## **Attachment 1 (Derivation of ACE NITS Rate)**

ATLANTIC CITY ELECTRIC
Proposed Transmission Rate Design
Formula Rate Effective July 1, 2019

#### Line

6	2019 Network Integration Transmission Service Rate (per MW Per Year)	\$ 54,394.71
5	2019 ACE Newtwork Service Peak	2,591
4	Total Transmission Costs Borne by ACE Customers	\$ 140,953,006
3	ACE Customer Share of Schedule 12 TEC included in Line 2	\$ 6,067,557
2	Less Total Schedule 12 TEC Included in Line (1)	\$ (10,670,472)
1	Transmission Service Annual Revenue Requirement	\$ 145,555,921

## PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for ACE Projects

Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet	Ar I	e 2019 - May 2020 nnual Revenue Requirement er PJM website	ACE Zone Share per PJM Open Access Transmission Tariff		ACE Zone Charges
Upgrade AE portion					_	
7 of Delco Tap	b0265	\$	497,580	89.87%	\$	447,175
Replace Monroe 8 230/69 kV TXfmrs	b0276	\$	764,018	91.46%	\$	698,771
Reconductor Union - 9 Corson 138 kV	b0211	\$	1,302,040	65.23%	\$	849,321
New 500/230 Kv Sub on Salem-East Windsor (>500 kV 10 portion)	b0210.A	\$	1,298,809	1.61%	\$	20,911
New 500/230 Kv Sub on Salem-East Windsor (>500 kV 11 portion) New 500/230kV Sub	0	\$	1,298,809	100.00%	\$	1,298,809
on Salem-East Windsor (< 500kV) 12 portion <sup>2</sup>	b0210.B	\$	1,852,197	65.23%	\$	1,208,188
Reconductor the existing Mickleton - Goucestr 230 kV 13 circuit (AE portion)	0	\$	467,008	0.00%	\$	-
Build second 230kV parallel from Mickelton to 14 Gloucester	b1398.3.1	\$	1,458,835	0.00%	\$	-
Upgrade to Mill T2 138/69 kV 15 transformer	b1600	\$	1,731,177	89.21%	\$	1,544,383
Total			\$10,670,472			\$6,067,557
					_	

**Attachment 2A – Atlantic City Electric Company Tariff Sheets** 

**Attachment 2B – Public Service Electric and Gas Company Tariff Sheets** 

**Attachment 2C – Jersey Central Power & Light Tariff Company Tariff Sheets** 

**Attachment 2D – Rockland Electric Company Tariff Sheets** 

## **Attachment 2A – Atlantic City Electric Company Tariff Sheets**

Attachment 2A Page 1 of 10

# RATE SCHEDULE RS (Residential Service)

#### **AVAILABILITY**

Available for full domestic service to individually metered residential customers, including rural domestic customers, engaged principally in agricultural pursuits.

	SUMMER June Through September	WINTER October Through May	
Delivery Service Charges:			
Customer Charge (\$/Month)	\$5.77	\$5.77	
Distribution Rates (\$/kWH)	Φ0 00F 407	Φ0.05004 <i>5</i>	
First Block (Summer <= 750 kWh; Winter<= 500kWh)	\$0.065467	\$0.059915	
Excess kWh	\$0.076211	\$0.059915	
Non-Utility Generation Charge (NGC) (\$/kWH)	See Rider NGC		
Societal Benefits Charge (\$/kWh)			
Clean Energy Program	See F	Rider SBC	
Universal Service Fund	See Rider SBC		
Lifeline		Rider SBC	
Uncollectible Accounts	See Rider SBC		
Transition Bond Charge (TBC) (\$/kWh)	• • • • • • • • • • • • • • • • • • • •	Rider SEC	
Market Transition Charge Tax (MTC-Tax) (\$/kWh) Transmission Service Charges (\$/kWh):	See Rider SEC		
Transmission Rate	\$0.020425	\$0.020425	
Reliability Must Run Transmission Surcharge	\$0.000000	\$0.00000	
Transmission Enhancement Charge (\$/kWh)	See Rider BGS		
Basic Generation Service Charge (\$/kWh)			
Regional Greenhouse Gas Initiative Recovery Charge (\$/kWh) See Rider R		Rider RGGI	

#### **CORPORATE BUSINESS TAX (CBT)**

Charges under this rate schedule include a component for Corporate Business Taxes as set forth in Rider CBT.

#### **NEW JERSEY SALES AND USE TAX (SUT)**

Charges under this rate schedule include a component for New Jersey Sales and Use Tax as set forth in Rider SUT.

Date of Issue:	Effective Date:
Issued by:	

#### Attachment 2A Page 2 of 10

# RATE SCHEDULE MGS-SECONDARY (Monthly General Service)

#### **AVAILABILITY**

Available at any point within the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer delivered at one point and metered at or compensated to the voltage of delivery. This schedule is not available to residential customers.

	SUMMER	WINTER	
	June Through September	October Through May	
Delivery Service Charges:			
Customer Charge			
Single Phase	\$9.96	\$9.96	
Three Phase	\$11.59	\$11.59	
Distribution Demand Charge (per kW)	\$2.68	\$2.20	
Reactive Demand Charge	\$0.58	\$0.58	
(For each kvar over one-third of kW demand)			
Distribution Rates (\$/kWh)	\$0.057395	\$0.051244	
Non-Utility Generation Charge (NGC) (\$/kWH)	See Ride	r NGC	
Societal Benefits Charge (\$/kWh)			
Clean Energy Program	See Rider SBC		
Universal Service Fund	See Rider SBC		
Lifeline	See Rider SBC		
Uncollectible Accounts	See Ride	r SBC	
Transition Bond Charge (TBC) (\$/kWh)	See Ride	r SEC	
Market Transition Charge Tax (MTC-Tax) (\$/kWh)	C-Tax) (\$/kWh) See Rider SEC		
CIEP Standby Fee (\$/kWh)	See Rider BGS		
Transmission Demand Charge (\$/kW for each kW in excess of 3 kW)	n \$3.93	\$3.55	
Reliability Must Run Transmission Surcharge (\$/kWh)	\$0.00000	\$0.00000	
Transmission Enhancement Charge (\$/kWh)	See Rider BGS		
Basic Generation Service Charge (\$/kWh)	See Rider BGS		
Regional Greenhouse Gas Initiative Recovery Charge	rge		
(\$/kWh)	See Rider	RGGI	

The minimum monthly bill will be \$9.96 per month plus any applicable adjustment.

Date of Issue:	Effective Date:	
Issued by:		

# RATE SCHEDULE MGS-PRIMARY (Monthly General Service)

#### **AVAILABILITY**

Available at any point within the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer delivered at one point and metered at or compensated to the voltage of delivery. This schedule is not available to residential customers.

voltage of delivery. This scriedule is not available to resider	SUMMER	WINTER	
	June Through September	October Through Ma	
Delivery Service Charges:			
Customer Charge			
Single Phase	\$14.70	\$14.70	
Three Phase	\$15.97	\$15.97	
Distribution Demand Charge (per kW)	\$1.57	\$1.22	
Reactive Demand Charge	\$0.43	\$0.43	
(For each kvar over one-third of kW demand)			
Distribution Rates (\$/kWh)	\$0.044214	\$0.042941	
Non-Utility Generation Charge (NGC) (\$/kWH)	See Ride	r NGC	
Societal Benefits Charge (\$/kWh)			
Clean Energy Program	See Rider SBC		
Universal Service Fund	See Rider SBC		
Lifeline	See Rider SBC		
Uncollectible Accounts	See Ride	r SBC	
Transition Bond Charge (TBC) (\$/kWh)	See Ride	r SEC	
Market Transition Charge Tax (MTC-Tax) (\$/kWh)	See Ride	r SEC	
CIEP Standby Fee (\$/kWh)	See Rider BGS		
Transmission Demand Charge	\$2.38	\$2.04	
(\$/kW for each kW in excess of 3 kW)			
Reliability Must Run Transmission Surcharge (\$/kWh)	\$0.00000	\$0.000000	
Transmission Enhancement Charge (\$/kWh)	See Rider BGS		
Basic Generation Service Charge (\$/kWh)	See Rider BGS		
Regional Greenhouse Gas Initiative	0 5:1-	DOOL	
Recovery Charge (\$/kWh)	See Rider RGGI		

The minimum monthly bill will be \$14.70 per month plus any applicable adjustment.

Date of Issue:	Effective Date:
Issued by:	

#### Attachment 2A Page 4 of 10

## RATE SCHEDULE AGS-SECONDARY (Annual General Service)

#### **AVAILABILITY**

Available at any point within the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage of delivery.

#### **MONTHLY RATE**

**Delivery Service Charges:** 

Customer Charge	\$193.22
Distribution Demand Charge (\$/kW)	\$11.07
Reactive Demand (for each kvar over one-third of kW	
demand)	\$0.86
Non-Utility Generation Charge (NGC) (\$/kWH)	See Rider NGC
Societal Benefits Charge (\$/kWh)	
Clean Energy Program	See Rider SBC
Universal Service Fund	See Rider SBC
Lifeline	See Rider SBC
Uncollectible Accounts	See Rider SBC
Transition Bond Charge (TBC) (\$/kWh)	See Rider SEC
Market Transition Charge Tax (MTC-Tax) (\$/kWh)	See Rider SEC
CIEP Standby Fee (\$/kWh)	See Rider BGS
Transmission Demand Charge (\$/kW)	\$4.04
Reliability Must Run Transmission Surcharge (\$/kWh)	\$0.00000
Transmission Enhancement Charge (\$/kWh)	See Rider BGS
Basic Generation Service Charge (\$/kWh)	See Rider BGS
Regional Greenhouse Gas Initiative Recovery Charge	

#### **CORPORATE BUSINESS TAX (CBT)**

(\$/kWh)

Charges under this rate schedule include a component for Corporate Business Taxes as set forth in Rider CBT.

See Rider RGGI

#### **NEW JERSEY SALES AND USE TAX (SUT)**

Charges under this rate schedule include a component for New Jersey Sales and Use Tax as set forth in Rider SUT.

#### **VETERANS' ORGANIZATION SERVICE**

Pursuant to N.J.S.A 48:2-21.41, when electric service is delivered to a customer that is a veterans' organization, and where the primary use of the service is dedicated to serving the needs of veterans of the armed forces, and the customer applies for and is eligible for such service.

Each customer shall be eligible for billing under this Special Provision upon submitting an Application for Veterans' Organization Service under this rate schedule and by qualifying as a "Veterans' Organization" as defined by N.J.S.A. 48:2-21.41 as "an organization dedicated to serving the needs of veterans of the armed forces that: is chartered under federal law, qualifies as a tax exempt organization under paragraph (19) of subsection (c) of section 501 of the federal Internal Revenue Code of 1986, 26 U.S.C. s.501 (c)(19), or that is organized as a corporation under the 'New Jersey Nonprofit Corporation Act,' N.J.S.15A:1-1 et seq." Under N.J.S.A. 48: 2-21.41, a qualified Veterans' Organization shall be charged the residential rate for service delivered to the property where the Veterans' Organization primarily operates, if the residential rate is lower than the commercial rate for service at that property. The customer shall furnish satisfactory proof of eligibility of service under this special provision to the Company, who will determine eligibility.

Date of Issue:	Effective Date:

#### Attachment 2A Page 5 of 10

## RATE SCHEDULE AGS-PRIMARY (Annual General Service)

#### **AVAILABILITY**

Available at any point within the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage of delivery.

#### **MONTHLY RATE**

**Delivery Service Charges:** 

Customer Charge \$744.15 **Distribution Demand Charge (\$/kW)** \$8.82

Reactive Demand (for each kvar over one-third of kW

demand) \$0.67 Non-Utility Generation Charge (NGC) (\$/kWH) See Rider NGC

Societal Benefits Charge (\$/kWh)

Clean Energy Program See Rider SBC Universal Service Fund See Rider SBC See Rider SBC Lifeline Uncollectible Accounts See Rider SBC Transition Bond Charge (TBC) (\$/kWh) See Rider SEC Market Transition Charge Tax (MTC-Tax) (\$/kWh) See Rider SEC CIEP Standby Fee (\$/kWh) See Rider BGS Transmission Demand Charge (\$/kW) \$4.08 Reliability Must Run Transmission Surcharge (\$/kWh) \$0.00000 Transmission Enhancement Charge (\$/kWh) See Rider BGS **Basic Generation Service Charge (\$/kWh)** See Rider BGS Regional Greenhouse Gas Initiative Recovery Charge

(\$/kWh) See Rider RGGI

#### **CORPORATE BUSINESS TAX (CBT)**

Charges under this rate schedule include a component for Corporate Business Taxes as set forth in Rider CBT.

#### **NEW JERSEY SALES AND USE TAX (SUT)**

Charges under this rate schedule include a component for New Jersey Sales and Use Tax as set forth in Rider SUT.

#### **VETERANS' ORGANIZATION SERVICE**

Pursuant to N.J.S.A 48:2-21.41, when electric service is delivered to a customer that is a veterans' organization, and where the primary use of the service is dedicated to serving the needs of veterans of the armed forces, and the customer applies for and is eligible for such service.

Each customer shall be eligible for billing under this Special Provision upon submitting an Application for Veterans' Organization Service under this rate schedule and by qualifying as a "Veterans' Organization" as defined by N.J.S.A. 48:2-21.41 as "an organization dedicated to serving the needs of veterans of the armed forces that: is chartered under federal law, qualifies as a tax exempt organization under paragraph (19) of subsection (c) of section 501 of the federal Internal Revenue Code of 1986, 26 U.S.C. s.501 (c)(19), or that is organized as a corporation under the 'New Jersey Nonprofit Corporation Act,' N.J.S.15A:1-1 et seq." Under N.J.S.A. 48: 2-21.41, a qualified Veterans' Organization shall be charged the residential rate for service delivered to the property where the Veterans' Organization primarily operates, if the residential rate is lower than the commercial rate for service at that property. The customer shall furnish satisfactory proof of eligibility of service under this special provision to the Company, who will determine eligibility.

Date of Issue:	Effective Date:
Issued by:	

#### **RATE SCHEDULE TGS**

# (Transmission General Service) (Sub Transmission Service Taken at 23kV and 34.5 kV)

#### **AVAILABILITY**

Available at any point within the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage subtransmission level (23 or 34.5 kV).

#### **MONTHLY RATE**

Delivery	Service	Charges:
----------	---------	----------

#### **Customer Charge**

Maximum billed demand within the most recent 12 billing months.

Less than 5,000 kW	\$131.75
5,000 – 9,000 kW	\$4,363.57
Greater than 9,000 kW	\$7,921.01

#### **Distribution Demand Charge (\$/kW)**

Maximum billed demand within the most recent 12 billing months.

Less than 5,000 kW	\$3.78
5,000 – 9,000 kW	\$2.91
Greater than 9,000 kW	\$1.45

Reactive Demand (for each kvar over one-third of kW

demand)	\$0.52
Non-Utility Generation Charge (NGC) (\$/kWH)	See Rider NGC

#### Societal Benefits Charge (\$/kWh)

Clean Energy Program	See Rider SBC
Universal Service Fund	See Rider SBC
Lifeline	See Rider SBC
Uncollectible Accounts	See Rider SBC
Transition Bond Charge (TBC) (\$/kWh)	See Rider SEC
Market Transition Charge Tax (MTC-Tax) (\$/kWh)	See Rider SEC
CIEP Standby Fee (\$/kWh)	See Rider BGS
Transmission Demand Charge (\$/kW)	\$4.99
Reliability Must Run Transmission Surcharge (\$/kWh)	\$0.00000
Transmission Enhancement Charge (\$/kWh)	See Rider BGS
Basic Generation Service Charge (\$/kWh)	See Rider BGS

Regional Greenhouse Gas Initiative Recovery Charge

(\$/kWh) See Rider RGGI

### **RATE SCHEDULE TGS**

# (Transmission General Service) (Transmission Service Taken at or above 69kV)

#### **AVAILABILITY**

Available at any point within the Company's system where facilities of adequate character and capacity exist for the entire electric service requirements of any customer contracting for annual service delivered at one point and metered at or compensated to the voltage at transmission level (69 kV or higher).

#### **MONTHLY RATE**

Delivery	/ Service	Charges:
----------	-----------	----------

#### **Customer Charge**

Maximum billed demand within the most recent 12 billing months.

Less than 5,000 kW	\$128.21
5,000 – 9,000 kW	\$4,246.42
Greater than 9,000 kW	\$19,316.15

#### Distribution Demand Charge (\$/kW)

Maximum billed demand within the most recent 12 billing months.

•	
Less than 5,000 kW	\$2.94
5,000 – 9,000 kW	\$2.27
Greater than 9,000 kW	\$0.14

Reactive Demand (for each kvar over one-third of kW

demand) \$0.50
Non-Utility Generation Charge (NGC) (\$/kWH) \$ See Rider NGC

### Societal Benefits Charge (\$/kWh)

Clean Energy Program See Rider SBC Universal Service Fund See Rider SBC Lifeline See Rider SBC **Uncollectible Accounts** See Rider SBC Transition Bond Charge (TBC) (\$/kWh) See Rider SEC Market Transition Charge Tax (MTC-Tax) (\$/kWh) See Rider SEC **CIEP Standby Fee (\$/kWh)** See Rider BGS Transmission Demand Charge (\$/kW) \$2.21

Reliability Must Run Transmission Surcharge (\$/kWh) \$0.000000 \$0.000000

Transmission Enhancement Charge (\$/kWh)

Basic Generation Service Charge (\$/kWh)

See Rider BGS

See Rider BGS

Regional Greenhouse Gas Initiative Recovery Charge

(\$/kWh) See Rider RGGI

Date of Issue:	Effective Date:
Date of issue.	Lifective Date.

#### Attachment 2A Page 8 of 10

## RATE SCHEDULE DDC (Direct Distribution Connection)

#### **AVAILABILITY**

Available at any point within the Company's existing distribution system where facilities of adequate character exist for the connection of fixed, constant and predictable non-residential loads not to exceed one kilowatt

#### **MONTHLY RATES**

#### Distribution:

Service and Demand (per day per connection)	\$0.161131
Energy (per day for each kW of effective load)	\$0.776105

Non-Utility Generation Charge (NGC) (\$/kWH) See Rider NGC

Societal Benefits Charge (\$/kWh)

Clean Energy Program See Rider SBC Universal Service Fund See Rider SBC

Lifeline See Rider SBC

**Uncollectible Accounts** See Rider SBC Transition Bond Charge (TBC) (\$/kWh) See Rider SEC Market Transition Charge Tax (MTC-Tax) (\$/kWh) See Rider SEC Transmission Rate (\$/kWh) \$0.006934 Reliability Must Run Transmission Surcharge (\$/kWh) \$0.000000 Transmission Enhancement Charge (\$/kWh) See Rider BGS **Basic Generation Service Charge (\$/kWh)** See Rider BGS Regional Greenhouse Gas Initiative Recovery Charge (\$/kWh) See Rider RGGI

#### **CORPORATE BUSINESS TAX (CBT)**

Charges under this rate schedule include a component for Corporate Business Taxes as set forth in Rider CBT.

#### **NEW JERSEY SALES AND USE TAX (SUT)**

Charges under this rate schedule include a component for New Jersey Sales and Use Tax as set forth in Rider SUT.

#### LOAD CONSUMPTION

Effective load shall be determined by the Company and be specified in the contract. Effective load is defined as the sum of the products of the connected load in kilowatts times the percent load on at one time. No changes in attached load may be made by the customer without the permission of the Company and customer shall allow the Company access to his premises to assure conformance with this provision.

Date of Issue:	Effective Date:

## RIDER STB-STANDBY SERVICE (Applicable to MGS, AGS, TGS and SPP Rate Schedules)

#### **AVAILABILITY**

This rider is available to customers having other sources of electrical energy supply, but who desire to purchase Standby Service from the Company. The terms of this rider shall not be available in any month when the customer's Generation Availability for the current and preceding five (5) months does not exceed 50%.

#### **DEFINITIONS**

#### Standby Service:

Standby Service is defined as the additional electrical capacity available to a customer in the event of a forced outage and during a mutually agreed upon customer's scheduled maintenance shutdown of the customer owned electrical energy source.

#### Standby Service Capacity:

The Standby Service Capacity shall be the maximum electrical capacity in kW supplied by the customer owned electrical energy source during the current and preceding five (5) months. Such Standby Service Capacity may be revised with the Company's approval as changes in the customer's load conditions warrant.

#### Generation Availability:

Generation Availability is defined as the availability of the customer owned electrical energy source during the current and preceding five (5) months and shall be determined by dividing the Kwhrs produced during this period by the product of the Standby Service Capacity times 4380 hours.

#### MODIFICATION OF DEMAND DETERMINATION

The monthly billing demand shall be as defined under the "Demand Determination" section of the applicable rate schedule.

The Standby Service Demand shall be the "Standby Service Capacity" as defined above.

During the billing months in which a forced outage or mutually agreed upon customer's scheduled maintenance shutdown occurs, the billing demand will be determined by subtracting the Standby Service Capacity from the total demand and waives the minimum charge provision of the applicable rate schedule. Electric service is provided under the terms of the applicable rate schedule. Total demand is defined as the sum of the Company's demand meter plus demand supplied by the other sources of electrical energy, all computed to the nearest whole kilowatt during a fifteen minute period.

#### STANDBY SERVICE CHARGE

This rider imposes a Standby Service Charge at the following voltage levels:

<u>Tariff</u>	Transmission Stand By Rate	Distribution Stand By Rate
	<u>(\$/kW)</u>	<u>(\$/kW)</u>
MGS-Secondary	\$0.40	\$0.15
MGS Primary	\$0.24	\$0.14
AGS Secondary	\$0.41	\$1.12
AGS Primary	\$0.41	\$0.90
TGS Sub Transmission	\$0.22	\$0.00
TGS Transmission	\$0.22	\$0.00

Date of Issue:	Effective Date:

## RIDER (BGS) continued Basic Generation Service (BGS)

#### **CIEP Standby Fee**

\$0.000160 per kWh

This charge recovers the costs associated with the winning BGS-CIEP bidders maintaining the availability of the hourly priced default electric supply service plus administrative charges pursuant to N.J.S.A. 48:2-60 and New Jersey Sales and Use Tax as set forth in Rider SUT. This charge is assessed on all kWhs delivered to all CIEP- eligible customers on Rate Schedules MGS Secondary, MGS Primary, AGS Secondary, AGS Primary or TGS.

#### **Transmission Enhancement Charge**

This charge reflects Transmission Enhancement Charges ("TECs"), implemented to compensate transmission owners for the annual transmission revenue requirements for "Required Transmission Enhancements" (as defined in Schedule 12 of the PJM OATT) that are requested by PJM for reliability or economic purposes and approved by the Federal Energy Regulatory Commission (FERC). The TEC charge (in \$ per kWh by Rate Schedule), including administrative charges pursuant to N.J.S.A. 48:2-60 and New Jersey Sales and Use Tax as set forth in Rider SUT, is delineated in the following table.

	Rate Class							
	RS	MGS Secondary	MGS Primary	AGS Secondary	AGS Primary	TGS	SPL/ CSL	DDC
VEPCo	0.000223	0.000186	0.000183	0.000128	0.000104	0.000093	-	0.000090
TrAILCo	0.000297	0.000236	0.000179	0.000172	0.000142	0.000131	-	0.000107
PSE&G	0.000417	0.000345	0.000342	0.000239	0.000195	0.000174	-	0.000166
PATH	0.000018	0.000015	0.000015	0.000011	0.000009	0.000007	-	0.000007
PPL	0.000106	0.000083	0.000064	0.000061	0.000050	0.000047	-	0.000038
PECO	0.000155	0.000123	0.000094	0.000090	0.000074	0.000068	-	0.000055
Рерсо	0.000020	0.000016	0.000012	0.000012	0.000010	0.000009	-	0.000007
MAIT	0.000026	0.000021	0.000021	0.000015	0.000012	0.000011		0.000011
JCP&L	0.000003	0.000002	0.000002	0.000002	0.000001	0.000001	-	0.000001
EL05-121	0.000037	0.000030	0.000023	0.000022	0.000018	0.000017		0.000014
Delmarva	0.000001	0.000001	0.000001	0.000001	-	-		-
BG&E	0.000039	0.000032	0.000025	0.000023	0.000019	0.000017	-	0.000014
AEP - East	0.000088	0.000074	0.000074	0.000051	0.000042	0.000037	-	0.000035
Total	0.001430	0.001164	0.001035	0.000827	0.000676	0.000612		0.000545

Date of Issue: Effective Date:

# Attachment 2B – Public Service Electric and Gas Company Tariff Sheets

#### PUBLIC SERVICE ELECTRIC AND GAS COMPANY

**B.P.U.N.J. No. 16 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 kilowatt-hour:

	For usage	in each of the	For usage	in each of the
	moi	nths of	mor	nths of
	October t	hrough May	June through	gh September
Rate		Charges		Charges
<u>Schedule</u>	<u>Charges</u>	Including SUT	<u>Charges</u>	Including SUT
RS – first 600 kWh	\$0.114040	\$0.121595	\$0.112919	\$0.120400
RS – in excess of 600 kWh	0.114040	0.121595	0.121916	0.129993
RHS – first 600 kWh	0.090264	0.096244	0.085276	0.090926
RHS – in excess of 600 kWh	0.090264	0.096244	0.097306	0.103753
RLM On-Peak	0.201006	0.214323	0.211913	0.225952
RLM Off-Peak	0.057398	0.061201	0.052453	0.055928
WH	0.052270	0.055733	0.050561	0.053911
WHS	0.052817	0.056316	0.050658	0.054014
HS	0.113812	0.121352	0.115264	0.122900
BPL	0.050905	0.054277	0.046186	0.049246
BPL-POF	0.050905	0.054277	0.046186	0.049246
PSAL	0.050905	0.054277	0.046186	0.049246

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.

#### PUBLIC SERVICE ELECTRIC AND GAS COMPANY

**B.P.U.N.J. No. 16 ELECTRIC** 

XXX Revised Sheet No. 79 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  Charge including New Jersey Sales and Use Tax (SUT)	
Charge applicable in the months of October through May	•

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	
	\$104.700.15 per MM per veer
FERC Electric Tariff of the PJM Interconnection, LLC	
EL05-121	\$ 188.13 per MW per month
PJM Seams Elimination Cost Assignment Charges	\$ 0.00 per MW per month
PJM Reliability Must Run Charge	
PJM Transmission Enhancements	ф отоб рег пти рег птепа.
Trans-Allegheny Interstate Line Company	\$ 58 78 per MW per month
Virginia Electric and Power Company	46.75 per MM/ per month
Determine Americania Fower Company	\$ 40.75 per lvivv per month
Potomac-Appalachian Transmission Highline L.L.C.	\$ 3.47 per MVV per month
PPL Electric Utilities Corporation	
American Electric Power Service Corporation	\$ 21.45 per MW per month
Atlantic City Electric Company	
Delmarva Power and Light Company	\$ 0.15 per MW per month
Potomac Electric Power Company	\$ 3.14 per MW per month
Politimare Can and Floatric Company	# 2.52 per MM/ per month
Baltimore Gas and Electric Company	\$ 3.52 per MW per month
Jersey Central Power and Light	
Mid Atlantic Interstate Transmission	\$ 16.22 per MW per month
PECO Energy Company	\$ 22.32 per MW per month
0, 1	
Above rates converted to a charge per kW of Transmission	
Obligation, applicable in all months	\$ 9 3942
	ψ 3.3342

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).

Charge including New Jersey Sales and Use Tax (SUT) ......\$ 10.0166

Date of Issue:

Issued by SCOTT S. JENNINGS, SVP - Corporate Planning, Strategy and Utility Finance – PSE&G

80 Park Plaza, Newark, New Jersey 07102

Filed pursuant to Order of Board of Public Utilities dated

in Docket No.

# PUBLIC SERVICE ELECTRIC AND GAS COMPANY

XXX Revised Sheet No. 83 Superseding XXX Revised Sheet No. 83

**B.P.U.N.J. No. 16 ELECTRIC** 

# BASIC GENERATION SERVICE – COMMERCIAL AND INDUSTRIAL ENERGY PRICING (CIEP) ELECTRIC SUPPLY CHARGES (Continued)

#### **BGS TRANSMISSION CHARGES**

Charges per	kilowatt of	<b>Transmission</b>	<b>Obligation:</b>
-------------	-------------	---------------------	--------------------

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\$104,709.15 per M	W per year
EL05-121\$ 188.13 per MV	/ per month
PJM Seams Elimination Cost Assignment Charges\$ 0.00 per MV	/ per month
PJM Reliability Must Run Charge\$ 0.00 per MV	/ per month
PJM Transmission Enhancements	•
Trans-Allegheny Interstate Line Company \$ 58.78 per MV	/ per month
Virginia Electric and Power Company\$ 46.75 per MV	/ per month
Potomac-Appalachian Transmission Highline L.L.C\$ 3.47 per MV	/ per month
PPL Electric Utilities Corporation\$ 226.26 per MW	/ per month
American Electric Power Service Corporation\$ 21.45 per MV	/ per month
Atlantic City Electric Company\$ 8.86 per MV	/ per month
Delmarva Power and Light Company\$ 0.15 per MV	/ per month
Potomac Electric Power Company\$ 3.14 per MV	/ per month
Baltimore Gas and Electric Company\$ 3.52 per MV	/ per month
Jersey Central Power and Light\$ 69.17 per MW Mid Atlantic Interstate Transmission\$ 16.22 per MW	/ per month
Mid Atlantic Interstate Transmission\$ 16.22 per MV	/ per month
PECO Energy Company\$ 22.32 per MV	/ per month
Above rates converted to a charge per kW of Transmission	
Obligation, applicable in all months	\$ 9.3942
Charge including New Jersey Sales and Use Tax (SUT)	\$ 10.0166

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.

# Attachment 2C – Jersey Central Power & Light Tariff Company Tariff Sheets

#### **JERSEY CENTRAL POWER & LIGHT COMPANY**

**BPU No. 12 ELECTRIC - PART III** 

XX Rev. Sheet No. 36 Superseding XX Rev. Sheet No. 36

#### 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, 2019, a RMR surcharge of \$0.000000 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 **February 1, 2019**, 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:

VEPCO-TEC surcharge of **\$0.000186** per KWH PATH-TEC surcharge of **\$0.000016** per KWH AEP-East-TEC surcharge of **\$0.000082** per KWH MAIT-TEC surcharge of **\$0.000069** per KWH

Effective **April 1, 2019**, the following TEC surcharge (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:

PSEG-TEC surcharge of \$0.002074 per KWH

Effective **July 1, 2019**, the following TEC surcharge (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:

EL05-121-TEC surcharge of **\$0.000514** per KWH

Effective **September 1, 2019**, 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 \$0.000234 per KWH Delmarva-TEC surcharge of \$0.000001 per KWH ACE-TEC surcharge of \$0.000069 per KWH PEPCO-TEC surcharge of \$0.000014 per KWH PPL-TEC surcharge of \$0.000729 per KWH BG&E-TEC surcharge of \$0.000016 per KWH PECO-TEC surcharge of \$0.000065 per KWH

 BGS Reconciliation Charge per KWH: (\$0.005747) (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-ups.

Issued: Effective:

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Docket No. dated

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

#### **JERSEY CENTRAL POWER & LIGHT COMPANY**

**BPU No. 12 ELECTRIC - PART III** 

XX Rev. Sheet No. 37 Superseding XX Rev. Sheet No. 37

#### 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)

**AVAILABILITY:** Rider BGS-CIEP is available to and provides Basic Generation Service (default service) charges applicable to all Full Service Customers taking service at primary and transmission voltages under Service Classifications GP and GT and any Full Service Customers taking service at secondary voltages under Service Classifications GS and GST that have a peak load share of 500 KW or greater as of November 1, 2018, or that have elected to take BGS-CIEP service no later than the second business day in January of each year. All BGS-CIEP customers remain subject to this Rider for the entire 12-month period from June 1 of any given year through May 31 of the following year.

#### **RATE PER BILLING MONTH:**

(For service rendered effective June 1, 2019 through May 31, 2020)

1) BGS Energy Charge per KWH: The sum of actual real-time PJM load weighted average Residual Metered Load Aggregate Locational Marginal Price for JCP&L Transmission Zone and ancillary services of \$0.00600 per KWH, times the Losses Multiplier provided below, times 1.06625 multiplier for Sales and Use Tax as provided in Rider SUT.

Losses Multiplier:	GT – High Tension Service	1.005
•	GT	1.027
	GP	1.047
	GST	1.103
	GS	1.103

- 2) BGS Capacity Charge per KW of Generation Obligation: \$0.24601 per KW-day times BGS-CIEP customer's share of the capacity peak load assigned to the JCP&L Transmission Zone by the PJM Interconnection, L.L.C., as adjusted by PJM assigned capacity related factors, times 1.06625 multiplier for Sales and Use Tax as provided in Rider SUT.
- **3) BGS Transmission Charge per KWH:** As provided in the respective tariff for Service Classifications GS, GST, GP and GT. Effective September 1, 2019, a RMR surcharge will be added to the BGS Transmission Charge applicable to all KWH usage, as follows (includes Sales and Use Tax as provided in Rider SUT):

GT – High Tension Service	<b>\$0.00000</b>
GT	<mark>\$0.000000</mark>
GP	<mark>\$0.000000</mark>
GS and GST	<mark>\$0.000000</mark>

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Docket No. dated

**BPU No. 12 ELECTRIC - PART III** 

XX Rev. Sheet No. 38 Superseding XX Rev. Sheet No. 38

#### 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 February 1, 2019, 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:

,	VEPCO-TEC	PATH-TEC
GS and GST	\$0.000186	\$0.000016
GP	\$0.000123	\$0.000011
GT	\$0.000113	\$0.000010
GT – High Tension Service	\$0.000028	\$0.000002
<b>G</b>	AEP-East-TEC	MAIT-TEC
GS and GST	\$0.000082	\$0.000069
GP	\$0.000054	\$0.000046
GT	\$0.000050	\$0.000043
GT – High Tension Service	\$0.000012	\$0.000011

Effective April 1, 2019, the following TEC surcharge (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage:

**PSEG-TEC** GS and GST \$0.002074 GP \$0.001367 GT \$0.001261 GT - High Tension Service \$0.000305

Effective July 1, 2019, the following TEC surcharge (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage:

EL05-121-TEC GS and GST \$0.000514 GP \$0.000351 GT \$0.000307 GT – High Tension Service \$0.000074

Effective September 1, 2019, 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:

TRAILCO-TEC	Delmarva-TEC	ACE-TEC
<b>\$0.000234</b>	<b>\$0.00001</b>	\$0.000069
\$0.000151	<b>\$0.00000</b>	<b>\$0.000046</b>
\$0.000133	<b>\$0.00000</b>	<b>\$0.000041</b>
<b>\$0.000031</b>	<b>\$0.00000</b>	\$0.000010
PEPCO-TEC	PPL-TEC	BG&E-TEC
<b>\$0.000014</b>	<b>\$0.000729</b>	\$0.000016
\$0.000010	<mark>\$0.000474</mark>	<b>\$0.000011</b>
<b>\$0.00009</b>	<b>\$0.000419</b>	\$0.000010
\$0.00002	<mark>\$0.000098</mark>	\$0.00000 <mark>2</mark>
PECO-TEC		
<b>\$0.000065</b>		
<b>\$0.000043</b>		
<mark>\$0.000037</mark>		
	\$0.000234 \$0.000151 \$0.000133 \$0.000031 PEPCO-TEC \$0.000014 \$0.000009 \$0.000009 PECO-TEC \$0.000065 \$0.000043	\$0.000234 \$0.000151 \$0.000133 \$0.000031 PEPCO-TEC \$0.000014 \$0.000010

4) BGS Reconciliation Charge per KWH: (\$0.002613) (includes Sales and Use Tax as provided in Rider SUT)

\$0.000009

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-ups.

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GT – High Tension Service

## **Attachment 2D – Rockland Electric Company Tariff Sheets**

#### **DRAFT**

Revised Leaf No. 83 Superseding Leaf No. 83

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

#### **RATE – MONTHLY (Continued)**

(4)

(3) Hansinission Charue	3)	Transmission Ch	arges
-------------------------	----	-----------------	-------

(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
	All kWh@	1.515 ¢ per kWh	1.515 ¢ per kWh
(b)		e Company and includes s	o all customers taking Basic surcharges related to Reliability phancement Charges.
	All kWh@	1.221 ¢ per kWh	<mark>1.221</mark> ¢ per kWh
Societ	tal Benefits Charge, Regional	Greenhouse Gas Initiative	Surcharge Securitization

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge as described in General Information Section Nos. 33, 34, 35, 36, and 37 respectively, shall be assessed on all kWh delivered hereunder.

Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge.

<sup>\*</sup> Definition of Summer Billing Months - June through September

#### DRAFT

Revised Leaf No. 90 Superseding Leaf No. 90

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

#### **RATE – MONTHLY (Continued)**

- (3) <u>Transmission Charges</u> (Continued)
  - (b) <u>Transmission Surcharge</u> This charge is applicable to all customers taking Basic Generation Service from the Company and includes surcharges related to Reliability Must Run, EL05-121 Settlement and Transmission Enhancement Charges.

	Summer Months*	Other Months
Secondary Voltage Service Only All kWh@	<mark>0.750</mark> ¢ per kWh	0.750 ¢ per kWh
Primary Voltage Service Only All kWh@	<mark>0.720</mark> ¢ per kWh	<mark>0.720</mark> ¢ per kWh

(4) <u>Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization</u> Surcharges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge.

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge as described in General Information Section Nos. 33, 34, 35, 36, and 37 respectively, shall be assessed on all kWh delivered hereunder.

<sup>\*</sup> Definition of Summer Billing Months - June through September

Other Months

#### **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\*

	Peak All kWh measured between a.m. and 10:00 p.m., Monday through Friday @		1.515 ¢ per kWh
	Off-Peak All other kWh @	1.515 ¢ per kWh	1.515 ¢ per kWh
(b)	•	Company and includes	to all customers taking Basic surcharges related to Reliability Enhancement Charges.
	All kWh@	0.739 ¢ per kWh	<mark>0.739</mark> ¢ per kWh

(4) <u>Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge.</u>

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge as described in General Information Section Nos. 33, 34, 35, 36, and 37 respectively, shall be assessed on all kWh delivered hereunder.

<sup>\*</sup> Definition of Summer Billing Months - June through September

Revised Leaf No. 102 Superseding Leaf No. 102

## SERVICE CLASSIFICATION NO. 4 PUBLIC STREET LIGHTING SERVICE (Continued)

#### RATE - MONTHLY (Continued)

### (1) <u>Distribution and Transmission Charges</u> (Continued)

#### (a) <u>Distribution Luminaire Charges</u> (Continued)

Nominal <u>Lumens</u>	Luminaire Type	<u>Watts</u>	Total <u>Wattage</u>	Distribution Charge
Post Top	<u>Luminaires</u>			
16,000	Sodium Vapor-Offset	150	199	\$20.29
Off-Road	way Luminaires			
27,500	Sodium Vapor	250	311	\$ 16.94
46,000	Sodium Vapor	400	488	23.82
Post-Top	<u>Luminaires</u>			
4,000	Mercury Vapor	100	130	\$ 10.36
7,900	Mercury Vapor	175	215	12.70
7,900	Merc. Vapor-Offset	175	215	14.92

#### (b) <u>Transmission Charges</u>

A Transmission Charge of 1.223 ¢ per kWh will apply to all customers taking Basic Generation Service from the Company. Transmission charges are also applicable to customers located in the Company's Central and Western Divisions and obtaining Competitive Energy Supply. Transmission 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. A Transmission Surcharge, to recover Reliability Must Run Charges, of 0.000 ¢ per kWh will also apply to all customers taking Basic Generation Service from the Company.

Transmission Charges shall be applied to the kWh estimate in the following manner:

kWh = (Total Wattage divided by 1,000) times Monthly Burn Hours\*

#### **DRAFT**

Revised Leaf No. 109 Superseding Leaf No. 109

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

#### **RATE - MONTHLY (Continued)**

(3	3)	Transm	nission	Charge
١,	,,	11411311	11001011	Oriargo

(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
	All kWh @	1.515 ¢ per kWh	1.515 ¢ per kWh
(b)		e Company and includes su	all customers taking Basic urcharges related to Reliability hancement Charges.
	All kWh@	<mark>0.768</mark> ¢ per kWh	<mark>0.768</mark> ¢ per kWh

(4) <u>Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge.</u>

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge as described in General Information Section Nos. 33, 34, 35, 36, and 37 respectively, shall be assessed on all kWh delivered hereunder.

<sup>\*</sup> Definition of Summer Billing Months - June through September

Revised Leaf No. 116 Superseding Leaf No. 116

## SERVICE CLASSIFICATION NO. 6 PRIVATE OVERHEAD LIGHTING SERVICE (Continued)

#### RATE - MONTHLY (Continued)

- (1) <u>Distribution and Transmission Charges</u> (Continued)
  - (c) <u>Transmission Charges for Service Types A, B, and C</u>

A Transmission Charge of 1.223 ¢ per kWh will apply to all customers taking Basic Generation Service from the Company. Transmission charges are also applicable to customers located in the Company's Central and Western Divisions and obtaining Competitive Energy Supply. Transmission 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. A Transmission Surcharge, to recover Reliability Must Run Charges, of 0.000 ¢ per kWh will also apply to all customers taking Basic Generation Service from the Company.

For service type A, B, or C if not metered, the charges shall be applied to the kWh estimated as follows:

kWh = (Total Wattage divided by 1,000) times Monthly Burn Hours\*

(2) <u>Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization</u> Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge.

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge as described in General Information Section Nos. 33, 34, 35, 36, and 37 respectively shall be assessed on all kWh delivered hereunder. For service type A, B, or C if not metered, the charges shall be applied to the kWh estimated as follows:

kWh = (Total Wattage divided by 1,000) times Monthly Burn Hours\*

\* See Monthly Burn Hours Table.

Revised Leaf No. 124 Superseding Leaf No. 124

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

#### **RATE- MONTHLY (Continued)**

(3) <u>Transmission Charges</u> (Continued)

All Periods

(a) (Continued)

(33, 33, 33,		<u>Primary</u>	High Voltage <u>Distribution</u>				
Demand Charg	<u>je</u>						
Period I	All kW @	\$2.41 per kW	\$2.41 per kW				
Period II	All kW @	0.64 per kW	0.64 per kW				
Period III	All kW @	2.41 per kW	2.41 per kW				
Period IV	All kW @	0.64 per kW	0.64 per kW				
Usage Charge							
Period I	All kWh @	0.404 ¢ per kWh	0.404 ¢ per kWh				
Period II	All kWh @	0.404 ¢ per kWh	0.404 ¢ per kWh				
Period III	All kWh @	0.404 ¢ per kWh	0.404 ¢ per kWh				
Period IV	All kWh @	0.404 ¢ per kWh	0.404 ¢ 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, EL05-121 Settlement and Transmission Enhancement Charges.

Primary High Voltage
Distribution

0.430 ¢ per kWh

0.430 ¢ per kWh

(4) <u>Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization</u> Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge.

All kWh @

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, Securitization Charges, Temporary Tax Act Credit, and Zero Emission Certificate Recovery Charge as described in General Information Section Nos. 33, 34, 35, 36, and 37 respectively, shall be assessed on all kWh delivered hereunder.

#### DRAFT

Revised Leaf No. 127 Superseding Leaf No. 127

## 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 2.902 ¢ per kWh during the billing months of October through May and 4.693 ¢ per kWh during the summer billing months, a Transmission Charge of 0.404 ¢ per kWh and a Transmission Surcharge of 0.430 ¢ 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.

## Attachment 3 – Proposed ACE Transmission Rate Design

#### **Atlantic City Electric Company**

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019 Change in FERC Formual Based Rate

2018 Booked Total Revenue (\$)		C	ransmission Revenue based on urrent Billing	Transmission Peak Load Share (kW)	-	Revenue based on		Increase/(Decre (\$)	ase) (%)	
\$	665,133,793	\$	80,090,601	1,464,224	\$	79,874,456	\$	(216,145)	-0.03%	
\$	153,900,386	\$	16,892,316	355,659	\$	19,401,439	\$	2,509,123	1.63%	
\$	3,774,177	\$	335,097	6,008	\$	327,741	\$	(7,356)	-0.19%	
\$	109,970,418	\$	18,979,172	380,108	\$	20,735,166	\$	1,755,994	1.60%	
\$	24,672,903	\$	4,859,552	95,259	\$	5,196,464	\$	336,912	1.37%	
\$	33,704,107	\$	4,667,660	94,035	\$	5,129,650	\$	461,990	1.37%	
\$	13,408,364	\$	2,810,637	52,871	\$	2,884,146	\$	73,509	0.55%	
\$	19,169,299	\$	-	-	\$	-	\$	-	0.00%	
\$	955,945	\$	106,028	1,749	\$	95,409	\$	(10,619)	-1.11%	
\$	359,555,599	\$	48,650,462	985,688	\$	53,770,015	\$	5,119,553	1.42%	
\$	1,024,689,392	\$	128,741,063	2,449,912	\$	133,644,470	\$	4,903,408	0.48%	
		\$	54.39 54.55							
	\$ \$\$\$\$\$\$\$\$	\$ 665,133,793 \$ 665,133,793 \$ 153,900,386 \$ 3,774,177 \$ 109,970,418 \$ 24,672,903 \$ 33,704,107 \$ 13,408,364 \$ 19,169,299 \$ 955,945 \$ 359,555,599	2018 Booked Total Revenue (\$)  \$ 665,133,793 \$  \$ 153,900,386 \$     3,774,177 \$     109,970,418 \$     24,672,903 \$     33,704,107 \$     13,408,364 \$     19,169,299 \$     955,945 \$     359,555,599 \$  \$ 1,024,689,392 \$	Booked Total Revenue (\$)         based on Current Billing Determinants (\$)           \$ 665,133,793         \$ 80,090,601           \$ 153,900,386         \$ 16,892,316           \$ 3,774,177         \$ 335,097           \$ 109,970,418         \$ 18,979,172           \$ 24,672,903         \$ 4,859,552           \$ 33,704,107         \$ 4,667,660           \$ 13,408,364         \$ 2,810,637           \$ 955,945         \$ 106,028           \$ 359,555,599         \$ 48,650,462	Transmission Revenue based on Current Billing Determinants (\$)  \$ 665,133,793 \$ 80,090,601 \$ 1,464,224  \$ 153,900,386 \$ 16,892,316 \$ 355,659 \$ 3,774,177 \$ 335,097 6,008 \$ 109,970,418 \$ 18,979,172 380,108 \$ 24,672,903 \$ 4,859,552 95,259 \$ 33,704,107 \$ 4,667,660 94,035 \$ 13,408,364 \$ 2,810,637 52,871 \$ 19,169,299 \$ 955,945 \$ 106,028 1,749 \$ 359,555,599 \$ 48,650,462 985,688  \$ 1,024,689,392 \$ 128,741,063 2,449,912	Transmission   Revenue   based on   Current Billing   Determinants   (\$)	2018 Booked Total (\$)         Revenue based on Current Billing Determinants (\$)         Transmission Peak Load Share (kW)         Transmission Revenue based on Peak Load Share (\$)           \$ 665,133,793         \$ 80,090,601         1,464,224         \$ 79,874,456           \$ 153,900,386 \$ 3,774,177 \$ 335,097 \$ 3,774,177 \$ 335,097 \$ 6,008 \$ 3,774,177 \$ 335,097 \$ 6,008 \$ 327,741 \$ 109,970,418 \$ 18,979,172 \$ 380,108 \$ 24,672,903 \$ 4,859,552 \$ 95,259 \$ 5,196,464 \$ 33,704,107 \$ 4,667,660 \$ 94,035 \$ 13,408,364 \$ 2,810,637 \$ 52,871 \$ 19,169,299 \$ - \$ 955,945 \$ 106,028 \$ 1,749 \$ 95,409 \$ 359,555,599 \$ 48,650,462         \$ 1,749 \$ 95,409 \$ 985,688 \$ 53,770,015           \$ 1,024,689,392         \$ 128,741,063 \$ 2,449,912         \$ 133,644,470 \$ 133,644,470	Transmission Revenue based on Current Billing Determinants (\$)   Transmission Revenue (\$)   Transmission Determinants (\$)   Transmission Peak Load Share (kW)	Transmission   Revenue   based on   Transmission   Revenue   based on   Transmission   Revenue   (\$)	

## ATLANTIC CITY ELECTRIC

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

## Residential ("RS")

	Billing Determinants			 Annualized Present Revenue w/o SUT	Rate Adjustment	Proposed Rate w/o SUT	Proposed Rate w/SUT	
kWh	4,169,648,140	\$ 0.020481	\$ 0.019208	\$ 80,090,601	\$ (0.000052)	\$ 0.019156	\$ 0.020425	
Transmission Rate Ch	ange			\$ (216,145)				

## ATLANTIC CITY ELECTRIC

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

## Monthly General Service - Secondary (MGS Secondary)

	Billing Determinants Rate							Rate Adjustment		Proposed Rate w/o SUT		Proposed Rate w/SUT	
Demand SUM > 3 KW WIN > 3 KW TOTAL KW	2,163,136 3,431,860 5,594,995	\$ \$	3.45 3.07	\$ \$	3.24 2.88	\$ \$	7,008,560 9,883,756 16,892,316	\$	0.450000 0.450000	\$ \$	3.69 3.33	\$ \$	3.93 3.55
Transmission Rate	e Change					\$	2,509,123						

## ATLANTIC CITY ELECTRIC

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

## **Monthly General Service - Primary (MGS Primary)**

	Billing  Determinants Ra		Rate	Rate			Annualized Present Revenue w/o SUT		Rate Adjustment		Proposed Rate w/o SUT		Proposed Rate w/SUT	
Demand SUM > 3 KW WIN > 3 KW TOTAL KW	49,115 113,834 162,949	<b>\$</b>	2.43 2.09	\$ \$	2.28 1.96	\$ \$	111,982 223,115 335,097	\$ \$	(0.05) (0.05)	\$ \$	2.23 1.91	\$	2.38 2.04	
Transmission Rate Ch	ange					\$	(7,356)							

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

# **Annual General Service Secondary (AGS Secondary)**

	Billing Determinants	 Rate	Rate w/o SUT		Annualized Present Revenue w/o SUT		Rate Adjustment		Proposed Rate w/o SUT		Proposed Rate w/SUT	
Demand KW	5,469,502	\$ 3.70	\$	3.47	\$	18,979,172	\$	0.32	\$	3.79	\$	4.04
Transmission Rate Cha	ange				\$	1,755,994						

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

# **Annual General Service Primary (AGS Primary)**

	Billing Determinants					Annualized Present Rate Revenue w/o SUT w/o SUT			Rate Adjustment		Proposed Rate w/o SUT		Proposed Rate w/SUT	
Demand KW	1,357,417	\$	3.82	\$	3.58	\$	4,859,552	\$	0.25	\$	3.83	\$	4.08	
Transmission Rate Ch	ange					\$	336,912							

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

# **Sub Transmission General Service (TGS)**

	Billing		Annualized Present Rate Revenue				Rate		Proposed Rate			pposed Rate	
	Determinants		Rate	w/0	o SUT		w/o SUT	<u>Adj</u>	ustment	w/	o SUT	W	/SUT
Demand KW	1,095,695	\$	4.54	\$	4.26	\$	4,667,660	\$	0.42	\$	4.68	\$	4.99
Transmission Rate Cha	inge					\$	461,990						

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

# **Transmission General Service (TGS)**

	Billing Determinants	 Annualized Present Rate Revenue Rate Rate w/o SUT Adjustment							Proposed Rate w/o SUT		Proposed Rate w/SUT	
Demand KW	1,391,404	\$ 2.15	\$	2.02	\$	2,810,637	\$	0.05	\$	2.07	\$	2.21
Transmission Rate Cha	nge				\$	73,509						

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

Street and Private Lighting (SPL)
Contributed Street Lighting (CSL)

Contributed Street Lighting	Billing Determinants	Rate		Rate w/o SUT		Annualized Present Revenue w/o SUT		Rate Adjustment		Proposed Rate w/o SUT		Proposed Rate w/SUT	
Kilowatthour charge Annual	73,491,448	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Transmission Rate Change						\$	-	\$	-				

Proposed Transmission Rate Design Formula Rate Effective July 1, 2019

# **Direct Distribution Connection (DDC)**

-	Billing Determinants Rate		Rate w/o SUT	Pre Rev	ualized esent venue o SUT	Rate Adjustment	Proposed Rate w/o SUT	Proposed Rate w/SUT	
Kilowatthour charge Annual	14,671,081	\$ 0.007706	\$ 0.007227	\$	106,028	\$ (0.000724)	\$ 0.006503	\$ 0.006934	
Transmission Rate Change				\$	(10,619)				

Atlantic City Electric Company Standby Rate Development Formula Rate Effective July 1, 2019

Rate Schedule	Dema	nd Rates (\$/kW) <b>Transmission</b>	Stan	dby Rates (\$/kW) <b>Transmission</b>	Transmission Standby Factor
MGS Secondary	\$	3.93	\$	0.40	0.101604278
MGS Primary	\$	2.38	\$	0.24	0.101604278
AGS Secondary	\$	4.04	\$	0.41	0.101604278
AGS Primary	\$	4.08	\$	0.41	0.101604278
TGS Transmission	\$	2.21	\$	0.22	0.101604278

- Attachment 4A Translation of 2019/2020 Schedule 12 Charges into Rates ACE
- Attachment 4B Translation of 2019/2020 Schedule 12 Charges into Rates PSE&G
- Attachment 4C Translation of 2019/2020 Schedule 12 Charges into Rates JCP&L
- Attachment 4D Translation of 2019/2020 Schedule 12 Charges into Rates RECO

# Attachment 4A – Translation of 2019/2020 Schedule 12 Charges into Rates – ACE

Proposed TrAIL CO Projects Transmission Enhancement Charge (TrAIL Co Project-TEC Surcharge) effective June 1, 2019
To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 1, 2019

Transmission Enhancement Costs Allocated to ACE Zone (2019)	\$ 167,269
	\$ 167,269
2019 ACE Zone Transmission Peak Load (MW)	2,591
Transmission Enhancement Rate (\$/MW)	\$ 64.55

	Col. 1	Col. 2	Col. 3	Co	I. 4 = Col. 2/Col. 3	Col. 5 = Col. 4 x $1/(1-Effective Rate)$	Col. 6	S = Col. 5 x 1.06625
	Transmission				Transmission			Transmission
	Obligation	Allocated Cost	BGS Eligible Sales June		Enhancement	Transmission Enhancement Charge w/	En	hancement Charge
Rate Class	(MW)	 Recovery	2019 - May 2020 (kWh)		Charge (\$/kWh)	BPU Assessment (\$/kWh)		w/ SUT (\$/kWh)
RS	1,464	\$ 1,134,191	4,080,911,660	\$	0.000278	\$ 0.000279	\$	0.000297
MGS Secondary	356	\$ 275,494	1,251,541,658	\$	0.000220	\$ 0.000221	\$	0.000236
MGS Primary	6	\$ 4,654	27,739,655	\$	0.000168	\$ 0.000168	\$	0.000179
AGS Secondary	380	\$ 294,433	1,833,118,746	\$	0.000161	\$ 0.000161	\$	0.000172
AGS Primary	95	\$ 73,788	556,105,782	\$	0.000133	\$ 0.000133	\$	0.000142
TGS	147	\$ 113,793	926,628,369	\$	0.000123	\$ 0.000123	\$	0.000131
SPL/CSL	-	\$ -	67,696,364	\$	-	\$ -	\$	-
DDC	2	\$ 1,355	13,542,140	\$	0.000100	\$ 0.000100	\$	0.000107
	2,450	\$ 1,897,707	8,757,284,374					

Proposed BG&E Projects Transmission Enhancement Charge (BG&E Project-TEC Surcharge) effective June 1, 2019

To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 1, 2019

Transmission Enhancement Costs Allocated to ACE Zone (2019)	\$ 22,469
	\$ 22,469
2019 ACE Zone Transmission Peak Load (MW)	2,591
Transmission Enhancement Rate (\$/MW-Month)	\$ 8.67

	Col. 1 Transmission	Col. 2	Col. 3	Col	I. 4 = Col. 2/Col. 3 Transmission	Col	$5 = \text{Col. } 4 \times 1/(1-\text{Effective Rate})$	Col. 6	= Col. 5 x 1.06625 Transmission
	Obligation	Allocated Cost	BGS Eligible Sales June		Enhancement	Tra	nsmission Enhancement Charge	Enh	nancement Charge
Rate Class	(MW)	Recovery	2019 - May 2020 (kWh)		Charge (\$/kWh)		w/ BPU Assessment (\$/kWh)		w/ SUT (\$/kWh)
RS	1,464	\$ 152,355	4,080,911,660	\$	0.000037	\$	0.000037	\$	0.000039
MGS Secondary	356	\$ 37,007	1,251,541,658	\$	0.000030	\$	0.000030	\$	0.000032
MGS Primary	6	\$ 625	27,739,655	\$	0.000023	\$	0.000023	\$	0.000025
AGS Secondary	380	\$ 39,551	1,833,118,746	\$	0.000022	\$	0.000022	\$	0.000023
AGS Primary	95	\$ 9,912	556,105,782	\$	0.000018	\$	0.000018	\$	0.000019
TGS	147	\$ 15,286	926,628,369	\$	0.000016	\$	0.000016	\$	0.000017
SPL/CSL	-	\$ -	67,696,364	\$	-	\$	-	\$	-
DDC	2	\$ 182	13,542,140	\$	0.000013	\$	0.000013	\$	0.000014
	2,450	\$ 254,918	8,757,284,374						

Proposed PPL Projects Transmission Enhancement Charge (PPL Project-TEC Surcharge) effective June 1, 2019
To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 1, 2019

Transmission Enhancement Costs Allocated to ACE Zone (2019)	\$ 59,634
	\$ 59,634
2019 ACE Zone Transmission Peak Load (MW)	2,591
Transmission Enhancement Rate (\$/MW-Month)	\$ 23.01

	Col. 1	Col. 2		Col.	4 = Col. 2/Col. 3	Co	I. $5 = \text{Col. } 4 \times 1/(1-\text{Effective Rate})$	Col. 6	= Col. 5 x 1.06625
	Transmission				Transmission				Transmission
	Obligation	Allocated Cost	BGS Eligible Sales June	Enha	ncement Charge	Trans	smission Enhancement Charge w/	Enl	hancement Charge
Rate Class	(MW)	Recovery	2019 - May 2020 (kWh)		(\$/kWh)		BPU Assessment (\$/kWh)		w/ SUT (\$/kWh)
RS	1,464	\$ 404,355	4,080,911,660	\$	0.000099	\$	0.000099	\$	0.000106
MGS Secondary	356	\$ 98,218	1,251,541,658	\$	0.000078	\$	0.000078	\$	0.000083
MGS Primary	6	\$ 1,659	27,739,655	\$	0.000060	\$	0.000060	\$	0.000064
AGS Secondary	380	\$ 104,969	1,833,118,746	\$	0.000057	\$	0.000057	\$	0.000061
AGS Primary	95	\$ 26,307	556,105,782	\$	0.000047	\$	0.000047	\$	0.000050
TGS	147	\$ 40,569	926,628,369	\$	0.000044	\$	0.000044	\$	0.000047
SPL/CSL	-	\$ -	67,696,364	\$	-	\$	-	\$	-
DDC	2	\$ 483	13,542,140	\$	0.000036	\$	0.000036	\$	0.000038
	2,450	\$ 676,560	8,757,284,374						

Atlantic City Electric Company
Proposed DPL Projects Transmission Enhancement Charge (DPL Project-TEC Surcharge) effective June 1, 2019
To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 1, 2019

Transmission Enhancement Costs Allocated to ACE Zone (2019)	\$ 541
	\$ 541
2019 ACE Zone Transmission Peak Load (MW)	2,591
Transmission Enhancement Rate (\$/MW-Month)	\$ 0.21

	Col. 1	Col. 2	Col. 3	Col.	4 = Col. 2/Col. 3	Col	$.5 = \text{Col. } 4 \times 1/(1-\text{Effective Rate})$	Col. 6	= Col. 5 x 1.06625			
	Transmission				Transmission			Transmission				
	Obligation	Allocated Cost	BGS Eligible Sales June	Enhar	ncement Charge	Trans	mission Enhancement Charge w/	En	hancement Charge			
Rate Class	(MW)	 Recovery	2019 - May 2020 (kWh)		(\$/kWh)		BPU Assessment (\$/kWh)		w/ SUT (\$/kWh)			
RS	1,464	\$ 3,672	4,080,911,660	\$	0.000001	\$	0.000001	\$	0.000001			
MGS Secondary	356	\$ 892	1,251,541,658	\$	0.000001	\$	0.000001	\$	0.000001			
MGS Primary	6	\$ 15	27,739,655	\$	0.000001	\$	0.000001	\$	0.000001			
AGS Secondary	380	\$ 953	1,833,118,746	\$	0.000001	\$	0.000001	\$	0.000001			
AGS Primary	95	\$ 239	556,105,782	\$	-	\$	-	\$	-			
TGS	147	\$ 368	926,628,369	\$	-	\$	-	\$	-			
SPL/CSL	-	\$ -	67,696,364	\$	-	\$	-	\$	-			
DDC	2	\$ 4	13,542,140	\$	-	\$	-	\$	-			
	2,450	\$ 6,143	8,757,284,374									

Atlantic City Electric Company
Proposed PEPCO Projects Transmission Enhancement Charge (PEPCO Project-TEC Surcharge) effective June 1, 2019
To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 1, 2019

Transmission Enhancement Costs Allocated to ACE Zone (2019)	\$ 11,435
	\$ 11,435
2019 ACE Zone Transmission Peak Load (MW)	2,591
Transmission Enhancement Rate (\$/MW-Month)	\$ 4.41

	Col. 1	Col. 2	Col. 3	Co	I. 4 = Col. 2/Col. 3	Co	I. $5 = \text{Col. } 4 \times 1/(1-\text{Effective Rate})$	Col. 6	= Col. 5 x 1.06625
	Transmission				Transmission				Transmission
	Obligation	Allocated Cost	BGS Eligible Sales June		Enhancement	Tra	ansmission Enhancement Charge	Enl	nancement Charge
Rate Class	(MW)	 Recovery	2019 - May 2020 (kWh)		Charge (\$/kWh)		w/ BPU Assessment (\$/kWh)		w/ SUT (\$/kWh)
RS	1,464	\$ 77,539	4,080,911,660	\$	0.000019	\$	0.000019	\$	0.000020
MGS Secondary	356	\$ 18,834	1,251,541,658	\$	0.000015	\$	0.000015	\$	0.000016
MGS Primary	6	\$ 318	27,739,655	\$	0.000011	\$	0.000011	\$	0.000012
AGS Secondary	380	\$ 20,129	1,833,118,746	\$	0.000011	\$	0.000011	\$	0.000012
AGS Primary	95	\$ 5,045	556,105,782	\$	0.000009	\$	0.000009	\$	0.000010
TGS	147	\$ 7,780	926,628,369	\$	0.000008	\$	0.00008	\$	0.000009
SPL/CSL	-	\$ -	67,696,364	\$	-	\$	-	\$	-
DDC	2	\$ 93	13,542,140	\$	0.000007	\$	0.000007	\$	0.000007
	2,450	\$ 129,738	8,757,284,374						

Proposed PECO Projects Transmission Enhancement Charge (PECO-TEC Surcharge) effective June 1, 2019
To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 1, 2019

Transmission Enhancement Costs Allocated to ACE Zone (2019)	\$ 87,418
	\$ 87,418
2019 ACE Zone Transmission Peak Load (MW)	2,591
Transmission Enhancement Rate (\$/MW)	\$ 33.74

	Col. 1 Transmission	Col. 2	Col. 3	Col. 4	4 = Col. 2/Col. 3 Transmission	Col.	5 = Col. 4 x 1/(1-Effective Rate)	Col. 6	6 = Col. 5 x 1.06625 Transmission
	Obligation	Allocated Cost	BGS Eligible Sales Jun	Enhan	cement Charge	Tran	smission Enhancement Charge	Enha	incement Charge w/
Rate Class	(MW)	Recovery	2019 - May 2020 (kWh)		(\$/kWh)		w/ BPU Assessment (\$/kWh)		SUT (\$/kWh)
RS	1,464	\$ 592,749	4,080,911,660	\$	0.000145	\$	0.000145	\$	0.000155
MGS Secondary	356	\$ 143,978	1,251,541,658	\$	0.000115	\$	0.000115	\$	0.000123
MGS Primary	6	\$ 2,432	27,739,655	\$	0.000088	\$	0.000088	\$	0.000094
AGS Secondary	380	\$ 153,876	1,833,118,746	\$	0.000084	\$	0.000084	\$	0.000090
AGS Primary	95	\$ 38,563	556,105,782	\$	0.000069	\$	0.000069	\$	0.000074
TGS	147	\$ 59,470	926,628,369	\$	0.000064	\$	0.000064	\$	0.000068
SPL/CSL	-	\$ -	67,696,364	\$	-	\$	-	\$	-
DDC	2	\$ 708	13,542,140	\$	0.000052	\$	0.000052	\$	0.000055
	2,450	\$ 991,777	8,757,284,374						

# Attachment 4B – Translation of 2019/2020 Schedule 12 Charges into Rates – PSE&G

#### Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for Allegheny TrAILCo Projects

	TEC Charges for June 2019 - May 2020 PSE&G Zonal Transmission Load for Effective Yr. (MW) Term (Months) OATT rate converted to \$/MW/yr =	\$ \$ \$	7,038,332.87 9,978.3 12 58.78 705.36							all v	alues sh	iow w	o NJ SUT						
			RS	F	RHS		RLM		WH	,	WHS		HS		PSAL	-		BPL	
	Trans Obl - MW Total Annual Energy - MWh		4,205.0 12,332,838.9		21.8 109,600.5		74.0 190,365.8		998.0		- 17.0	)	4.2 12,526.2		53,08			- 284,612.0	
	Energy Charge in \$/MWh in \$/kWh - rounded to 6 places	\$ <b>\$</b>	0.240499 <b>0.000240</b>	*	0.140299 <b>0.000140</b>	\$ <b>\$</b>	0.274191 <b>0.000274</b>	\$ <b>\$</b>	-	\$ <b>\$</b>	-	\$ <b>\$</b>	0.236504 <b>0.000237</b>			-	\$ <b>\$</b>	-	
Line	¥																		
1 2 3	Total BGS-RSCP eligbile Trans Obl Total BGS-RSCP eligbile energy @ cust Total BGS-RSCP eligbile energy @ trans nodes		6,976.3 24,465,276.4 25,829,485	MWh			ounded					= su = (2)	m of BGS-R3 m of BGS-R3 · * loss expar	SCP nsior	eligib n facto	ole k' or to	Wh tran	@ cust is node	
4 5 6	Change in OATT rate * total Trans Obl Change in Average Supplier Payment Rate Change in Average Supplier Payment Rate	\$ \$	4,920,803 0.1905 0.19			unro	ounded ounded nded to 2 deci	mal	places			= (4)	nange in OAT (3) rounded to:					S-RSCP eligible Tra	ans Obl
7 8	Proposed Total Supplier Payment Difference due to rounding	\$ \$	4,907,602 (13,201)				ounded ounded						* (3) - (4)						

#### Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for BG&E

	TEC Charges for June 2019 - May 2020 PSE&G Zonal Transmission Load for Effective Yr. (MW) Term (Months) OATT rate converted to \$/MW/yr =	\$ \$ \$		/MW/n /MW/y						all v	alues sh	ow w/	o NJ SUT						
			RS		RHS		RLM		WH	,	WHS		HS		PSAI	L		BPL	
	Trans Obl - MW Total Annual Energy - MWh		4,205.0 12,332,838.9		21.8 109,600.5		74.0 190,365.8		998.0		- 17.0	)	4.2 12,526.2	1	153,0	- 89.0		- 284,612.0	
	Energy Charge in \$/MWh in \$/kWh - rounded to 6 places	\$ <b>\$</b>	0.014402 <b>0.000014</b>	*	0.008402 <b>0.000008</b>		0.016420 <b>0.000016</b>	*	-	\$ <b>\$</b>	-	\$ <b>\$</b>	0.014163 <b>0.000014</b>			-	\$ <b>\$</b>	:	
Line	¥																		
1 2 3	Total BGS-RSCP eligbile Trans Obl Total BGS-RSCP eligbile energy @ cust Total BGS-RSCP eligbile energy @ trans nodes	¢	6,976.3 24,465,276.4 25,829,485	MWh			ounded					= su = (2)	m of BGS-RS m of BGS-RS * loss expar	SCP	eligil n fact	ole k' or to	Wh tran	@ cust ns node	one Ohl
5 6	Change in OATT rate * total Trans Obl Change in Average Supplier Payment Rate Change in Average Supplier Payment Rate	\$ \$ \$	294,679 0.0114 0.01	/MWh /MWh		unro	ounded ounded nded to 2 deci	mal	places			= (4)	iange in OAT (3) rounded to					S-RSCP eligible Tra	ans Obi
7 8	Proposed Total Supplier Payment Difference due to rounding	\$ \$	258,295 (36,384)				ounded ounded						* (3) - (4)						

#### Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for PPL Projects

	TEC Charges for June 2019 - May 2020 PSE&G Zonal Transmission Load for Effective Yr. (MW) Term (Months) OATT rate converted to \$/MW/yr =	\$ \$ \$	27,092,730.33 9,978.3 12 226.26 /MV 2,715.12 /MV				ē	all values s	how w	/o NJ SUT				
			RS	RHS	RLM		WH	WHS		нѕ	PSAL	ВЕ	PL	
	Trans Obl - MW Total Annual Energy - MWh		4,205.0 12,332,838.9	21.8 109,600.5		74.0 65.8	998.0	- 17.	0	4.2 12,526.2		284	- I,612.0	
	Energy Charge in \$/MWh in \$/kWh - rounded to 6 places	\$ <b>\$</b>	0.925746 \$ <b>0.000926</b> \$	0.540049 <b>0.000540</b>	*	•		\$ - <b>\$ -</b>	\$ <b>\$</b>	0.910369 <b>0.000910</b>	*	\$ <b>\$</b>	-	
Line	¥													
1 2 3	Total BGS-RSCP eligbile Trans Obl Total BGS-RSCP eligbile energy @ cust Total BGS-RSCP eligbile energy @ trans nodes	¢	6,976.3 MW 24,465,276.4 MW 25,829,485 MW	/h	unrounded				= su = (2)	m of BGS-RS ) * loss expar	SCP eligible SCP eligible Insion factor to	Wh @ o trans n	cust ode	<b>L</b> I
5 6	Change in OATT rate * total Trans Obl Change in Average Supplier Payment Rate Change in Average Supplier Payment Rate	\$ \$ \$	18,941,492 0.7333 /MV 0.73 /MV		unrounded unrounded rounded to 2	decim	al places		= (4)	) / (3)	1 rate * 10ta 2 decimal pla		RSCP eligible Trans Ot	IC
7 8	Proposed Total Supplier Payment Difference due to rounding	\$ \$	18,855,524 (85,968)		unrounded unrounded				. ,	) * (3) ) - (4)				

#### Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for ACE Projects

	, ,		•															
	TEC Charges for June 2019 - May 2020	\$	1,060,665.64	ļ														
	PSE&G Zonal Transmission Load for Effective YI (MW)	r.	9,978.3	3														
	Term (Months)		12															
	OATT rate	\$	8.86	/MW/	month				а	ll val	ues sh	ow w	o NJ SUT					
	converted to \$/MW/yr	= \$	106.32	/MW/	yr													
			RS		RHS		RLM	1	WH	W	HS		HS	PS	AL		BPL	
	Trans Obl - MW		4,205.0	)	21.8		74.0		-		-		4.2		-		-	
	Total Annual Energy - MWh		12,332,838.9		109,600.5		190,365.8		998.0		17.0	)	12,526.2	153	,089.0	)	284,612.0	
	Energy Charge																	
	in \$/MWh	\$	0.036251	*	0.021147	•	0.041329 \$		- 3	\$	-	\$	0.035649	*	-	\$	-	
	in \$/kWh - rounded to 6 places	\$	0.000036	\$	0.000021	\$	0.000041 \$	5	-	\$	-	\$	0.000036	\$	-	\$	-	
Line :	<b>‡</b>																	
1	Total BGS-RSCP eligbile Trans Obl		6,976.3	NA\A/								- 011	m of BGS-RS	CD A	aible T	Franc	Obl	
2	Total BGS-RSCP eligbile mans obi		24,465,276.4										m of BGS-RS					
3	Total BGS-RSCP eligbile energy @ trans nodes		25,829,485			unro	ounded						) * loss expans					
4	Change in OATT rate * total Trans Obl	\$	741.720			unro	ounded					= Ch	nange in OAT	T rate	* Tota	ıl BG	S-RSCP eligible Tr	ans Obl
5	Change in Average Supplier Payment Rate	\$	0.0287	/MWh	า	unro	ounded						) / (3)				3	
6	Change in Average Supplier Payment Rate	\$	0.03	/MWh	1	rour	nded to 2 decim	al p	olaces			= (5)	) rounded to 2	decin	nal pla	ces		
7	Proposed Total Supplier Payment	\$	774,885			unro	ounded					= (6)	) * (3)					
8	Difference due to rounding	\$	33,164				ounded						) - (4)					

# Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for Delmarva Projects

	TEC Charges for June 2019 - May 2020 PSE&G Zonal Transmission Load for Effective Yr. (MW) Term (Months) OATT rate converted to \$/MW/yr =	\$ \$ \$	17,581.29 9,978.3 12 0.15 // 1.80 //	MW/month MW/yr				;	all valu	ues sho	ow w/	'o NJ SUT					
			RS	RHS		RLM	,	WH	WH	HS		HS	PS	AL		BPL	
	Trans Obl - MW Total Annual Energy - MWh		4,205.0 12,332,838.9	109,60	1.8 0.5	74.0 190,365.8		998.0		- 17.0		4.2 12,526.2	153	- ,089.0		- 284,612.0	
	Energy Charge in \$/MWh in \$/kWh - rounded to 6 places	\$ <b>\$</b>	0.000614 S		58 \$ <b>\$</b>	0.000700 <b>0.000001</b>			\$ <b>\$</b>	-	\$ <b>\$</b>	0.000604 <b>0.000001</b>		-	\$ <b>\$</b>	-	
Line	<i>‡</i>																
1 2 3	Total BGS-RSCP eligbile Trans Obl Total BGS-RSCP eligbile energy @ cust Total BGS-RSCP eligbile energy @ trans nodes		6,976.3 N 24,465,276.4 N 25,829,485 N	ЛWh	unro	ounded					= sur	m of BGS-RS m of BGS-RS * loss expar	SCP eli	gible k	Wh	@ cust	
4 5 6	Change in OATT rate * total Trans Obl Change in Average Supplier Payment Rate Change in Average Supplier Payment Rate	\$ \$ \$	12,557 0.0005 /I - /I	MWh MWh	unre	ounded ounded nded to 2 deci	mal p	olaces			= (4)	J				S-RSCP eligible T	rans Obl
7 8	Proposed Total Supplier Payment Difference due to rounding	\$ \$	- (12,557)			ounded ounded					= (6) = (7)	` '					

# Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for PEPCO Projects

	TEC Charges for June 2019 - May 2020 PSE&G Zonal Transmission Load for Effective Yr. (MW) Term (Months) OATT rate converted to \$/MW/yr =	\$ \$ \$	376,115.50 9,978.3 12 3.14 / 37.68 /	/MW/mo /MW/yr	onth				8	all va	alues sh	iow w	/o NJ SUT					
			RS	RI	HS		RLM		WH	٧	VHS		нѕ	F	PSAL		BPL	
	Trans Obl - MW Total Annual Energy - MWh		4,205.0 12,332,838.9	10	21.8 09,600.5		74.0 190,365.8		998.0		- 17.0	)	4.2 12,526.2	1	- 53,089	0.0	- 284,612.0	
	Energy Charge in \$/MWh in \$/kWh - rounded to 6 places	\$ <b>\$</b>	0.012847 <b>0.000013</b>		.007495 . <b>000007</b>	\$ <b>\$</b>	0.014647 <b>0.000015</b>	\$ <b>\$</b>		\$ <b>\$</b>	-	\$ <b>\$</b>	0.012634 <b>0.000013</b>	*	-	9	\$ - <b>\$</b> -	
Line	#																	
1 2 3	Total BGS-RSCP eligbile Trans Obl Total BGS-RSCP eligbile energy @ cust Total BGS-RSCP eligbile energy @ trans nodes Change in OATT rate * total Trans Obl	\$	6,976.3 M 24,465,276.4 M 25,829,485 M 262,867	MWh			ounded					= su = (2)	m of BGS-RS m of BGS-RS ) * loss expar	SCP sion	eligible factor	kW to tr	/h @ cust	ible Trans Obl
5	Change in Average Supplier Payment Rate Change in Average Supplier Payment Rate	\$	0.0102 / 0.01 /			unro	ounded nded to 2 decir	nal	places			= (4)	) / (3) ) rounded to 2				J	
7 8	Proposed Total Supplier Payment Difference due to rounding	\$ \$	258,295 (4,572)				ounded ounded						) * (3) ) - (4)					

#### Transmission Charge Adjustment - BGS-RSCP PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for PECO Energy Company Transmission Projects

			=		-							
	TEC Charges for June 2019 - May 2020	\$ 2,672,908.08										
	PSE&G Zonal Transmission Load for Effective Yr. (MW)	9,978.3										
	Term (Months)	12										
	OATT rate	\$ 22.32 /M	1W/month				all values	show w	o NJ SUT			
	converted to \$/MW/yr =	\$ 267.84 /M	1W/yr									
		RS	RHS		RLM	WH	WHS		HS	PSAL	BPL	
	Trans Obl - MW	4,205.0	21.	8	74.0	-	-		4.2	-	-	
	Total Annual Energy - MWh	12,332,838.9	109,600.	5	190,365.8	998.0	17	.0	12,526.2	153,089.0	284,612.0	
	Energy Charge											
	in \$/MWh	\$ 0.091323 \$			0.104116 \$	-	\$ -	\$	0.089806	*	\$ -	
	in \$/kWh - rounded to 6 places	\$ 0.000091 \$	0.000053	\$ \$	0.000104 \$	-	\$ -	\$	0.000090	\$ -	\$ -	
Line	#											
1	Total BGS-RSCP eligbile Trans Obl	6,976.3 M	١٨/					- 61	ım of RGS-RS	SCP eligible Tr	ans Ohl	
2	Total BGS-RSCP eligbile energy @ cust	24,465,276.4 M								CP eligible kV		
3	Total BGS-RSCP eligbile energy @ trans nodes	25,829,485 M		unro	unded					sion factor to		
4	Change in OATT rate * total Trans Obl	\$ 1,868,532			unded					T rate * Total	BGS-RSCP eligible Trans O	ıbl
5	Change in Average Supplier Payment Rate	\$ 0.0723 /M			unded				) / (3) )			
6	Change in Average Supplier Payment Rate	\$ 0.07 /M	1VV F1	roun	ded to 2 decima	ai piaces		= (5	) rounded to 2	decimal place	es	
7	Proposed Total Supplier Payment	\$ 1,808,064		unro	unded			= (6	) * (3)			
8	Difference due to rounding	\$ (60,468)			unded				) - (4)			
	_	•										

# Attachment 4C – Translation of 2019/2020 Schedule 12 Charges into Rates – JCP&L

### **Jersey Central Power & Light Company**

Proposed TRAILCO Project Transmission Enhancement Charge (TRAILCO-TEC Surcharge) effective September 1, 2019
To reflect FERC-approved TRAILCO Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly TRAILCO-TEC Costs Allocated to JCP&L Zone \$346,863.96 (1)
2019 JCP&L Zone Transmission Peak Load (MW) 5,976.50
TRAILCO-Transmission Enhancement Rate (\$/MW-month) \$58.04

				Effective Septe	ember 1, 2019
	Transmission				TRAILCO-TEC
	Obligation	Allocated Cost	BGS Eligible Sales	TRAILCO-TEC	Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$3,601,999	16,480,061,858	\$0.000219	\$0.000234
Primary	360.4	\$251,003	1,762,932,983	\$0.000142	\$0.000151
Transmission @ 34.5 kV	289.9	\$201,903	1,608,893,340	\$0.000125	\$0.000133
Transmission @ 230 kV	14.9	\$10,377	353,109,180	\$0.000029	\$0.000031
Total	5,837.1	\$4,065,282	20,204,997,362		

- (1) Cost Allocation of TRAILCO Project Schedule 12 Charges to JCP&L Zone for 2019/2020
- (2) Based on 12 months TRAILCO Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

Line	No.		
1	BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW
4	TRAILCO-Transmission Enhancement Costs to RSCP Suppliers	\$3,426,076	= Line 3 x \$58.04 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.20	= Line 4 / Line 2

\$24,061.65 (1)

\$4.03

5,976.50

#### **Attachment 4C**

### **Jersey Central Power & Light Company**

Proposed BG&E Project Transmission Enhancement Charge (BG&E-TEC Surcharge) effective September 1, 2019
To reflect FERC-approved BG&E Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly BG&E-TEC Costs Allocated to JCP&L Zone
2019 JCP&L Zone Transmission Peak Load (MW)
BG&E-Transmission Enhancement Rate (\$/MW-month)

				Effective Septe	mber 1, 2019
	Transmission				BG&E-TEC
	Obligation	Allocated Cost	BGS Eligible Sales	BG&E-TEC	Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$249,868	16,480,061,858	\$0.000015	\$0.000016
Primary	360.4	\$17,412	1,762,932,983	\$0.000010	\$0.000011
Transmission @ 34.5 kV	289.9	\$14,006	1,608,893,340	\$0.000009	\$0.000010
Transmission @ 230 kV	14.9	\$720	353,109,180	\$0.000002	\$0.000002
Total	5,837.1	\$282,005	20,204,997,362		

- (1) Cost Allocation of BG&E Project Schedule 12 Charges to JCP&L Zone for 2019/2020
- (2) Based on 12 months BG&E Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

Line I	No.		
1	BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW
4	BG&E-Transmission Enhancement Costs to RSCP Suppliers	\$237,889	= Line 3 x \$4.03 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.01	= Line 4 / Line 2

### **Jersey Central Power & Light Company**

Proposed PPL Project Transmission Enhancement Charge (PPL-TEC Surcharge) effective September 1, 2019 To reflect FERC-approved PPL Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly PPL-TEC Costs Allocated to JCP&L Zone \$1,085,067.69 (1) 2019 JCP&L Zone Transmission Peak Load (MW) 5,976.50 PPL-Transmission Enhancement Rate (\$/MW-month) \$181.56

				Effective Septe	mber 1, 2019
	Transmission			•	PPL-TEC
	Obligation	Allocated Cost	<b>BGS</b> Eligible Sales	PPL-TEC	Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$11,267,856	16,480,061,858	\$0.000684	\$0.000729
Primary	360.4	\$785,192	1,762,932,983	\$0.000445	\$0.000474
Transmission @ 34.5 kV	289.9	\$631,596	1,608,893,340	\$0.000393	\$0.000419
Transmission @ 230 kV	14.9	\$32,462	353,109,180	\$0.000092	\$0.000098
Total	5.837.1	\$12.717.106	20.204.997.362		

- (1) Cost Allocation of PPL Project Schedule 12 Charges to JCP&L Zone for 2019/2020
- (2) Based on 12 months PPL Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

Line	No.

<u>Line</u> 1	No. BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW
4	PPL-Transmission Enhancement Costs to RSCP Suppliers	\$10,717,407	= Line 3 x \$181.56 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.63	= Line 4 / Line 2

### **Jersey Central Power & Light Company**

Proposed ACE Project Transmission Enhancement Charge (ACE-TEC Surcharge) effective September 1, 2019
To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly ACE-TEC Costs Allocated to JCP&L Zone \$103,724.91 (1) 2019 JCP&L Zone Transmission Peak Load (MW) 5,976.50 ACE-Transmission Enhancement Rate (\$\mathrm{S}\mathrm{MW-month}\) \$17.36

				Effective Septe	mber 1, 2019
	Transmission				ACE-TEC
	Obligation	Allocated Cost	<b>BGS</b> Eligible Sales	ACE-TEC	Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$1,077,128	16,480,061,858	\$0.000065	\$0.000069
Primary	360.4	\$75,059	1,762,932,983	\$0.000043	\$0.000046
Transmission @ 34.5 kV	289.9	\$60,376	1,608,893,340	\$0.000038	\$0.000041
Transmission @ 230 kV	14.9	\$3,103	353,109,180	\$0.000009	\$0.000010
Total	5,837.1	\$1,215,667	20,204,997,362		

- (1) Cost Allocation of ACE Project Schedule 12 Charges to JCP&L Zone for 2019/2020
- (2) Based on 12 months ACE Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

Line No.								
1	BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH					
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH					
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW					
4	ACE-Transmission Enhancement Costs to RSCP Suppliers	\$1,024,753	= Line 3 x \$17.36 x 12					
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.06	= Line 4 / Line 2					

### **Jersey Central Power & Light Company**

Proposed Delmarva Project Transmission Enhancement Charge (Delmarva-TEC Surcharge) effective September 1, 2019 To reflect FERC-approved Delmarva Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly Delmarva-TEC Costs Allocated to JCP&L Zone \$860.84 (1) 2019 JCP&L Zone Transmission Peak Load (MW) 5,976.50 Delmarva-Transmission Enhancement Rate (\$/MW-month) \$0.14

#### Effective September 1, 2019

					,
	Transmission Obligation	Allocated Cost	BGS Eligible Sales	Delmarva-TEC	Delmarva-TEC Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$8,939	16,480,061,858	\$0.000001	\$0.000001
Primary	360.4	\$623	1,762,932,983	\$0.000000	\$0.000000
Transmission @ 34.5 kV	289.9	\$501	1,608,893,340	\$0.000000	\$0.000000
Transmission @ 230 kV	14.9	\$26	353,109,180	\$0.000000	\$0.000000
Total	5.837.1	\$10.089	20.204.997.362		

- (1) Cost Allocation of Delmarva Project Schedule 12 Charges to JCP&L Zone for 2019/2020
- (2) Based on 12 months Delmarva Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

Line	No.		
1	BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW
4	Delmarva-Transmission Enhancement Costs to RSCP Suppliers	\$8,264	= Line 3 x \$0.14 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.00	= Line 4 / Line 2

### **Jersey Central Power & Light Company**

Proposed PEPCO Project Transmission Enhancement Charge (PEPCO-TEC Surcharge) effective September 1, 2019
To reflect FERC-approved PEPCO Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly PEPCO-TEC Costs Allocated to JCP&L Zone
2019 JCP&L Zone Transmission Peak Load (MW)
PEPCO-Transmission Enhancement Rate (\$/MW-month)

\$20,765.82 (1) 5,976.50 \$3.47

				Effective Septe	mber 1, 2019
	Transmission			•	PEPCO-TEC
	Obligation	Allocated Cost	<b>BGS</b> Eligible Sales	PEPCO-TEC	Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$215,642	16,480,061,858	\$0.000013	\$0.000014
Primary	360.4	\$15,027	1,762,932,983	\$0.000009	\$0.000010
Transmission @ 34.5 kV	289.9	\$12,087	1,608,893,340	\$0.000008	\$0.000009
Transmission @ 230 kV	14.9	\$621	353,109,180	\$0.000002	\$0.000002
Total	5,837.1	\$243,378	20,204,997,362		

- (1) Cost Allocation of PEPCO Project Schedule 12 Charges to JCP&L Zone for 2019/2020
- (2) Based on 12 months PEPCO Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

Line	

1	BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW
4	PEPCO-Transmission Enhancement Costs to RSCP Suppliers	\$204,833	= Line 3 x \$3.47 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.01	= Line 4 / Line 2

### **Jersey Central Power & Light Company**

Proposed PECO Project Transmission Enhancement Charge (PECO-TEC Surcharge) effective September 1, 2019 To reflect FERC-approved PECO Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2019 - May 2020

2019/2020 Average Monthly PECO-TEC Costs Allocated to JCP&L Zone 2019 JCP&L Zone Transmission Peak Load (MW) PECO-Transmission Enhancement Rate (\$/MW-month)

\$97,597.82 (1) 5,976.50 \$16.33

				Effective Septe	mber 1, 2019
	Transmission				PECO-TEC
	Obligation	Allocated Cost	<b>BGS</b> Eligible Sales	PECO-TEC	Surcharge w/
BGS by Voltage Level	(MW)	Recovery (\$) (2)	(kWh) (3)	Surcharge (\$/kWh)	SUT(\$/kWh)
Secondary (excluding lighting)	5,171.9	\$1,013,502	16,480,061,858	\$0.000061	\$0.000065
Primary	360.4	\$70,625	1,762,932,983	\$0.000040	\$0.000043
Transmission @ 34.5 kV	289.9	\$56,810	1,608,893,340	\$0.000035	\$0.000037
Transmission @ 230 kV	14.9	\$2,920	353,109,180	\$0.00008	\$0.000009
Total	5,837.1	\$1,143,857	20,204,997,362		

- (1) Cost Allocation of PECO Project Schedule 12 Charges to JCP&L Zone for 2019/201920
- (2) Based on 12 months PECO Project costs from June 2019 through May 2020
- (3) September 2019 through August 2020

### **BGS-RSCP Supplier Payment Adjustment**

1	BGS-RSCP Eligible Sales June through May @ Customer	15,389,564	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,073,576	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,919.13	MW
4	PECO-Transmission Enhancement Costs to RSCP Suppliers	\$963,953	= Line 3 x \$16.33 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$0.06	= Line 4 / Line 2

5 Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)

# Attachment 4D – Translation of 2019/2020 Schedule 12 Charges into Rates – RECO

0.00010

# **Rockland Electric Company**

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (TrAILCo) effective July 1, 2019 To reflect FERC-approved TrailCo Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly TrAILCo-TEC Costs Allocated to RECO 2019 RECO Zone Transmission Peak Load (MW) Transmission Enhancement Rate (\$/MW-month) SUT			)				(1) (2)			
	Col. 1	Col. 2	С	Col.3=Col.2 x \$24,025 x 12		Col. 4		Col. 5 = Col. 3/Col. 4		Col. 6 = Col. 5 x 1.07
	BGS-Eligible									
	Transmission	Transmission			[	BGS Eligible Sales		Transmission		Transmission
	Obligation	Obligation		Allocated Cost	Jul	y 2019- June 2020		Enhancement	Enl	nancement Charge
_ Rate Class	(MW)	(Pct)		Recovery (1)		(kWh)		Charge (\$/kWh)		w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$	171,695		672,451,000	\$	0.00026	\$	0.00028
SC2 Secondary	131.7	28.65%	\$	82,595		517,204,000	\$	0.00016	\$	0.00017
SC2 Primary	15.3	3.33%	\$	9,592		67,155,000	\$	0.00014	\$	0.00015
SC3	0.1	0.02%	\$	52		302,000	\$	0.00017	\$	0.00018
SC4	0.0	0.00%	\$	-		6,328,000	\$	-	\$	-
SC5	3.5	0.75%	\$	2,169		14,401,000	\$	0.00015	\$	0.00016

22,194

288,297

5,546,000

238,803,000

1,522,190,000

\$

\$

\$

0.00009

(1) Attachment 2 - Cost Allocation of TrAILCo Schedule 12 Charges to RECO Zone for July 2019 to June 2020

0.00%

7.70% 100.00% \$

\$

\$

(2) Includes RECO's Central and Western Divisions

0.0

459.6 (2)

35.4

# **BGS-FP Supplier Payment Adjustment**

SC6

SC7

Total

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 266,948.69	= Line 3 x \$52.27 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.23	= Line 4/Line 2

0.00001

\$

\$

0.00001

# **Rockland Electric Company**

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (BG&E) effective July 1, 2019 To reflect FERC-approved BG&E Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly BG&E-TEC Costs Allocated to RECO 2019 RECO Zone Transmission Peak Load (MW) Transmission Enhancement Rate (\$/MW-month) SUT						(1) (2)			
	Col. 1	Col. 2	Col.3=Col.2 x \$1,294 x 12		Col. 4		Col. 5 = Col. 3/Col. 4		Col. 6 = Col. 5 x 1.07
	BGS-Eligible								
	Transmission	Transmission		BG	SS Eligible Sales		Transmission		Transmission
	Obligation	Obligation	Allocated Cost	July 2	2019- June 2020		Enhancement	Enł	nancement Charge
Rate Class	(MW)	(Pct)	Recovery (1)		(kWh)		Charge (\$/kWh)		w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$ 9,247		672,451,000	\$	0.00001	\$	0.00001
SC2 Secondary	131.7	28.65%	\$ 4,448		517,204,000	\$	0.00001	\$	0.00001
SC2 Primary	15.3	3.33%	\$ 517		67,155,000	\$	0.00001	\$	0.00001
SC3	0.1	0.02%	\$ 3		302,000	\$	0.00001	\$	0.00001
SC4	0.0	0.00%	\$ -		6,328,000	\$	-	\$	-
SC5	3.5	0.75%	\$ 117		14,401,000	\$	0.00001	\$	0.00001

1,195

15,527

5,546,000

238,803,000

1,522,190,000

\$

\$

(1) Attachment 2 - Cost Allocation of BG&E Schedule 12 Charges to RECO Zone for July 2019 to June 2020

0.00%

7.70%

100.00%

\$

\$

\$

(2) Includes RECO's Central and Western Divisions

0.0

459.6 (2)

35.4

# **BGS-FP Supplier Payment Adjustment**

SC6

SC7

Total

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 14,402.05	= Line 3 x \$2.82 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.01	= Line 4/Line 2

0.00062

0.00038

# **Rockland Electric Company**

SC4

SC5

SC6

SC7

Total

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (PPL) effective July 1, 2019 To reflect FERC-approved PPL Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly 2019 RECO Zone Transmiss	\$	92,264 459.6	(1) (2)							
Transmission Enhancement SUT	·	200.74 6.625%								
						0.02070				
	Col. 1	Col. 2	C	Col.3=Col.2 x \$92,264 x 12		Col. 4		Col. 5 = Col. 3/Col. 4		Col. 6 = Col. 5 x 1.07
	BGS-Eligible									
	Transmission	Transmission			BGS Eligib	le Sales		Transmission		Transmission
	Obligation	Obligation		Allocated Cost	July 2019- Jui	ne 2020		Enhancement	Enh	nancement Charge
Rate Class	(MW)	(Pct)		Recovery (1)		(kWh)		Charge (\$/kWh)		w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$	659,372	672,4	51,000	\$	0.00098	\$	0.00104
SC2 Secondary	131.7	28.65%	\$	317,194	517,2	04,000	\$	0.00061	\$	0.00065
SC2 Primary	15.3	3.33%	\$	36,838	67,1	55,000	\$	0.00055	\$	0.00059
SC3	0.1	0.02%	\$	199	3	02.000	\$	0.00066	\$	0.00070

8,331

85,233

1,107,167

6,328,000

14,401,000

238,803,000

1,522,190,000

5,546,000

\$

\$

\$

\$

\$

\$

\$

\$

0.00058

0.00036

(1) Attachment 2 - Cost Allocation of PPL Schedule 12 Charges to RECO Zone for July 2019 to June 2020

0.00%

0.75%

0.00%

7.70% 100.00% \$

\$

\$

\$

\$

(2) Includes RECO's Central and Western Divisions

0.0

3.5

0.0

459.6 (2)

35.4

# **BGS-FP Supplier Payment Adjustment**

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 1,025,201.45	= Line 3 x \$200.74 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.89	= Line 4/Line 2

# **Rockland Electric Company**

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (ACE) effective July 1, 2019 To reflect FERC-approved ACE Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly TrAILCo-TEC Costs Allocated to RECO	\$ 2,798 (1)
2019 RECO Zone Transmission Peak Load (MW)	459.6 (2)
Transmission Enhancement Rate (\$/MW-month)	\$ 6.09
SUT	6.625%

	Col. 1	Col. 2	Co	ol.3=Col.2 x \$2,798 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 July 2019- June 2020 (kWh)	Transmission Enhancement Charge (\$/kWh)	Ent	Transmission nancement Charge w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$	19,995	672,451,000	\$ 0.00003	\$	0.00003
SC2 Secondary	131.7	28.65%	\$	9,619	517,204,000	\$ 0.00002	\$	0.00002
SC2 Primary	15.3	3.33%	\$	1,117	67,155,000	\$ 0.00002	\$	0.00002
SC3	0.1	0.02%	\$	6	302,000	\$ 0.00002	\$	0.00002
SC4	0.0	0.00%	\$	-	6,328,000	\$ -	\$	-
SC5	3.5	0.75%	\$	253	14,401,000	\$ 0.00002	\$	0.00002
SC6	0.0	0.00%	\$	-	5,546,000	\$ -	\$	-
SC7	<u>35.4</u>	7.70%	\$	2,585	238,803,000	\$ 0.00001	\$	0.00001
Total	459.6 (2)	100.00%	\$	33,575	1,522,190,000			

<sup>(1)</sup> Attachment 2 - Cost Allocation of ACE Schedule 12 Charges to RECO Zone for July 2019 to June 2020

# **BGS-FP Supplier Payment Adjustment**

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 31,102.31	= Line 3 x \$6.09 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.03	= Line 4/Line 2

<sup>(2)</sup> Includes RECO's Central and Western Divisions

Col. 6 = Col. 5 x 1.07

### **Rockland Electric Company**

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (Delmarva) effective July 1, 2019 To reflect FERC-approved Delmarva Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly Delmarva-TEC Costs Allocated to RECO	\$ 61 (1)
2019 RECO Zone Transmission Peak Load (MW)	459.6 (2)
Transmission Enhancement Rate (\$/MW-month)	\$ 0.13
SUT	6.625%

Col. 2

Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales July 2019- June 2020 (kWh)	Transmission Enhancement Charge (\$/kWh)	Enh	Transmission nancement Charge w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$ 439	672,451,000	\$ -	\$	=
SC2 Secondary	131.7	28.65%	\$ 211	517,204,000	\$ -	\$	-
SC2 Primary	15.3	3.33%	\$ 25	67,155,000	\$ -	\$	-
SC3	0.1	0.02%	\$ -	302,000	\$ -	\$	-
SC4	0.0	0.00%	\$ -	6,328,000	\$ -	\$	-
SC5	3.5	0.75%	\$ 6	14,401,000	\$ -	\$	-
SC6	0.0	0.00%	\$ -	5,546,000	\$ -	\$	-
SC7	<u>35.4</u>	7.70%	\$ 57	238,803,000	\$ -	\$	-
Total	459.6 (2)	100.00%	\$ 738	1,522,190,000			

Col. 4

Col. 5 = Col. 3/Col. 4

Col.3=Col.2 x \$061 x 12

- (1) Attachment 2 Cost Allocation of Delmarva Schedule 12 Charges to RECO Zone for July 2019 to June 2020
- (2) Includes RECO's Central and Western Divisions

Col. 1

### **BGS-FP Supplier Payment Adjustment**

#### Line No.

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 663.92	= Line 3 x \$0.13 * 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 July 1, 2019 To reflect FERC-approved PEPCO Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly I 2019 RECO Zone Transmiss			)		\$ 866 459.6	(1) (2)			
Transmission Enhancement I	`	,			\$ 1.88	(2)			
SUT					6.625%				
	Col. 1	Col. 2		Col.3=Col.2 x \$866 x 12	Col. 4		Col. 5 = Col. 3/Col. 4		Col. 6 = Col. 5 x 1.07
	BGS-Eligible								
	Transmission	Transmission			BGS Eligible Sales		Transmission		Transmission
	Obligation	Obligation		Allocated Cost	July 2019- June 2020		Enhancement	Enh	nancement Charge
Rate Class	(MW)	(Pct)		Recovery (1)	(kWh)		Charge (\$/kWh)		w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$	6,189	672,451,000	\$	0.00001	\$	0.00001
SC2 Secondary	131.7	28.65%	\$	2,977	517,204,000	\$	0.00001	\$	0.00001
SC2 Primary	15.3	3.33%	\$	346	67,155,000	\$	0.00001	\$	0.00001
SC3	0.1	0.02%	\$	2	302,000	\$	0.00001	\$	0.00001
SC4	0.0	0.00%	\$	-	6,328,000	\$	-	\$	-
SC5	3.5	0.75%	\$	78	14,401,000	\$	0.00001	\$	0.00001
SC6	0.0	0.00%	\$	-	5,546,000	\$	-	\$	-
SC7	<u>35.4</u>	7.70%	\$	800	238,803,000	\$	-	\$	-

10,392

1,522,190,000

(1) Attachment 2 - Cost Allocation of PEPCO Schedule 12 Charges to RECO Zone for July 2019 to June 2020

100.00%

(2) Includes RECO's Central and Western Divisions

459.6 (2)

### **BGS-FP Supplier Payment Adjustment**

Total

#### Line No.

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 9,601.37	= Line 3 x \$1.88 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.01	= Line 4/Line 2

Col.  $6 = \text{Col. } 5 \times 1.07$ 

### **Rockland Electric Company**

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (PECO) effective July 1, 2019 To reflect FERC-approved PECO Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2019 to May 2020

2019/2020 Average Monthly PECO-TE	C Costs Allocated to	RECO		\$ 8,627	(1)	
2019 RECO Zone Transmission Peak	Load (MW)			459.6	(2)	
Transmission Enhancement Rate (\$/M	lW-month)			\$ 18.77		
SUT				6.625%		
	Col. 1	Col. 2	Col.3=Col.2 x \$8,627 x 12	Col. 4		Col. 5 = Col. 3/Col. 4

Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales July 2019- June 2020 (kWh)	Transmission Enhancement Charge (\$/kWh)	Enł	Transmission nancement Charge w/ SUT (\$/kWh)
SC1	273.7	59.55%	\$ 61,656	672,451,000	\$ 0.00009	\$	0.00010
SC2 Secondary	131.7	28.65%	\$ 29,660	517,204,000	\$ 0.00006	\$	0.00006
SC2 Primary	15.3	3.33%	\$ 3,445	67,155,000	\$ 0.00005	\$	0.00005
SC3	0.1	0.02%	\$ 19	302,000	\$ 0.00006	\$	0.00006
SC4	0.0	0.00%	\$ -	6,328,000	\$ -	\$	-
SC5	3.5	0.75%	\$ 779	14,401,000	\$ 0.00005	\$	0.00005
SC6	0.0	0.00%	\$ -	5,546,000	\$ -	\$	-
SC7	<u>35.4</u>	7.70%	\$ 7,970	238,803,000	\$ 0.00003	\$	0.00003
Total	459.6 (2)	100.00%	\$ 103,529	1,522,190,000			

- (1) Attachment 2 Cost Allocation of PECO Schedule 12 Charges to RECO Zone for July 2019 to June 2020
- (2) Includes RECO's Central and Western Divisions

### **BGS-FP Supplier Payment Adjustment**

#### Line No.

1	BGS-RSCP Eligible Sales Jul - Jun @ cust (RECO Eastern Division)	1,231,459	MWH
2	BGS-RSCP Eligible Sales Jul - Jun @ trans node (RECO Eastern Division)	1,146,049	MWH
3	BGS-RSCP Eligible Transmission Obligation	426	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 95,860.47	= Line 3 x \$18.77 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.08	= Line 4/Line 2

#### **Rockland Electric Company**

Transmission

Calculation of Transmission Surcharges reflecting proposed changes effective July 1, 2019

To reflect: RMR Costs

FERC-approved ACE Project Schedule 12 Charges (Schedule 12 PJM OATT)

FERC-approved AEP-East Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

FERC-approved BG&E Project Schedule 12 Charges (Schedule 12 PJM OATT)
FERC-approved Delmarva Project Schedule 12 Charges (Schedule 12 PJM OATT)

FERC-approved PATH Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

FERC-approved PEPCO Project Schedule 12 Charges (Schedule 12 PJM OATT)

FERC-approved PPL Project Schedule 12 Charges (Schedule 12 PJM OATT)s

FERC-approved PSE&G Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

FERC-approved TrailCo Project Schedule 12 Charges (Schedule 12 PJM OATT)

FERC-approved VEPCo Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

FERC-approved MAIT Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

FERC-approved JCP&L Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

FERC-approved PECO Project Schedule 12 Charges (Schedule 12 PJM OATT)

FERC-approved EL05-121 Project Schedule 12 Charges (Schedule 12 PJM OATT) currently in RECO's rates

#### (A) Transmission Surcharge rates by Transmission Project and Service Class (excluding SUT)

Project	Note	SC1	SC2 Sec	SC2 Pri	SC3	SC4	SC5	SC6	SC7
Reliability Must Run	(1)	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
ACE - TEC	(2)	0.00003	0.00002	0.00002	0.00002	0.00000	0.00002	0.00000	0.00001
AEP-East - TEC	(3)	0.00009	0.00006	0.00006	0.00006	0.00000	0.00006	0.00000	0.00003
BG&E- TEC	(4)	0.00001	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00001
Delmarva - TEC	(5)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PATH - TEC	(6)	0.00001	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00000
PEPCO - TEC	(7)	0.00001	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00000
PPL - TEC	(8)	0.00098	0.00061	0.00055	0.00066	0.00000	0.00058	0.00000	0.00036
PSE&G - TEC	(9)	0.00874	0.00531	0.00515	0.00513	0.00000	0.00548	0.00000	0.00306
TrAILCo - TEC	(10)	0.00026	0.00016	0.00014	0.00017	0.00000	0.00015	0.00000	0.00009
/EPCo - TEC	(11)	0.00021	0.00013	0.00012	0.00012	0.00000	0.00013	0.00000	0.00007
MAIT -TEC	(12)	0.00006	0.00004	0.00004	0.00004	0.00000	0.00004	0.00000	0.00002
JCP&L -TEC	(13)	0.00030	0.00019	0.00018	0.00018	0.00000	0.00019	0.00000	0.00011
PECO -TEC	(14)	0.00009	0.00006	0.00005	0.00006	0.00000	0.00005	0.00000	0.00003
EL05-121	(15)	0.00067	0.00044	0.00042	0.00048	0.00000	0.00049	0.00000	0.00025
Total (\$/kWh and excl SUT)		\$0.01146	\$0.00705	\$0.00676	\$0.00695	\$0.00000	\$0.00722	\$0.00000	\$0.00404
Fotal (¢/kWh and excl SUT)		1.146¢	0.705 ¢	0.676¢	0.695¢	0.000 ¢	0.722 ¢	0.000 ¢	0.404 ¢
Transmission Surcharge rat	es by Trar	nsmission Pr	oject and Se	rvice Class (	including SU	T)	6.625%		
Transmission									
Project	Note	SC1	SC2 Sec	SC2 Pri	SC3	SC4	SC5	SC6	SC7
Reliability Must Run	(1)	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
ACE - TEC	(2)	0.00003	0.00002	0.00002	0.00002	0.00000	0.00002	0.00000	0.00001
AEP-East - TEC	(3)	0.00010	0.00006	0.00006	0.00006	0.00000	0.00006	0.00000	0.00003
BG&E- TEC	(4)	0.00010	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00001

Project	Note	SC1	SC2 Sec	SC2 Pri	SC3	SC4	SC5	SC6	SC7
Delichility Must Due	(4)	<b>#</b> 0.00000	<b>#</b> 0.0000	<b>#0.00000</b>	<b>#0.00000</b>	<b>#0.00000</b>	<b>#0.00000</b>	<b>#0.00000</b>	<b>#</b> 0.00000
Reliability Must Run	(1)	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
ACE - TEC	(2)	0.00003	0.00002	0.00002	0.00002	0.00000	0.00002	0.00000	0.00001
AEP-East - TEC	(3)	0.00010	0.00006	0.00006	0.00006	0.00000	0.00006	0.00000	0.00003
BG&E- TEC	(4)	0.00001	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00001
Delmarva - TEC	(5)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PATH - TEC	(6)	0.00001	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00000
PEPCO - TEC	(7)	0.00001	0.00001	0.00001	0.00001	0.00000	0.00001	0.00000	0.00000
PPL - TEC	(8)	0.00104	0.00065	0.00059	0.00070	0.00000	0.00062	0.00000	0.00038
PSE&G - TEC	(9)	0.00932	0.00566	0.00549	0.00547	0.00000	0.00584	0.00000	0.00326
TrAILCo - TEC	(10)	0.00028	0.00017	0.00015	0.00018	0.00000	0.00016	0.00000	0.00010
VEPCo - TEC	(11)	0.00022	0.00014	0.00013	0.00013	0.00000	0.00014	0.00000	0.00007
MAIT -TEC	(12)	0.00006	0.00004	0.00004	0.00004	0.00000	0.00004	0.00000	0.00002
JCP&L -TEC	(13)	0.00032	0.00020	0.00019	0.00019	0.00000	0.00020	0.00000	0.00012
PECO -TEC	(14)	0.00010	0.00006	0.00005	0.00006	0.00000	0.00005	0.00000	0.00003
EL05-121	(15)	0.00071	0.00047	0.00045	0.00051	0.00000	0.00052	0.00000	0.00027
Total (\$/kWh and incl SUT)		\$0.01221	\$0.00750	\$0.00720	\$0.00739	\$0.00000	\$0.00768	\$0.00000	\$0.00430
Total (¢/kWh and incl SUT)		1.221 ¢	0.750 ¢	0.720 ¢	0.739¢	0.000 ¢	0.768¢	0.000 ¢	0.430¢

### Notes:

- (1) RMR rates set to "0" due to retirement of Yorktown-1 and Yorktown-2 Generation Units
- (2) ACE-TEC rates rates calculated in Attachment 6D of the joint filing.
- (3) AEP-East-TEC rates pursuant to the Board's Order dated January 17, 2019 in Docket No. ER18121290.
- (4) BG&E-TEC rates calculated in Attachment 6B of the joint filing.
- (5) Delmarva-TEC rates calculated in Attachment 6E of the joint filing.
- (6) PATH-TEC rates pursuant to the Board's Order dated January 17, 2019 in Docket No. ER18121290.
- (7) PEPCO-TEC rates calculated in Attachment 6F of the joint filing.
- (8) PPL-TEC rates calculated in Attachment 6C of the joint filing.
- (9) PSE&G-TEC rates calculated in Attachment 5 of the joint filing made on December 6, 2018 Docket No. ER18121290
- (10) TrAILCo-TEC rates calculated in Attachment 6A of the joint filing.
- (11) VEPCo-TEC rates pursuant to the Board's Order dated January 17, 2019 in Docket No. ER18121290.
- (12) MAIT-TEC rates pursuant to the Board's Order dated January 17, 2019 in Docket No. ER18121290.
- (13) JCP&L-TEC rates pursuant to the Board's Order dated January 17, 2019 in Docket No. ER18121290.
- (14) PECO-TEC rates calculated in Attachment 6G of the joint filing.
- (15) EL05-121 rates pursuant to the Board's Order dated May 18, 2019 in Docket No. ER19040440.

**Attachment 5A – Cost Allocation of 2019/2020 TrailCo Schedule 12 Charges** 

**Attachment 5B – Cost Allocation of 2019/2020 BG&E Schedule 12 Charges** 

**Attachment 5C – Cost Allocation of 2019/2020 PPL Schedule 12 Charges** 

**Attachment 5D – Cost Allocation of 2019/2020 ACE Schedule 12 Charges** 

Attachment 5E – Cost Allocation of 2019/2020 Delmarva Schedule 12 Charges Attachment 5F – Cost Allocation of 2019/2020 PEPCO Schedule 12 Charges

Attachment 58 – Cost Allocation of 2019/2020 PECO Schedule 12 Charges

# Attachment 5A – Cost Allocation of 2019/2020 TrailCo Schedule 12 Charges

Attachment 5A PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for Allegheny TrAILCo Projects

(a)

(b)

(c)

(d)

(e)

(f)

(g)

(h)

(i)

(j)

				Resnons	sible Custom	ers - Schedule 12	Annendix	Estimated New Jersey EDC Zone Charges by Project						
Required		June 2019-May		CE	JCP&L	PSE&G	RE	ACE	JCP&L	PSE&G	RE	Total		
Transmission	PJM	Annual Reve		one	Zone	Zone	Zone	Zone	Zone	Zone	Zone	NJ Zones		
Enhancement	Upgrade ID	Requireme	nt Sha	are <sup>1</sup>	Share <sup>1</sup>	Share <sup>1</sup>	Share <sup>1</sup>	Charges	Charges	Charges	Charges	Charges		
per PJM website	per PJM spreadsheet	per PJM web	site	per i	PJM Open Ac	cess Transmission	Tariff	J	Ū	J	J	J		
502 Junction-Mt Storm-	b0328.1; b0328.2;													
Meadowbrook	b0347.1; b0347.2;													
(>=500kV) - CWIP <sup>1</sup>	b0347.3; b0347.4	\$ 63,856,0	73.78	1.61%	3.71%	6.19%	0.26%	\$1,028,083	\$2,369,060	\$3,952,691	\$166,026	\$7,515,860		
Wylie Ridge <sup>2</sup>	b0218	\$ 2,555,3	35.19 1	1.83%	15.56%	0.00%	0.00%	\$302,296	\$397,610	\$0	\$0	\$699,906		
Black Oak	b0216	\$ 2,636,2	55.50	1.61%	3.71%	6.19%	0.26%	\$42,444	\$97,805	\$163,184	\$6,854	\$310,287		
Meadowbrook 200														
MVAR capacitor	b0559	\$ 357,	66.59	1.61%	3.71%	6.19%	0.26%	\$5,750	\$13,251	\$22,109	\$929	\$42,039		
Replace Kammer														
765/500 kV TXfmr	b0495	\$ 2,175,	48.55	1.61%	3.71%	6.19%	0.26%	\$35,020	\$80,698	\$134,642	\$5,655	\$256,015		
Doubs TXfmr 2	b0343	\$ 575,	16.93	1.85%	0.00%	0.00%	0.00%	\$10,647	\$0	\$0	\$0	\$10,647		
Doubs TXfmr 3	b0344	\$ 529,2	93.90	1.86%	0.00%	0.00%	0.00%	\$9,845	\$0	\$0	\$0	\$9,845		
Doubs TXfmr 4	b0345	\$ 643,	16.97	1.85%	0.00%	0.00%	0.00%	\$11,905	\$0	\$0	\$0	\$11,905		
New Osage 138KV Ckt	b0674	\$ 2,214,	42.72	0.00%	0.00%	0.25%	0.01%	\$0	\$0	\$5,535	\$221	\$5,757		
Cap at Grover 230	b0556	\$ 104,9	09.22	8.64%	18.30%	26.32%	0.98%	\$9,064	\$19,198	\$27,612	\$1,028	\$56,903		
Upgrade transformer														
500/230	b1153	\$ 3,415,	51.53	3.86%	12.95%	21.15%	0.74%	\$131,833	\$442,288	\$722,347	\$25,274	\$1,321,741		
Build a 300 MVAR														
Switched Shunt at														
Doubs 500kV	b1803	\$ 302,	69.22	1.61%	3.71%	6.19%	0.26%	\$4,875	\$11,233	\$18,741	\$787	\$35,636		
Install 500 MVAR svc at														
Hunterstown 500kV Sub														
Hunterstown 500kV Sub	b1800	\$ 2,656,3	20.76	1.61%	3.71%	6.19%	0.26%	\$42,767	\$98,550	\$164,426	\$6,906	\$312,649		
Install 500 MVAR svc at														
Hunterstown 500kV Sub														
Hunterstown 500kV Sub	b1800_dfax	\$ 2,656,3	20.76	0.00%	1.44%	44.23%	1.81%	\$0	\$38,251	\$1,174,891	\$48,079	\$1,261,221		
Install a new 600 MVAR														
SVC at Meadowbrook														
500 kV	b1804	\$ 3,732,8	65.72	1.61%	3.71%	6.19%	0.26%	\$60,099	\$138,489	\$231,064	\$9,705	\$439,358		
Build 250 MVAR svc at														
Altoona 230kV	b1801	\$ 4,382,3	81.09	6.48%	8.15%	8.19%	0.33%	\$283,978	\$357,164	\$358,917	\$14,462	\$1,014,521		
Convert Moshannon sub														
to 4 breaker 230 kv ring														
bus	b1964	\$ 916,4	78.50	0.00%	5.48%	0.00%	0.00%	\$0	\$50,223	\$0	\$0	\$50,223		
Build a 100 MVAR Fast														
Switched Shunt and 200														
MVAR Switched Shunt														
at Mansfield 345 kV														
I I I I I I I I I I I I I I I I I I I	b1802	\$ 216,	90.45	6.48%	8.15%	8.19%	0.33%	\$14,035	\$17,652	\$17,739	\$715	\$50,141		

### Attachment 5A PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for Allegheny TrAILCo Projects

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	<b>(j)</b>
			Respon	sible Custom	ners - Schedule 12	Appendix	Est	imated New Jers	ey EDC Zone Cha	arges by Project	
Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet	June 2019-May 2020 Annual Revenue Requirement per PJM website	Zone Share <sup>1</sup>	JCP&L Zone Share <sup>1</sup> PJM Open Ad	PSE&G Zone Share <sup>1</sup> ccess Transmission	RE Zone Share <sup>1</sup> Tariff	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
Install 100 MVAR capacitor at Johnstown 230 kV substation	b0555	\$ 168,824.34	8.64%	18.30%	26.32%	0.98%	\$14,586	\$30,895	\$44,435	\$1,654	\$91,570
Install 300 MVAR capacitor at Conemaugh 500 kV substation	b0376	\$ -	1.66%	3.74%	6.26%	0.26%	\$0 <b>\$2,007,227</b>	\$0 <b>\$4,162,368</b>	\$0 <b>\$7,038,333</b>	\$0 <b>\$288,297</b>	\$0 <b>\$13,496,224</b>
Notes on calculations >>>	>						= (a) * (b)	= (a) * (c)	= (a) * (d)	= (a) * (e)	= (f) + (g) + (h) + (i)

			(k)	<b>(I)</b>		(m)	(n)	(0)	(p)
	Zonal Cost Allocation for New Jersey Zones	lm	erage Monthly npact on Zone tomers in 19/20	2019TX Peak Load per PJM website		Rate in MW-mo.	2019 Impact (7 months)	2020 Impact (5 months)	2019-2020 Impact (12 months)
	PSE&G	\$	586.527.74	9.978.3	\$	58.78	\$ 4.105.694	\$ 2,932,639	\$ 7,038,333
	JCP&L	\$	346,863.96	5,976.5			\$ 2,428,048	\$ 1,734,320	\$ 4,162,368
	ACE	\$	167,268.91	2,591.3	\$	64.55	\$ 1,170,882	\$ 836,345	\$ 2,007,227
	RE	\$	24,024.73	414.8	\$	57.92	\$ 168,173	\$ 120,124	\$ 288,297
	Total Impact on NJ Zones	\$	1,124,685.34				\$ 7,872,797	\$ 5,623,427	\$ 13,496,224
Notes on calculations >>>					=	: (k) * (l)	= (k) * 7	= (k) * 5	= (n) * (o)

#### Notes:

<sup>1) 2019</sup> 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	t 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	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (52.77%) / Dominion (34.37%) / PEPCO (12.86%)
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%)

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

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

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

†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 11	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
	Build new Meadow	As specified under the	(2.48%) / Dominion (13.17%) /
b0328.2	Brook – Loudoun 500	procedures detailed in	EKPC (2.13%) / JCPL (3.71%) /
00320.2	kV circuit (20 of 50	Attachment H-18B,	ME (1.88%) / NEPTUNE*
	miles)	Section 1.b	(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			Dominion (91.48%) / PEPCO
			(8.52%)
		As specified under the	AEC (1.85%) / BGE (21.49%) /
b0343	Replace Doubs 500/230	procedures detailed in	DPL (3.91%) / Dominion
00343	kV transformer #2	Attachment H-18B,	(28.86%) / ME (2.97%) / PECO
		Section 1.b	(5.73%) / PEPCO (35.19%)
		As specified under the	AEC (1.86%) / BGE (21.50%) /
1.0244	Replace Doubs 500/230	procedures detailed in	DPL (3.91%) / Dominion
b0344	kV transformer #3	Attachment H-18B,	(28.82%) / ME (2.97%) / PECO
		Section 1.b	(5.74%) / PEPCO (35.20%)
		As specified under the	AEC (1.85%) / BGE (21.49%) /
b0345	Replace Doubs 500/230	procedures detailed in	DPL (3.90%) / Dominion
00315	kV transformer #4	Attachment H-18B,	(28.83%) / ME (2.98%) / PECO
		Section 1.b	(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 T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
	Build new Mt. Storm –	As specified under the	(2.48%) / Dominion (13.17%) /
b0347.1	502 Junction 500 kV	procedures detailed in	EKPC (2.13%) / JCPL (3.71%) /
00347.1	circuit	Attachment H-18B,	ME (1.88%) / NEPTUNE*
	circuit	Section 1.b	(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (65.36%) / PEPCO
			(34.64%)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
	Build new Mt. Storm –	As specified under the	(2.48%) / Dominion (13.17%) /
b0347.2	Meadow Brook 500 kV	procedures detailed in	EKPC (2.13%) / JCPL (3.71%) /
00347.2	circuit	Attachment H-18B,	ME (1.88%) / NEPTUNE*
	Circuit	Section 1.b	(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (40.83%) / Dominion
1			(59.17%)

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

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

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
		As specified under the	(2.48%) / Dominion (13.17%) /
b0347.3	Build new 502 Junction	procedures detailed in	EKPC (2.13%) / JCPL (3.71%) /
00347.3	500 kV substation	Attachment H-18B,	ME (1.88%) / NEPTUNE*
		Section 1.b	(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (65.36%) / PEPCO
			(34.64%)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
		As specified under the	(2.48%) / Dominion (13.17%) /
b0347.4	Upgrade Meadow Brook	procedures detailed in	EKPC (2.13%) / JCPL (3.71%) /
00317.1	500 kV substation	Attachment H-18B,	ME (1.88%) / NEPTUNE*
		Section 1.b	(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (40.83%) / Dominion
			(59.17%)

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

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

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
b0347.5	Replace Harrison 500		EKPC (2.13%) / JCPL (3.71%) /
00347.3	kV breaker HL-3		ME (1.88%) / NEPTUNE*
			(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (65.36%) / PEPCO
			(34.64%)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
b0347.6	Upgrade (per ABB		EKPC (2.13%) / JCPL (3.71%) /
00317.0	inspection) breaker HL-6		ME (1.88%) / NEPTUNE*
			(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (65.36%) / PEPCO
			(34.64%)

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

required 1	Talishiission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
b0347.7	Upgrade (per ABB		EKPC (2.13%) / JCPL (3.71%) /
00347.7	inspection) breaker HL-7		ME (1.88%) / NEPTUNE*
			(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (65.36%) / PEPCO
			(34.64%)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) /
			AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
			AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK
			AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL
			AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) /
b0347.8	Upgrade (per ABB		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) /
b0347.8	Upgrade (per ABB inspection) breaker HL-8		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) /
b0347.8	10 4		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) /
b0347.8	10 4		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO
b0347.8	10 4		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
b0347.8	10 4		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
b0347.8	10 4		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
b0347.8	10 4		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)

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

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

required 11	ansmission Ennancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) / APS
		(5.79%) / ATSI (7.95%) / BGE
		(4.11%) / ComEd (13.24%) / Dayton
		(2.07%) / DEOK (3.22%) / DL
	Ungrada (nor ADD	(1.73%) / DPL (2.48%) / Dominion
b0347.9	Upgrade (per ABB	(13.17%) / EKPC (2.13%) / JCPL
00347.9	inspection) breaker HL-	(3.71%) / ME (1.88%) /
	10	NEPTUNE* (0.42%) / PECO
		(5.34%) / PENELEC (1.86%) /
		PEPCO (3.98%) / PPL (4.76%) /
		PSEG (6.19%) / RE (0.26%)
		DFAX Allocation:
		APS (65.36%) / PEPCO (34.64%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) / APS
		(5.79%) / ATSI (7.95%) / BGE
		(4.11%) / ComEd (13.24%) / Dayton
		(2.07%) / DEOK (3.22%) / DL
	Upgrade (per ABB	(1.73%) / DPL (2.48%) / Dominion
b0347.10	Inspection) Hatfield 500	(13.17%) / EKPC (2.13%) / JCPL
00347.10	kV breakers HFL-1	(3.71%) / ME (1.88%) /
	KV bleakers HFL-1	NEPTUNE* (0.42%) / PECO
		(5.34%) / PENELEC (1.86%) /
		PEPCO (3.98%) / PPL (4.76%) /
		PSEG (6.19%) / RE (0.26%)
		DFAX Allocation:
		APS (65.36%) / PEPCO (34.64%)

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

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

Required 11	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (65.36%) / PEPCO (34.64%)
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	Load-Ratio Share Allocation:  AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (65.36%) / PEPCO (34.64%)

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

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

Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion Upgrade (per ABB (13.17%) / EKPC (2.13%) / JCPL Inspection) Hatfield b0347.13 (3.71%) / ME (1.88%) / 500 kV breakers HFL-6 NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) **DFAX Allocation:** APS (65.36%) / PEPCO (34.64%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE

Annual Revenue Requirement Responsible Customer(s)

Upgrade (per ABB

Inspection) Hatfield

500 kV breakers HFL-7

b0347.14

Required Transmission Enhancements

(4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion

(13.17%) / EKPC (2.13%) / JCPL

(3.71%) / ME (1.88%) /

NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)

\*\*DFAX Allocation:\*
APS (65.36%) / PEPCO (34.64%)

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion Upgrade (per ABB (13.17%) / EKPC (2.13%) / JCPL Inspection) Hatfield b0347.15 (3.71%) / ME (1.88%) / 500 kV breakers HFL-9 NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) **DFAX Allocation:** APS (65.36%) / PEPCO (34.64%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion Upgrade (per ABB (13.17%) / EKPC (2.13%) / JCPL b0347.16 inspection) Harrison (3.71%) / ME (1.88%) / 500 kV breaker 'HL-3' NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)

**DFAX Allocation:**APS (65.36%) / PEPCO (34.64%)

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

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

Required Tra	ansmission Enhancements	Annual Revenue Requirem	ent Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) / APS
			(5.79%) / ATSI (7.95%) / BGE
			(4.11%) / ComEd (13.24%) / Dayton
	Replace Meadow		(2.07%) / DEOK (3.22%) / DL
			(1.73%) / DPL (2.48%) / Dominion
b0347.17	Brook 138 kV breaker		(13.17%) / EKPC (2.13%) / JCPL
00347.17	'MD-10'		(3.71%) / ME (1.88%) /
	WID-10		NEPTUNE* (0.42%) / PECO
			(5.34%) / PENELEC (1.86%) /
			PEPCO (3.98%) / PPL (4.76%) /
			PSEG (6.19%) / RE (0.26%)
			DFAX Allocation:
			<i>APS (40.83%) / Dominion (59.17%)</i>
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) / APS
			(5.79%) / ATSI (7.95%) / BGE
			(4.11%) / ComEd (13.24%) / Dayton
			(2.07%) / DEOK (3.22%) / DL
	Replace Meadow		(1.73%) / DPL (2.48%) / Dominion
b0347.18	Brook 138 kV breaker		(13.17%) / EKPC (2.13%) / JCPL
00547.10	'MD-11'		(3.71%) / ME (1.88%) /
	WID-11		NEPTUNE* (0.42%) / PECO
			(5.34%) / PENELEC (1.86%) /
			PEPCO (3.98%) / PPL (4.76%) /
			PSEG (6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (40.83%) / Dominion (59.17%)

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

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

Required 1ra	The state of the s	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
	Replace Meadow	Dominion (13.17%) / EKPC
b0347.19	Brook 138 kV breaker	(2.13%) / JCPL (3.71%) / ME
00347.17	'MD-12'	(1.88%) / NEPTUNE* (0.42%) /
	WID-12	PECO (5.34%) / PENELEC
		(1.86%) / PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		APS (40.83%) / Dominion
		(59.17%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) /
	Replace Meadow	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC
b0347.20	Replace Meadow  Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME
b0347.20	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) /
b0347.20	, ±	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC
b0347.20	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL
b0347.20	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC
b0347.20	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)
b0347.20	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE
b0347.20	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)

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

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

required 11	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
	Replace Meadow	Dominion (13.17%) / EKPC
b0347.21	Brook 138 kV breaker	(2.13%) / JCPL (3.71%) / ME
00347.21	'MD-14'	(1.88%) / NEPTUNE* (0.42%) /
	WID-14	PECO (5.34%) / PENELEC
		(1.86%) / PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		APS (40.83%) / Dominion
		(59.17%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) /
		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) /
	Replace Meadow	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC
h0347 22	Replace Meadow	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) /
b0347.22	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC
b0347.22	_ <u>+</u>	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC
b0347.22	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) /
b0347.22	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC
b0347.22	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL
b0347.22	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE
b0347.22	Brook 138 kV breaker	AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)

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

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

Required Tra	ansmission Enhancements	Annual Revenue Requiremen	t Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%) /
			Dayton (2.07%) / DEOK (3.22%) /
			DL (1.73%) / DPL (2.48%) /
	Replace Meadow		Dominion (13.17%) / EKPC
b0347.23	Brook 138 kV breaker		(2.13%) / JCPL (3.71%) / ME
00317.23	'MD-16'		(1.88%) / NEPTUNE* (0.42%) /
			PECO (5.34%) / PENELEC
			(1.86%) / PEPCO (3.98%) / PPL
			(4.76%) / PSEG (6.19%) / RE
		_	(0.26%)
			DFAX Allocation:
			APS (40.83%) / Dominion
			(59.17%)
			Load-Ratio Share Allocation:
	Replace Meadow		AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%) /
			Dayton (2.07%) / DEOK (3.22%) /
			DL (1.73%) / DPL (2.48%) /
			Dominion (13.17%) / EKPC
b0347.24	Brook 138 kV breaker		(2.13%) / JCPL (3.71%) / ME
	'MD-17'		(1.88%) / NEPTUNE* (0.42%) /
			PECO (5.34%) / PENELEC
			(1.86%) / PEPCO (3.98%) / PPL
			(4.76%) / PSEG (6.19%) / RE
		-	(0.26%)
			DFAX Allocation:
			APS (40.83%) / Dominion
			(59.17%)

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

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

Required 11	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
	Replace Meadow	Dominion (13.17%) / EKPC
	Brook 138 kV breaker	(2.13%) / JCPL (3.71%) / ME
b0347.25	'MD-18'	(1.88%) / NEPTUNE* (0.42%) /
	WID-18	PECO (5.34%) / PENELEC
		(1.86%) / PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		APS (40.83%) / Dominion
		(50.170/)
		(59.17%)
		Load-Ratio Share Allocation:
		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) /
		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) /
		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) /
		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) /
		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) /
	Replace Meadow	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC
b0347.26	Replace Meadow  Brook 138 kV breaker	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME
b0347.26	Brook 138 kV breaker	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) /
b0347.26	, ±	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC
b0347.26	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.61%) / AEP (14.10%) /  APS (5.79%) / ATSI (7.95%) /  BGE (4.11%) / ComEd (13.24%) /  Dayton (2.07%) / DEOK (3.22%) /  DL (1.73%) / DPL (2.48%) /  Dominion (13.17%) / EKPC  (2.13%) / JCPL (3.71%) / ME  (1.88%) / NEPTUNE* (0.42%) /  PECO (5.34%) / PENELEC  (1.86%) / PEPCO (3.98%) / PPL
b0347.26	Brook 138 kV breaker	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC
b0347.26	Brook 138 kV breaker	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)
b0347.26	Brook 138 kV breaker	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation:
b0347.26	Brook 138 kV breaker	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)

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

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

Required 116	Required Transmission Emirancements — Affindar Revenue Requirement — Responsible Customer(s)			
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (40.83%) / Dominion (59.17%)		
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	Load-Ratio Share Allocation:  AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation:  APS (40.83%) / Dominion (59.17%)		

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

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

Required In	Required Transmission Emancements Annual Revenue Requirement Responsible Customer(s)			
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (40.83%) / Dominion (59.17%)		
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (40.83%) / Dominion (59.17%)		

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

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

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC Replace Meadowbrook (2.13%) / JCPL (3.71%) / ME b0347.31 138 kV breaker 'MD-8' (1.88%) / NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)**DFAX** Allocation: *APS* (40.83%) / *Dominion* (59.17%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME Replace Meadowbrook b0347.32 138 kV breaker 'MD-9' (1.88%) / NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)DFAX Allocation: *APS* (40.83%) / *Dominion* (59.17%)

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

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

Required Ira	ansmission Enhancements	Annual Revenue Requirem	ent Responsible Customer(s)
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'		APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'		APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor		APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation		AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (5.43%) / ATSI (32.16%) / Dayton (25.01%) / DEOK (36.60%) / DL (0.80%)

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

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

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

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

Required 1	ransmission Ennancements	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 Requir	rement Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: APS (100%)
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation		APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR		APS (100%)

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

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

Required I	ransmission Enhancements	Annual Revenue Requireme	ent 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	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE\* (0.42%) / Construct PECO (5.34%) / PENELEC Welton As specified under the Spring to Kemptown (1.86%) / PEPCO (3.98%) / PPL b0492 procedures detailed in 765 kV (4.76%) / PSEG (6.19%) / RE line (APS Attachment H-19B equipment) (0.26%)**DFAX** Allocation: AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) /PPL (6.39%) / PSEG (15.86%) / RE (0.59%) Replace Eastalco 230 kV breaker D-26 b0492.3 APS (100%) Replace Eastalco 230 kV breaker D-28 b0492.4 APS (100%)

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

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

Required Transmission Enhancements Responsible Customer(s) Annual Revenue Requirement Replace Eastalco 230 kV b0492.5 breaker D-31 APS (100%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC Replace existing (2.13%) / JCPL (3.71%) / ME Kammer 765/500 kV (1.88%) / NEPTUNE\* (0.42%) / b0495 transformer with a new PECO (5.34%) / PENELEC larger transformer (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)DFAX Allocation: APS (31.58%) / BGE (11.84%) / Dayton (16.65%) / DEOK (23.60%) / EKPC (2.76%) / PEPCO (13.57%) Reconductor the Powell Mountain - Sutton 138 b0533 kV line APS (100%) Install a 28.61 MVAR b0534 capacitor on Sutton 138 kV APS (100%) Install a 44 MVAR b0535 capacitor on Dutch Fork 138 kV APS (100%) Replace Doubs circuit b0536 breaker DJ1 APS (100%) Replace Doubs circuit b0537 breaker DJ7 APS (100%) Replace Doubs circuit b0538 breaker DJ10 APS (100%) Reconductor Albright -Mettiki - Williams b0572.1 Parsons – Loughs Lane 138 kV with 954 ACSR APS (100%)

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

Required Ti	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor Albright -		
b0572.2	Mettiki – Williams –		
00372.2	Parsons – Loughs Lane		
	138 kV with 954 ACSR		APS (100%)
	Reconfigure circuits in		
b0573	Butler – Cabot 138 kV		
	area		APS (100%)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%) /
			Dayton (2.07%) / DEOK (3.22%) /
			DL (1.73%) / DPL (2.48%) /
	Replace Fort Martin 500		Dominion (13.17%) / EKPC
b0577	kV breaker FL-1		(2.13%) / JCPL (3.71%) / ME
	k v bleaker FL-1		(1.88%) / NEPTUNE* (0.42%) /
			PECO (5.34%) / PENELEC
			(1.86%) / PEPCO (3.98%) / PPL
			(4.76%) / PSEG (6.19%) / RE
			(0.26%)
			DFAX Allocation:
			APS (100%)
	Install 33 MVAR 138		
b0584	kV capacitor at		
	Necessity 138 kV		APS (100%)
	Increase Cecil 138 kV		
	capacitor size to 44		
	MVAR, replace five 138		
b0585	kV breakers at Cecil due		
00303	to increased short circuit		
	fault duty as a result of		
	the addition of the Prexy		
	substation		APS (100%)
	Increase Whiteley 138		
b0586	kV capacitor size to 44		
	MVAR		APS (100%)

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

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

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor AP portion of Tidd – Carnegie 138		
b0587	kV and Carnegie –		
	Weirton 138 kV with		
	954 ACSR		APS (100%)
	Install a 40.8 MVAR		
b0588	138 kV capacitor at		
	Grassy Falls		APS (100%)
b0589	Replace five 138 kV		
00389	breakers at Cecil		APS (100%)
	Replace #1 and #2		111 5 (10070)
b0590	breakers at Charleroi		
	138 kV		APS (100%)
	Install a 25.2 MVAR		
b0591	capacitor at Seneca		1.700 (1.000 ()
	Caverns 138 kV		APS (100%)
h0672	Rebuild Elko – Carbon		
b0673	Center Junction using 230 kV construction		APS (100%)
	250 KV Construction		APS (97.69%) / DL (0.96%) /
b0674	Construct new Osage –		PENELEC (1.09%) / PSEG
00071	Whiteley 138 kV circuit		(0.25%) / RE (0.01%)
	Replace the Osage 138		
b0674.1	kV breaker		
	'CollinsF126'		APS (100%)
			AEC (1.02%) / APS (82.01%)
	Convert Monocacy -		/ DPL (0.85%) / JCPL (1.75%)
b0675.1	Walkersville 138 kV to		/ ME (6.38%) / NEPTUNE*
	230 kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) AEC (1.02%) / APS (82.01%)
	Convert Walkersville -		/ DPL (0.85%) / JCPL (1.75%)
1.0675.2	Catoctin 138 kV to 230		/ ME (6.38%) / NEPTUNE*
b0675.2	kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%)

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

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

Required Tr	ansmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV		AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV		AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV		AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV		AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV		AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV		AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)

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

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

Required Tr	ansmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			AEC (1.02%) / APS (82.01%)
	Convert Walkersville		/ DPL (0.85%) / JCPL (1.75%)
b0675.9	Substation from 138 kV		/ ME (6.38%) / NEPTUNE*
00073.9	to 230 kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%)
			AEC (0.64%) / APS (86.77%)
	Dagandyatan Dayka		/ DPL (0.53%) / JCPL (1.93%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV		/ ME (4.05%) / NEPTUNE*
000/0.1	Lime Kiin (#207) 230kV		(0.18%) / PECO (1.93%) /
			PENELEC (0.93%) / PSEG
			(2.92%) / RE (0.12%)
			AEC (0.64%) / APS (86.77%)
	Reconductor Doubs -		/ DPL (0.53%) / JCPL (1.93%)
b0676.2			/ ME (4.05%) / NEPTUNE*
00076.2	Lime Kiln (#231) 230kV		(0.18%) / PECO (1.93%) /
			PENELEC (0.93%) / PSEG
			(2.92%) / RE (0.12%)
	Reconductor Double		
b0677	Toll Gate – Riverton		
	with 954 ACSR		APS (100%)
	Reconductor Glen Falls -		
b0678	Oak Mound 138kV with		
	954 ACSR		APS (100%)
	Reconductor Grand		
b0679	Point – Letterkenny with		
	954 ACSR		APS (100%)
	Reconductor Greene -		
b0680	Letterkenny with 954		
	ACSR		APS (100%)
	Replace 600/5 CT's at		
b0681	Franklin 138 kV		
	TIGHKIHI 130 KV		APS (100%)
	Replace 600/5 CT's at		
b0682	Whiteley 138 kV		1.70 (1.222.0)
	,, intereg 150 KV		APS (100%)

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

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

Required I	Fransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg		
	with 954 ACSR		APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer		APS (72.06%) / JCPL (4.18%) / ME (6.80%) / NEPTUNE* (0.38%) / PECO (4.06%) / PENELEC (5.89%) / PSEG (6.38%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer		APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)		APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)		APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)		APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)		APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'		APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'		APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'		APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'		APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'		APS(100%)

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

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

Required 1	ransmission 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%)

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

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

Required 7	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%)

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

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

Required T	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 1	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 T	ransmission 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 To	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Construct Braddock 138		
	kV breaker station that		
	connects the Charleroi -		
	Gordon 138 kV line,		
b1023.4	Washington - Franklin		
	138 kV line and the		
	Washington - Vanceville		
	138 kV line including a		
	66 MVAR capacitor		APS (100%)
	Increase the size of the		
b1027	shunt capacitors at Enon		
	138 kV		APS (100%)
	Raise three structures on		
b1028	the Osage - Collins Ferry		
01020	138 kV line to increase		
	the line rating		APS (100%)
	Reconductor the		
	Edgewater – Vasco Tap;		
b1128	Edgewater – Loyalhanna		
	138 kV lines with 954		
	ACSR		APS (100%)
	Reconductor the East		
b1129	Waynesboro - Ringgold		
01129	138 kV line with 954		177 (1000)
	ACSR		APS (100%)
1.1.01	Upgrade Double Tollgate		
b1131	– Meadowbrook MDT		A P.G. (1000 ()
	Terminal Equipment		APS (100%)
	Upgrade Double		
b1132	Tollgate-Meadowbrook		
	MBG terminal		A DG (1000/)
	equipment		APS (100%)
b1133	Upgrade terminal		A DG (1000)
	equipment at Springdale		APS (100%)
	Reconductor the		
1 1 1 2 5	Bartonville –		
b1135	Meadowbrook 138 kV		
	line with high		A DC (1000/)
	temperature conductor		APS (100%)

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

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor the Eastgate		
b1137	– Luxor 138 kV;		APS (78.77%) / PENELEC
01137	Eastgate – Sony 138 kV		(14.11%) / PSEG (6.85%) / RE
	line with 954 ACSR		(0.27%)
	Reconductor the King		
b1138	Farm – Sony 138 kV line		
	with 954 ACSR		APS (100%)
	Reconductor the Yukon		
b1139	– Waltz Mills 138 kV		
01137	line with high		
	temperature conductor		APS (100%)
	Reconductor the Bracken		
b1140	Junction – Luxor 138 kV		
	line with 954 ACSR		APS (100%)
	Reconductor the		
	Sewickley – Waltz Mills		
b1141	Tap 138 kV line with		
	high temperature		177 (1000)
	conductor		APS (100%)
	Reconductor the		
	Bartonsville –		
b1142	Stephenson 138 kV;		
	Stonewall – Stephenson		
	138 kV line with 954		A DG (1000/)
	ACSR		APS (100%)
	Reconductor the		
b1143	Youngwood – Yukon		A DC (90 020/) / DENIEL E.C.
	138 kV line with high		APS (89.92%) / PENELEC
	temperature conductor		(10.08%)
	Reconductor the Bull		
b1144	Creek Junction – Cabot		
	138 kV line with high		A DC (1000/)
	temperature conductor		APS (100%)

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

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor the Lawson		
b1145	Junction – Cabot 138 kV		
01143	line with high		
	temperature conductor		APS (100%)
	Replace Layton -		
b1146	Smithton #61 138 kV		
01140	line structures to increase		
	line rating		APS (100%)
	Replace Smith – Yukon		
b1147	138 kV line structures to		
	increase line rating		APS (100%)
	Reconductor the		
b1148	Loyalhanna – Luxor 138		
	kV line with 954 ACSR		APS (100%)
	Reconductor the Luxor –		
b1149	Stony Springs Junction		
01177	138 kV line with 954		
	ACSR		APS (100%)
b1150	Upgrade terminal		
01130	equipment at Social Hall		APS (100%)
	Reconductor the		
b1151	Greenwood – Redbud		
01101	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		
01100	breaker 'Cecil OCB'		APS (100%)
b1161	Replace Peters 138 kV		
01101	breaker 'Union JctOCB'		APS (100%)
	Replace Double Toll		
b1162	Gate 138 kV breaker		
	'DRB-2'		APS (100%)
	Replace Double Toll		
b1163	Gate 138 kV breaker		
	'DT 138 kV OCB'		APS (100%)

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

Required 1	ransmission Enhancements	Annual Revenue Requirement	t Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'		APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'		APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'		APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'		APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work		BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor		APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus		APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer		APS (100%)

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

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

Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Loop Carbon Center		
b1221.3	Junction – Williamette		
	line into Bear Run		APS (100%)
	Carbon Center – Carbon		,
	Center Junction &		
b1221.4	Carbon Center Junction		
01221.1	- Bear Run conversion		
	from 138 kV to 230 kV		APS (100%)
	Reconductor Willow-		711 5 (10070)
b1230	Eureka & Eurkea-St		
01230	Mary 138 kV lines		APS (100%)
	Waiy 138 KV IIIICS		AEC (1.40%) / APS (75.74%) /
	Reconductor Nipetown –		DPL (1.92%) / JCPL (2.92%) /
b1232	Reid 138 kV with 1033		ME (6.10%) / Neptune (0.27%)
01232	ACCR		
	ACCR		/ PECO (4.40%) / PENELEC
	TT 1 · 1		(3.26%) / PPL (3.99%)
1 1222 1	Upgrade terminal		
b1233.1	equipment at		A DC (1000/)
	Washington		APS (100%)
1 100 4	Replace structures		
b1234	between Ridgeway and		A DG (1000()
	Paper city		APS (100%)
	Reconductor the Albright		1 DG (20 2 20 ) (D GT (4 6 100 ()
b1235	– Black Oak AFA 138		APS (30.25%) / BGE (16.10%)
01233	kV line with 795		/ Dominion (30.51%) / PEPCO
	ACSS/TW		(23.14%)
	Upgrade terminal		
b1237	equipment at Albright,		
	replace bus and line side		
	breaker disconnects and		
	leads, replace breaker		
	risers, upgrade RTU and		
	line		APS (100%)
	Install a 138 kV 44		
b1238	MVAR capacitor at		
	Edgelawn substation		APS (100%)

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

Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Install a 138 kV 44		
b1239	MVAR capacitor at		
	Ridgeway substation		APS (100%)
	Install a 138 kV 44		
b1240	MVAR capacitor at Elko		
	Substation		APS (100%)
	Upgrade terminal		
	equipment at		
b1241	Washington substation		
	on the GE		
	Plastics/DuPont terminal		APS (100%)
	Replace structures		
b1242	between Collins Ferry		
	and West Run		APS (100%)
	Install a 138 kV		
b1243	capacitor at Potter		
	Substation		APS (100%)
b1261	Replace Butler 138 kV		
01201	breaker '1-2 BUS 138'		APS (100%)
1.4000	Install 2nd 500/138 kV		175 (02 270 () 177 (7 200 () (
b1383	transformer at 502		APS (93.27%) / DL (5.39%) /
	Junction		PENELEC (1.34%)
	Reconductor		
	approximately 2.17 miles		
b1384	of Bedington –		
	Shepherdstown 138 kV		A TO (4.000 ()
	with 954 ACSR		APS (100%)
b1385	Reconductor Halfway -		
	Paramount 138 kV with		A DG (1000()
	1033 ACCR		APS (100%)
	Reconductor Double		
b1386	Tollgate – Meadow		A DG (02 220() / D GE (2 200() /
	Brook 138 kV ckt 2 with		APS (93.33%) / BGE (3.39%) /
	1033 ACCR		PEPCO (3.28%)
b1387	Reconductor Double		A DG (02-220/) / DGE (2-200/) /
	Tollgate – Meadow		APS (93.33%) / BGE (3.39%) /
	Brook 138 kV		PEPCO (3.28%)
1 1200	Reconductor Feagans		
b1388	Mill – Millville 138 kV		A DC (1000/)
	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) Reconductor Bens Run b1389 St. Mary's 138 kV with AEP (12.40%) / APS (17.80%) 954 ACSR / DL (69.80%) Replace Bus Tie Breaker b1390 at Opequon APS (100%) Replace Line Trap at b1391 Gore APS (100%) Replace structure Belmont – Trissler 138 b1392 kV line APS (100%) Replace structures Kingwood – Pruntytown b1393 138 kV line APS (100%) Upgrade Terminal b1395 Equipment at Kittanning APS (100%) Change reclosing Pruntytown 138 kV b1401 breaker 'P-16' to 1 shot at 15 seconds APS (100%) Change reclosing on Rivesville 138 kV b1402 breaker 'Pruntytown #34' to 1 shot at 15 seconds APS (100%) Change reclosing Yukon 138 kV breaker b1403 'Y21 Shepler' to 1 shot at 15 seconds APS (100%) Replace the Kiski Valley kV breaker 138 b1404 'Vandergrift' with a 40 kA breaker APS (100%) Change reclosing on Armstrong 138 kV

b1405

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 11	ransmission Enhancements	Annual Revenue Requiremen	t Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV		
01400	breaker 'KITTANNING'		
	to 1 shot at 15 seconds		APS (100%)
	Change reclosing on		
b1407	Armstrong 138 kV		
01407	breaker 'BURMA' to 1		
	shot at 15 seconds		APS (100%)
	Replace the Weirton 138		
b1408	kV breaker 'Tidd 224'		
	with a 40 kA breaker		APS (100%)
	Replace the Cabot 138		
b1409	kV breaker 'C9 Kiski		
01407	Valley' with a 40 kA		
	breaker		APS (100%)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
	Terminal Equipment		EKPC (2.13%) / JCPL (3.71%) /
b1507.2	upgrade at Doubs		ME (1.88%) / NEPTUNE*
	substation		(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
		_	(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (19.80%) / BGE (9.71%) /
			Dominion (59.40%) / PEPCO
			(11.09%)

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

Required Tr	ansmission Enhancements	Annual Revenue Requiremen	t Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
	Mt. Storm – Doubs		(2.48%) / Dominion (13.17%) /
	transmission line rebuild		EKPC (2.13%) / JCPL (3.71%) /
b1507.3	in Maryland – Total line		ME (1.88%) / NEPTUNE*
	mileage for APS is 2.71		(0.42%) / PECO (5.34%) /
	miles		PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			APS (19.80%) / BGE (9.71%) /
			Dominion (59.40%) / PEPCO
			(11.09%)
b1510	Install 59.4 MVAR		177 (1999)
	capacitor at Waverly		APS (100%)
b1672	Install a 230 kV breaker		
01072	at Carbon Center		APS (100%)
b0539	Replace Doubs circuit		
00000	breaker DJ11		APS (100%)
b0540	Replace Doubs circuit		
00010	breaker DJ12		APS (100%)
b0541	Replace Doubs circuit		
00311	breaker DJ13		APS (100%)
b0542	Replace Doubs circuit		
	breaker DJ20		APS (100%)
b0543	Replace Doubs circuit		
00575	breaker DJ21		APS (100%)
	Remove instantaneous		
b0544	reclose from Eastalco		
	circuit breaker D-26		APS (100%)

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

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

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Remove instantaneous b0545 reclose from Eastalco circuit breaker D-28 APS (100%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / Install 200 **MVAR** EKPC (2.13%) / JCPL (3.71%) / b0559 capacitor at Meadow ME (1.88%) / NEPTUNE\* Brook 500 kV substation (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) **DFAX** Allocation: APS (40.83%) / Dominion (59.17%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO Install 250 **MVAR** b0560 (3.98%) / PPL (4.76%) / PSEG capacitor at Kemptown 500 kV substation (6.19%) / RE (0.26%) DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / *NEPTUNE (1.12%) / PECO* (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

\* Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL Build a 300 MVAR Switched (2.48%) / Dominion (13.17%) / Shunt 500 EKPC (2.13%) / JCPL (3.71%) / Doubs kV ME (1.88%) / NEPTUNE\* b1803 increase (~50 MVAR) in (0.42%) / PECO (5.34%) / size the existing Switched PENELEC (1.86%) / PEPCO Shunt at Doubs 500 kV (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) **DFAX Allocation:** APS (19.80%) / BGE (9.71%) / *Dominion (59.40%) / PEPCO* (11.09%)Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / Install a new 600 MVAR EKPC (2.13%) / JCPL (3.71%) / b1804 SVC at Meadowbrook ME (1.88%) / NEPTUNE\* 500kV (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) DFAX Allocation: APS (40.83%) / Dominion (59.17%) Replace relaying at the Mt. Airy substation on b1816.1 the Carroll - Mt. Airy 230 kV line APS (100%)

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the 1200 A wave trap, line risers, breaker risers with 1600 b1822 capacity terminal equipment at Reid 138 kV SS APS (100%) Replace the 800 A wave trap with a 1200 A wave b1823 trap at Millville 138 kV substation APS (100%) Reconductor Grant Point - Guilford 138kV line b1824 approximately 8 miles of 556 ACSR with 795 ACSR APS (100%) Replace the 800 Amp line trap at Butler 138 b1825 kV Sub on the Cabot East 138 kV line APS (100%) Change the CT ratio at b1826 Double Toll Gate 138 kV SS on MDT line APS (100%) Change the CT ratio at b1827 Double Toll Gate 138 kV SS on MBG line APS (100%) Reconductor Bartonville – Stephenson 3.03 mile 138 kV line of b1828.1 556 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) Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of b1828.2 556 ACSR with 795 ACSR APS (100%) Replace the existing 138 kV 556.5 **ACSR** substation conductor risers with 954 ACSR at b1829 the Redbud 138 kV substation, including but not limited to the line side disconnect leads APS (100%) Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and b1830 replace 1024 ACAR breaker risers at Paramount 138 kV substation APS (100%) Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace b1832 bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs -Lime Kiln 1 (207) 230 kV line terminal APS (100%) Replace the 1200 A line side and bus disconnect switches with 1600 A switches, replace b1833 bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs -Lime Kiln 2 (231) 230 kV line terminal APS (100%)

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

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

SS

and Guildford 138 kV

APS (100%)

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Construct a 138 kV line between Buckhannon b1840 and Weston 138 kV APS (100%) substations Replace line trap at Stonewall on the b1902 Stephenson 138 kV line terminal APS (100%) Loop the Homer City-Handsome Lake 345 kV line into the Armstrong b1941 substation and install a 345/138 kV transformer APS (67.86%) / PENELEC at Armstrong (32.14%)Change the CT ratio at Millville to improve the b1942 Millville - Old Chapel 138 kV line ratings APS (100%) APS (41.06%) / DPL (6.68%) / Convert Moshannon JCPL (5.48%) / ME (10.70%) / b1964 substation to a 4 breaker Neptune\* (0.53%) / PECO 230 kV ring bus (15.53%) / PPL (20.02%) Install a 44 MVAR 138 b1965 kV capacitor at Luxor substation APS (100%) Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace b1986 breaker risers on the Mitchell 138 kV bus on the Elrama terminal APS (100%) Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. b1987 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) Raise structures between Lake Lynn and West Run to eliminate the b1988 clearance de-rates on the West Run – Lake Lynn 138 kV line APS (100%) Raise structures between Collins Ferry and West Run to eliminate the b1989 clearance de-rates on the Collins Ferry - West Run 138 kV line APS (100%) Replace Weirt 138 kV breaker 'Sb2095 TORONTO226' with 63kA rated breaker APS (100%) Revise the reclosing of b2096 Weirt 138 kV breaker '2&5 XFMR' APS (100%) Replace Ridgeley 138 kV breaker '#2 XFMR b2097 OCB' APS (100%) Revise the reclosing of Ridgelev 138 kV breaker b2098 'AR3' with 40kA rated breaker APS (100%) Revise the reclosing of b2099 Ridgeley 138 kV breaker 'RC1' APS (100%) Replace Ridgelev 138 kV breaker 'WC4' with b2100 40kA rated breaker APS (100%) Replace Ridgeley 138 kV breaker '1 XFMR b2101 OCB' with 40kA rated breaker APS (100%)

'GARETTRJCT'

40kA rated breaker

Replace Armstrong 138

breaker

with

kV

b2102

APS (100%)

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Add a new 138 kV line b2124.1 exit APS (100%) Construct a 138 kV ring bus and install a 138/69 b2124.2 kV autotransformer APS (100%) Add new 138 kV line exit and install a 138/25 kV b2124.3 transformer APS (100%) Construct approximately b2124.4 5.5 miles of 138 kV line APS (100%) approximately Convert 7.5 miles of 69 kV to 138 b2124.5 kV APS (100%) Install a 75 MVAR 230 b2156 capacitor kV Shingletown Substation APS (100%) Replace 800A wave trap at Stonewall with a 1200 b2165 A wave trap APS (100%) Reconductor the Millville - Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade b2166 line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800 APS (100%) For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck b2168 and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit 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 T	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 Tran	nsmission Enhancements Ar	nnual Revenue Requirement	Responsible Customer(s)
	Reconductor 0.33 miles of		
b2117	the Parkersburg - Belpre line		A DC (1000/)
	and upgrade Parkersburg		APS (100%)
	terminal equipment		
b2118	Add 44 MVAR Cap at New		A DC (1000/)
	Martinsville		APS (100%)
b2120	Six-Wire Lake Lynn -		A DC (1000/)
	Lardin 138 kV circuits		APS (100%)
	Replace Weirton 138 kV		
b2142	breaker "Wylie Ridge 210"		APS (100%)
	with 63 kA breaker		
	Replace Weirton 138 kV		
b2143	breaker "Wylie Ridge 216"		APS (100%)
	with 63 kA breaker		
b2174.8	Replace relays at Mitchell		A DC (1000/)
021/4.6	substation		APS (100%)
b2174.9	Replace primary relay at		A DS (1000/)
021/4.9	Piney Fork substation		APS (100%)
	Perform relay setting		
b2174.10	changes at Bethel Park		APS (100%)
	substation		
	Armstrong Substation:		
	Relocate 138 kV controls		
b2213	from the generating station		APS (100%)
	building to new control		
	building		
	Albright Substation: Install a	ı	
	new control building in the		
	switchyard and relocate		
b2214	controls and SCADA		APS (100%)
	equipment from the		
	generating station building		
	the new control center		
b2215	Rivesville Switching		
	Station: Relocate controls		
	and SCADA equipment		APS (100%)
02213	from the generating station		Ai 5 (10070)
	building to new control		
	building		

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

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

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

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

Install two 31.7 MVAR capacitors at the new

WaldoRun 138 kV substation Replace the Weirton 138 kV

breaker 'WYLIE RID210'

with 63 kA breakers
Replace the Weirton 138 kV

breaker 'WYLIE RID216'

with 63 kA breakers

b2433.3

b2424

b2425

APS (100%)

APS (100%)

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

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

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Yukon 138 kV breaker "Y-2(1B-BETHE)" b2666.12 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-21(SHEPJ)" b2666.13 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker b2666.14 APS (100%) "Y-22(SHEPHJT)" with an 80 kA breaker Change CT Ratio at Seneca Caverns from 120/1 to 160/1 b2672 APS (100%) and adjust relay settings accordingly AEP (12.91%) / APS (19.04%) / ATSI (1.24%) / ComEd (0.35%) / Carroll Substation: Replace the Germantown 138 kV Dayton (1.45%) / DEOK b2688.3 wave trap, upgrade the bus (2.30%) / DL (1.11%) / conductor and adjust CT Dominion (44.85%) / ratios EKPC (0.78%) / PEPCO (15.85%) / RECO (0.12%)Upgrade terminal equipment b2689.3 APS (100%) at structure 27A Upgrade 138 kV substation equipment at Butler. Shanor Manor and Krendale b2696 substations. New rating of APS (100%) line will be 353 MVA summer normal/422 MVA emergency Remove existing Black Oak b2700 APS (100%) SPS AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Reconfigure the Ringgold Dayton (0.59%) / DEOK b2743.6 230 kV substation to double (1.02%) / DL (0.01%) / bus double breaker scheme 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) AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK Replace the two Ringgold b2743.6.1 230/138 kV transformers (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)AEP (6.46%) / APS (8.74%) / BGE (19.74%) Rebuild/Reconductor the / ComEd (2.16%) / Ringgold - Catoctin Dayton (0.59%) / DEOK b2743.7 138 kV circuit and upgrade (1.02%) / DL (0.01%) / terminal equipment on both Dominion (39.95%) / ends EKPC (0.45%) / PEPCO (20.88%)Relocate the FirstEnergy Pratts 138 kV terminal CVTs at Gordonsville substation to b2747.1 APS (100%) allow for the installation of a new motor operated switch being installed by Dominion Replace the breaker risers and wave trap at Bredinville b2763 138 kV substation on the APS (100%) Cabrey Junction 138 kV terminal Upgrade Fairview 138 kV breaker risers and disconnect leads; Replace 500 CU b2764 APS (100%) breaker risers and 556 ACSR disconnect leads with **795 ACSR** Replace terminal equipment b2964.1 at Pruntytown and Glen APS (100%) Falls 138 kV station Reconductor approximately 8.3 miles of the McAlpin b2964.2 APS (100%) White Hall Junction 138 kV circuit

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

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

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

Required Tr	ransmission Enhancements An	nual Revenue Requirement	Responsible Customer(s)
	Construct a new 500/138 kV		
	substation as a 4-breaker ring		
	bus with expansion plans for		
	double-breaker-double-bus on		
	the 500 kV bus and breaker-		
	and-a-half on the 138 kV bus to		
	provide EHV source to the		
	Marcellus shale load growth		
	area. Projected load growth of		
	additional 160 MVA to current		
	plan of 280 MVA, for a total		
	load of 440 MVA served from		
	Waldo Run substation. Replace		
	primary relaying and carrier		
b2996	sets on Belmont and Harrison		APS (100%)
02990	500 kV Remote End		Al 3 (10070)
	substations. Construct		
	additional 3-breaker string at		
	Waldo Run 138 kV bus.		
	Relocate the Sherwood #2 line		
	terminal to the new string.		
	Construct two single circuit		
	Flint Run - Waldo Run 138 kV		
	lines using 795 ACSR		
	(approximately 3 miles). After		
	terminal relocation on new 3-		
	breaker string at Waldo Run,		
	terminate new Flint Run 138 kV		
	lines onto the two open		
	terminals		
	Reconductor 3.1 mile 556		
	ACSR portion of Cabot to		
	Butler 138 kV with 556 ACSS		
b3005	and upgrade terminal		APS (100%)
03003	equipment. 3.1 miles of line		711 5 (10070)
	will be reconductored for this		
	project. The total length of the		
	line is 7.75 miles		

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace four Yukon 500/138 kV transformers with three APS (52.84%) / DL b3006 transformers with higher rating (47.16%) and reconfigure 500 kV bus Reconductor the Blairsville East to Social Hall 138 kV line and upgrade terminal equipment -AP portion. 4.8 miles total. The new conductor will be 636 b3007.1 APS (100%) ACSS replacing the existing 636 ACSR conductor. At Social Hall, meters, relays, bus conductor, a wave trap, circuit breaker and disconnects will be replaced Replace terminal equipment at Keystone and Cabot 500 kV buses. At Keystone, bus tubing and conductor, a wave trap, and b3010 APS (100%) meter will be replaced. At Cabot, a wave trap and bus conductor will be replaced Construct new Route 51 b3011.1 substation and connect 10 138 DL (100%) kV lines to new substation Upgrade terminal equipment at Yukon to increase rating on b3011.2 Yukon to Charleroi #2 138 kV DL (100%) line (New Yukon to Route 51 #4 138 kV line) Upgrade terminal equipment at Yukon to increase rating on b30113 DL (100%) Yukon to Route 51 #1 138 kV line Upgrade terminal equipment at Yukon to increase rating on b3011.4 DL (100%) Yukon to Route 51 #2 138 kV

line

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

Required Tra	nsmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
b3011.5	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #3 138 kV		DL (100%)
	line		
b3011.6	Upgrade remote end relays for Yukon – Allenport – Iron Bridge 138 kV line		DL (100%)
b3012.1	Construct new ties from FirstEnergy's new substation to Duquesne's new substation - AP portion. The estimated line length is approximately 4.7 miles, however, this length is subject to change based on the final route of the line. Approximately 1.7 miles could potentially be constructed by using the existing double circuit towers on the Wycoff tap. The line is planned to use 2-954 ACSS conductors per phase		DL (100%)
b3013	Reconductor Vasco Tap to Edgewater Tap 138 kV line. 4.4 miles. The new conductor will be 336 ACSS replacing the existing 336 ACSR conductor		APS (100%)
b3015.6	Reconductor Elrama to Mitchell 138 kV line – AP portion. 4.2 miles total. 2x 795 ACSS/TW 20/7		DL (100%)
b3028	Upgrade substation disconnect leads at William 138 kV substation		APS (100%)
b3051.1	Ronceverte cap bank and terminal upgrades		APS (100%)
b3052	Install a 138 kV capacitor (29.7 MVAR effective) at West Winchester 138 kV		APS (100%)

# Attachment 5B – Cost Allocation of 2019/2020 BG&E Schedule 12 Charges

			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet	Ar F	e 2019 - May 2020 nnual Revenue Requirement er PJM website	ACE Zone Share <sup>1</sup>	JCP&L Zone Share <sup>1</sup>	- Schedule 12 PSE&G Zone Share <sup>1</sup> s <i>Transmission</i>	RE Zone Share <sup>1</sup>	Estir ACE Zone Charges	nated New Jer JCP&L Zone Charges	sey EDC Zone PSE&G Zone Charges	Charges by Pr RE Zone Charges	oject Total NJ Zones Charges
Install a second Conastone – Graceton 230 kV circuit	b0497	\$	2,985,934	9.03%	9.67%	14.11%	0.52%	\$269,630	\$288,740	\$421,315	\$15,527	\$995,212
install new 500 kV transmission from Possum Point to Calvert Cliffs	b0512	\$	-	1.61%	3.71%	6.19%	0.26%	\$0	\$0	\$0	\$0	\$0
Totals		\$	-					\$0 <b>\$269,630</b>	\$0 <b>\$288,740</b>	\$0 <b>\$421,315</b>	\$0 <b>\$15,527</b>	\$0 <b>\$995,212</b>
Notes on calculations >>>								= (a) * (b)	= (a) * (c)	= (a) * (d)	= (a) * (e)	= (f) + (g) + (h) + (i)

		(k)	(1)		(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	lmp	rage Monthly act on Zone omers in 19/20	2019TX Peak Load per PJM website		ate in IW-mo.	2019 Impact months)	2020 Impact months)	019-2020 Impact 2 months)
PSE&G	\$	35,109.61	9.978.3	\$	3.52	\$ 245.767	\$ 175.548	\$ 421,315
JCP&L	\$	24,061.65	5,976.5	*	4.03	\$ 168,432	\$ 120,308	\$ 288,740
ACE	\$	22,469.15	2,591.3	\$	8.67	\$ 157,284	\$ 112,346	\$ 269,630
RE	\$	1,293.90	414.8	\$	3.12	\$ 9,057	\$ 6,470	\$ 15,527
Total Impact on NJ								
Zones	\$	82,934.32				\$ 580,540	\$ 414,672	\$ 995,212

#### Notes:

Notes on calculations >>>

<sup>1) 2019</sup> 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) Add (2) 230 kV Breakers at High Ridge and install b0152 BGE (100%) two Northwest 230 kV 120 MVAR capacitors Install a 4<sup>th</sup> Waugh Chapel 500/230kV transformer. terminate the transformer BGE (85.56%) / ME (0.83%) / b0244 in a new 500 kV bay and PEPCO (13.61%) operate the existing inservice spare transformer on standby As specified in Attachment Replace both Conastone BGE (75.85%) / Dominion H-2A, Attachment 7, the b0298 (11.54%) / ME (4.73%) / PEPCO 500/230 kV transformers Transmission Enhancement (7.88%)with larger transformers Charge Worksheet Replace Conastone 230 b0298.1 BGE (100%) kV breaker 500-3/2323 Add a fourth 230/115 kV transformer, two 230 kV b0474 circuit breakers and a 115 BGE (100%) kV breaker at Waugh Chapel Create two 230 kV ring buses at North West, add two 230/115 kV b0475 BGE (100%) transformers at North West and create a new 115 kV station at North West Rebuild High Ridge 230 b0476 kV substation to Breaker BGE (100%) and Half configuration Replace the Waugh BGE (90.56%) / ME (1.51%) / Chapel 500/230 kV PECO (.92%) / PEPCO (4.01%) / b0477 transformer #1 with three PPL (3.00%) single phase transformers

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

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

1104011100		7 minual revenue requiremen	it Responsible Customer(s)
b0497	Install a second Conastone – Graceton 230 kV circuit		AEC (9.03%) / DPL (16.90%) / JCPL (9.67%) / ME (1.48%) / Neptune* (0.95%) / PECO (30.88%) / PPL (16.46%) / PSEG (14.11%) / 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 (6.31%) / DPL (8.70 %) / JCPL (14.62%) / ME (10.65%) / Neptune* (1.38%) / PECO (15.75%) / PPL (21.14%) / PSEG (20.68%) / RE (0.77%)
b0512.33	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at Calvert Cliffs substation		AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)

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

Kec	quirea .	ransmission Enhancements	Annual Revenue Requirement Resp	onsidie Customer(s)
b05	512.43	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at Calvert Cliffs substation	APS ( BGE (4  / Da  (3.22  (2.48% EKPC  ME  (0.4  PENI  (3.98%	1.61%) / AEP (14.10%) / 5.79%) / ATSI (7.95%) / 1.11%) / ComEd (13.24%) 1.11%) / DEOK 2.07%) / DEOK 3.70 / DDL (1.73%) / DPL 3.70 / Dominion (13.17%) / (2.13%) / JCPL (3.71%) / (1.88%) / NEPTUNE* 2%) / PECO (5.34%) / ELEC (1.86%) / PEPCO 3.70 / PPL (4.76%) / PSEG 3.19%) / RE (0.26%)
b(	0729	Rebuild both Harford – Perryman 110615-A and 110616-A 115 kV circuits		BGE (100%)
b(	0749	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.)**

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Remove line drop limitations at the		
b0826	substation terminations for		BGE (100%)
	Riverside – East Point 115		
	kV		
	Install an SPS for one year		
	to trip a Mays Chapel 115		
b0827	kV breaker one line		BGE (100%)
	110579 for line overloads		
	110509		
	Disable the HS throwover		
b0828	at Harrisonville for one		BGE (100%)
	year		
	Rebuild each line (0.2		
	miles each) to increase the		
b0870	normal rating to 968 MVA		BGE (100%)
	and the emergency rating		
	to 1227 MVA		
	Increase contact parting		
b0906	time on Wagner 115 kV		BGE (100%)
	breaker 32-3/2		
	Increase contact parting		
b0907	time on Wagner 115 kV		BGE (100%)
	breaker 34-1/3		
	Rebuild Graceton - Bagley		
	230 kV as double circuit		APS (2.02%) / BGE (75.22%) /
b1016	line using 1590 ACSR.		Dominion (16.10%) / PEPCO
01010	Terminate new line at		(6.66%)
	Graceton with a new		(0.0070)
	circuit breaker.		
	Upgrade wire drops at		
b1055	Center 115kV on the		BGE (100%)
01000	Center - Westport 115 kV		232 (10070)
	circuit		
	Upgrade wire sections at		
1.4050	Wagner on both 110534		
b1029	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 F	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.)**

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

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

Required	Transmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
1 1252	Replace the existing Northeast 230/115 kV		
b1253	transformer #3 with 500 MVA		BGE (100%)
	Replace the Northeast 230		BGL (10070)
b1253.1	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.)**

Advance the baseline upgrade B1252 to upgrade terminal equipment removing terminal limitation at Pumphrey Tap on BGE 230 kV circuit 2332-A  BGE (100%)
terminal equipment removing terminal limitation at Pumphrey Tap on BGE 230 kV circuit 2332-A  BGE (100%)
b1544 removing terminal limitation at Pumphrey Tap on BGE 230 kV circuit 2332-A BGE (100%)
limitation at Pumphrey Tap on BGE 230 kV circuit 2332-A  BGE (100%)
Tap on BGE 230 kV circuit 2332-A BGE (100%)
circuit 2332-A BGE (100%)
Upgrade terminal
equipment at both
b <sub>1545</sub> Brandon Shores and
b1545 Waugh Chapel removing
terminal limitation on
BGE 230 kV circuit 2343 BGE (100%)
Upgrade terminal
equipment at Graceton
b1546 removing terminal
limitation on BGE portion
of the 230 kV Graceton –
Cooper circuit 2343 BGE (100%)
b1583 Replace Hazelwood 115
b1383   kV breaker '110602'   BGE (100%)
b1584 Replace Hazelwood 115
b1384   kV breaker '110604'   BGE (100%)
Moving the station supply
b1606.1 connections of the
Hazelwood 115/13kV
station BGE (100%)
b1606.2 Installing 115kV tie
breakers at Melvale BGE (100%)
Revise the reclosing for
b1785   Pumphrey 115 kV breaker
'110521 DR' BGE (100%)
Revise the reclosing for
b1786   Pumphrey 115 kV breaker
'110526 DR' BGE (100%)
Revise the reclosing for
b1789   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 1	ransmission Enhancements	Annuai Revenue Requirement	Responsible Customer(s)
	Install a 115 kV tie		
	breaker at Wagner to		
b2219	create a separation from		BGE (100%)
	line 110535 and		
	transformer 110-2		
b2220	Install four 115 kV		BGE (100%)
02220	breakers at Chestnut Hill		DOL (10070)
	Install an SPS to trip		
b2221	approximately 19 MW		BGE (100%)
02221	load at Green St. and		DOL (10070)
	Concord		
	Install a 230/115kV		
	transformer at Raphael		
	Rd and construct		
	approximately 3 miles of		
b2307	115kV line from Raphael		BGE (100%)
	Rd. to Joppatowne.		
	Construct a 115kV three		
	breaker ring at		
	Joppatowne		
	Build approximately 3		
	miles of 115kV		
	underground line from		
	Bestgate tap to Waugh		
b2308	Chapel. Create two		BGE (100%)
	breaker bay at Waugh		
	Chapel to accommodate		
	the new underground		
	circuit		
	Build a new Camp Small		
b2396	115 kV station and install		BGE (100%)
	30 MVAR capacitor		

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

required 1	Tansinission Emiancements	Annuai Kevenue Kequitemeni	Responsible Customer(s)
b2396.1	Install a tie breaker at Mays Chapel 115 kV		BGE (100%)
	substation		,
	Upgrade the Riverside		
	115kV substation strain		
	bus conductors on		
	circuits 115012 and		
b2567	115011 with double		BGE (100%)
	bundled 1272 ACSR to		
	achieve ratings of		
	491/577 MVA SN/SE on		
	both transformer leads		
	Reconductor Northwest –		
	Northwest #2 115kV		
b2568	110574 substation tie		BGE (100%)
02000	circuit with 2167 ACSR		2 02 (10070)
	to achieve ratings of		
	400/462 MVA SN/SE		
	Conastone 230 kV		AFD (C 460/) / ABC (0.740/) /
	substation tie-in work		AEP (6.46%) / APS (8.74%) /
	(install a new circuit breaker at Conastone		BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK
b2752.6	230 kV and upgrade any		(1.02%) / DL (0.01%) /
	required terminal		Dominion (39.95%) / EKPC
	equipment to terminate		(0.45%) / PEPCO (20.88%)
	the new circuit)		(0.43/0)/1E1CO (20.88/0)
	,		AEP (6.46%) / APS (8.74%) /
	Reconductor/Rebuild the		BGE (19.74%) / ComEd (2.16%)
	two Conastone –		/ Dayton (0.59%) / DEOK
b2752.7	Northwest 230 kV lines		(1.02%) / DL (0.01%) /
	and upgrade terminal		Dominion (39.95%) / EKPC
	equipment on both ends		(0.45%) / PEPCO (20.88%)
	Replace the Conastone		````
b2752 8	230 kV '2322 B5'		BGE (100%)
b2752.8	breaker with a 63kA		DOE (10070)
	breaker		

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

required i	Tarisi ilission Linareci ilicita	Timaar revenae regamemen	it Responsible Customer(s)
b2752.9	Replace the Conastone 230 kV '2322 B6' breaker with a 63kA breaker		BGE (100%)
b2766.1	Upgrade substation equipment at Conastone 500 kV to increase facility rating to 2826 MVA normal and 3525 MVA emergency		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)

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

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

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

# Attachment 5C – Cost Allocation of 2019/2020 PPL Schedule 12 Charges

Attachment 5C PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for PPL Projects

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		Responsible Customers - Schedule 12 Appendix			Appendix	Estimated New Jersey EDC Zone Charges by Project						
Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet		ne 2019- May 2020 Annual Revenue Requirement per PJM website	ACE Zone Share <sup>1</sup> per l	JCP&L Zone Share <sup>1</sup> PJM Open Acc	PSE&G Zone Share <sup>1</sup> tess Transmission	RE Zone Share <sup>1</sup> <i>Tariff</i>	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
New 500 KV Susquehana- Roseland Line New 500 KV Susquehana-	b0487	\$	37,675,631.73	1.61%	3.71%	6.19%	0.26%	\$606,578	\$1,397,766	\$2,332,122	\$97,957	\$4,434,422
Roseland Line	b0487_dfax	\$	37,675,631.73	0.00%	29.66%	63.75%	2.60%	\$0	\$11,174,592	\$24,018,215	\$979,566	\$36,172,374
Replace wave trap at Alburtus 500 kV Sub	b0171.2	\$	4,268.47	1.61%	3.71%	6.19%	0.26%	\$69	\$158	\$264	\$11	\$502
Replace wave trap at Alburtus 500 kV Sub	b0171.2_dfax	\$	4,268.47	0.00%	12.94%	29.10%	1.19%	\$0	\$552	\$1,242	\$51	\$1,845
Replace wavetrap at Hosensack 500KV Sub Replace wavetrap at	b0172.1	\$	3,060.97	1.61%	3.71%	6.19%	0.26%	\$49	\$114	\$189	\$8	\$360
Hosensack 500KV Sub	b0172.1_dfax	\$	3,060.97	3.72%	26.83%	52.82%	2.16%	\$114	\$821	\$1,617	\$66	\$2,618
Replace wavetraps at Juniata 500KV Sub	b0284.2	\$	6,193.10	1.61%	3.71%	6.19%	0.26%	\$100	\$230	\$383	\$16	\$729
Replace wavetraps at Juniata 500KV Sub	b0284.2_dfax	\$	6,193.10	0.00%	32.79%	0.00%	0.00%	\$0	\$2,031	\$0	\$0	\$2,031
New S-R additions < 500kV <sup>2</sup> New substation and	b0487.1	\$	1,795,510.88	0.00%	0.00%	5.14%	0.19%	\$0	\$0	\$92,289	\$3,411	\$95,701
transformers Middletown Install Lauschtown	b0468	\$	2,461,319.67	0.00%	4.56%	5.94%	0.22%	\$0	\$112,236	\$146,202	\$5,415	\$263,853
500/230 kV Sub below 500kv portion Install Lauschtown	b2006	\$	1,149,064.71	1.11%	9.68%	11.43%	0.45%	\$12,755	\$111,229	\$131,338	\$5,171	\$260,493
500/230 kV Sub 500kv portion tie line Install Lauschtown	b2006.1	\$	2,562,557.67	1.61%	3.71%	6.19%	0.26%	\$41,257	\$95,071	\$158,622	\$6,663	\$301,613
500/230 kV Sub 500kv portion tie line 200 MVAR shunt	b2006.1_dfax	\$	2,562,557.67	0.00%	0.00%	0.00%	0.00%	\$0	\$0	\$0	\$0	\$0
reactor at Alburtis 500kv	b2237	\$	1,082,765.57	1.61%	3.71%	6.19%	0.26%	\$17,433	\$40,171	\$67,023	\$2,815	\$127,442
200 MVAR shunt reactor at Alburtis 500kv	b2237_dfax	\$	1,082,765.57	0.00%	0.00%	0.00%	0.00%	\$0	\$0	\$0	\$0	\$0

Attachment 5C PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for PPL Projects

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			Respons	sible Custome	ers - Schedule 12	Appendix	Estima	ated New Jerse	y EDC Zone Ch	arges by Proj	ect
Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet	June 2019- May 2020 Annual Revenue Requirement per PJM website	Zone Share <sup>1</sup>	JCP&L Zone Share <sup>1</sup> PJM Open Acc	PSE&G Zone Share <sup>1</sup> cess Transmission	RE Zone Share <sup>1</sup> n <i>Tariff</i>	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
200 MVAR shunt reactor at Lackawana 500kv		\$ 1,296,592.99	1.61%	3.71%	6.19%	0.26%	\$20,875	\$48,104	\$80,259	\$3,371	\$152,609
200 MVAR shunt reactor at Lackawana 500kv	b2716_dfax	\$ 1,296,592.99	0.00%	0.00%	0.00%	0.00%	\$0	\$0	\$0	\$0	\$0
Add 3rd Bay w/3 Breakers at Lackawanna 500kv	b2824	\$ 1,017,175.60	1.61%	3.71%	6.19%	0.26%	\$16,377	\$37,737	\$62,963	\$2,645	\$119,722
Add 3rd Bay w/3 Breakers at Lackawanna 500kv <b>Totals</b>	b2824_dfax	\$ 1,017,175.60	0.00%	0.00%	0.00%	0.00%	\$0 <b>\$715,605</b>	\$0 <b>\$13,020,812</b>	\$0 <b>\$27,092,730</b>	\$0 <b>\$1,107,166</b>	\$0 <b>\$41,936,314</b>
Notes on calculations	>>>						= (a) * (b)	= (a) * (c)	= (a) * (d)	= (a) * (e)	= (f) + (g) +

			(k)	(1)		(m)	(n)	(o)	(p)
	Zonal Cost Allocation for New Jersey Zones	In	verage Monthly npact on Zone stomers in 19/20	2019 Peak Load per PJM website		Rate in MW-mo.	2019 Impact (7 months)	2020 Impact (5 months)	2019-2020 Impact 12 months)
	PSE&G	\$	2,257,727.53	9.978.3	\$	226.26	\$ 15.804.093	\$ 11,288,638	\$ 27,092,730
	JCP&L	\$	1,085,067.69	5,976.5		181.56	\$ 7,595,474	\$ 5,425,338	13,020,812
	ACE	\$	59,633.77	2,591.3	\$	23.01	\$ 417,436	\$ 298,169	\$ 715,605
	RE	\$	92,263.83	414.8	\$	222.43	\$ 645,847	\$ 461,319	\$ 1,107,166
•	Total Impact on NJ								
	Zones	\$	3,494,692.82				\$ 24,462,850	\$ 17,473,464	\$ 41,936,314
Notes on calculations >:	>>				=	= (k) * (l)	= (k) * 7	= (k) * 5	= (n) * (o)

#### Notes:

<sup>1) 2019</sup> allocation share percentages are from PJM OATT

# **SCHEDULE 12 – APPENDIX**

# (9) PPL Electric Utilities Corporation

Required T	ransmission Enhancements	Annual Revenue Requirement	ent Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252		PPL (100%)
b0171.2	Replace wavetrap at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)

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

Required Transmission Enhancements		Annual Revenue Requireme	ent Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
		I	EKPC (2.13%) / JCPL (3.71%) /
b0172.1	Replace wave trap at		ME (1.88%) / NEPTUNE*
001/2.1	Alburtis 500kV substation		(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			AEC (3.72%) / JCPL (26.83%) /
			<i>NEPTUNE (</i> 4.75%) / PECO
			(9.72%) / <i>PSEG (</i> 52.82%) / <i>RE</i>
			(2.16%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / Replace two wave traps EKPC (2.13%) / JCPL (3.71%) / at Juniata 500 kV – on b0284.2 ME (1.88%) / NEPTUNE\* the two Juniata – (0.42%) / PECO (5.34%) / Airydale 500 kV PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) DFAX Allocation: BGE (34.75%) / DL (0.58%) / JCPL (32.79%) / ME (28.17%) / *NEPTUNE (*3.71%) Changes at Juniata 500 b0284.4 kV substation PPL (100%) Replace wavetrap at the b0293 1 Martins Creek 230 kV bus PPL (100%) Raise the operating temperature of the 2b0293.2 1590 ACSR to 140C for the Martins Creek -Portland 230 kV circuit PPL (100%) Spare Juniata 500/230 b0440 kV transformer PPL (100%) Build a new substation with two 150 MVA transformers between JCPL (4.56%) / Neptune\* Dauphin and (0.37%) / PECO (1.79%) / Hummelstown 230/69 b0468 PENELEC (0.33%) / PPL kV substations by (86.79%) / PSEG (5.94%) / RE sectionalizing the (0.22%)Middletown Junction – New Lebanon 230 kV line

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install 130 MVAR b0469 capacitor at West Shore 230 kV line PPL (100%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL Build new 500 kV (2.48%) / Dominion (13.17%) / transmission facilities EKPC (2.13%) / JCPL (3.71%) / from Susquehanna to b0487 ME (1.88%) / NEPTUNE\* Pennsylvania – New (0.42%) / PECO (5.34%) / Jersey border at PENELEC (1.86%) / PEPCO Bushkill (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) DFAX Allocation: JCPL (29.66%) / NEPTUNE (3.99%) / PSEG (63.75%) / RE (2.60%)Install Lackawanna 500/230 kV PENELEC (16.93%) / PPL transformer and (77.74%) / PSEG (5.14%) / RE b0487.1 upgrade 230 kV (0.19%)substation and switchyard Conastone - Otter Creek 230 kV -AEC (6.31%) / DPL (8.70%) / Reconductor JCPL (14.62%) / ME (10.65%) / approximately 17.2 b0500.1 Neptune\* (1.38%) / PECO miles of 795 kcmil (15.75%) / PPL (21.14%) / ACSR with new 795 PSEG (20.68%) / RE (0.77%) kcmil ACSS operated at 160 deg C

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL Install 250 MVAR (2.48%) / Dominion (13.17%) / b0558 capacitor at Juniata 500 EKPC (2.13%) / JCPL (3.71%) / kV substation ME (1.88%) / NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) Eldred – Pine Grove 69 b0593 kV line Rebuild Part 2: 8 miles PPL (100%) Rebuild Lackawanna – b0595 Edella 69 kV line to double circuit PPL (100%) Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with b0596 69 kV design; approximately 8 miles total PPL (100%) Reconductor Suburban -Providence 69 kV #1 and b0597 resectionalize the Suburban 69 kV lines PPL (100%) Reconductor Suburban b0598 Taps #1 and #2 for 69 kV line portions PPL (100%)

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

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

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

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

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

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

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

Required	Transmission Enhancements	Annual Revenue Requireme	ent 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 T	ransmission Enhancements	Annual Revenue Requirem	ent 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 T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
b1525	Build new West Pocono 230/69 kV Substation		PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line		PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker		PPL (100%)
b1526	Install a new Honeybrook  – Twin Valley 69/138 kV tie		PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlertown #1 & #2 69 kV lines at East Texas Substation		PPL (100%)
b1529	Add a double breaker 230 kV bay 3 at Hosensack		PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design		PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury		PPL (100%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Rebuild Lycoming-Lock Haven #1 and b1533 Lycoming-Lock Haven #2 69kV lines PPL (100%) Rebuild 1.4 miles of the Sunbury-Milton 69kV b1534 PPL (100%) AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / Re-configure the DEOK (3.22%) / DL (1.73%) / Breinigsville 500 kV DPL (2.48%) / Dominion b1601 substation with addition (13.17%) / EKPC (2.13%) / two 500 kV circuit JCPL (3.71%) / ME (1.88%) / breakers NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)† Re-configure the Elimsport 230 kV b1602 substation to breaker and half scheme and install 80 MVAR capacitor PPL (100%) Install a 90 MVAR cap b1740 bank on the Frackville 230 kV bus #207973 PPL (100%) Install a 3rd West Shore b1756 230/69 kV transformer PPL (100%) Install a 230 kV motoroperated air-break switch b1757 on the Clinton - Elimsport 230 kV line PPL (100%)

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

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

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the CTs and switch in SAKR Bay 3 to increase the rating of the b2005 Millwood-South Akron 230 kV Line and of the rating in Bay 3 PPL (100%) AEC (1.11%) / JCPL (9.68%) Install North Lancaster / ME (19.56%) / Neptune\* b2006 500/230 kV substation (0.76%) / PECO (6.06%) / (below 500 kV portion) PPL (50.95%) / PSEG (11.43%) / RE (0.45%) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / **Install North Lancaster** DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC b2006.1 500/230 kV substation (500 kV portion) (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) DFAX Allocation: PPL (100%) Construct a new 230/69 kV North Lancaster substation. The sub will b2006.2 be supplied from the SAKR-BERK 230kV Line PPL (100%) Construct new 69/138 kV transmission from North b2006.3 Lancaster 230/69 kV sub to Brecknock and Honeybrook areas PPL (100%)

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

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

Required Transmission Enhancements		Annual Revenue Requiren	ment Responsible Customer(s)
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation		PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation		PPL (100%)

#### SCHEDULE 12 - APPENDIX A

#### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the Blooming b1813.12 Grove 230 kV breaker PPL (100%) 'Peckville' Rebuild and reconductor 2.6 miles of b2223 PPL (100%) the Sunbury - Dauphin 69 kV circuit Add a 2nd 150 MVA b2224 230/69 kV transformer PPL (100%) at Springfield **Load-Ratio Share Allocation:** AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL 150 MVAR shunt (2.48%) / Dominion (13.17%) / b2237 reactor at Alburtis 500 EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE\* kV (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%) **DFAX Allocation:** PPL (100%) 100 MVAR shunt b2238 reactor at Elimsport 230 PPL (100%) kV

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

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

Required	Transmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
	Rebuild approximately 23.7 miles of the Susquehanna - Jenkins		
b2269	230kV circuit. This replaces a temporary SPS that is already planned to mitigate the violation		PPL (100%)
	until this solution is implemented		
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 Ennancements	Annual Revenue Require	ment 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 Ennancements	Annual Revenue Requirement Responsible Customer(s)
b2716	Add a 200 MVAR shunt reactor at Lackawanna 500 kV substation	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
b2754.1	Install 7 miles of optical ground wire (OPGW) between Gilbert and Springfield 230 kV substations	PPL (100%) 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%)

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

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

required	Transmission Emianeements	Amual Revenue Requirement Responsible Customer(s)
b2824	Reconfigure/Expand the Lackawanna 500 kV substation by adding a third bay with three breakers	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
		DFAX Allocation: PPL (100%)
b2838	Build a new 230/69 kV substation by tapping the Montour – Susquehanna 230 kV double circuits and Berwick – Hunlock & Berwick – Colombia 69 kV circuits	PPL (100%)
b2979	Replace Martins Creek 230 kV circuit breakers with 80 kA rating	PPL (100%)

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

# Attachment 5D – Cost Allocation of 2019/2020 ACE Schedule 12 Charges

## Attachment 5D PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for ACE Projects

			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet	An R	2019 - May 2020 nual Revenue equirement • PJM website	ACE Zone Share <sup>1</sup>	JCP&L Zone Share <sup>1</sup>	ners - Schedule 1 PSE&G Zone Share <sup>1</sup> ccess Transmissic	RE Zone Share <sup>1</sup>	ACE Zone Charges	ated New Jers JCP&L Zone Charges	ey EDC Zone C PSE&G Zone Charges	harges by Pro RE Zone Charges	ject Total NJ Zones Charges
Upgrade AE portion of Delco Tap	b0265	\$	497,580	89.87%	9.48%	0.00%	0.00%	\$447,175	\$47,171	\$0	\$0	\$494,346
Replace Monroe 230/69 kV TXfmrs	b0276	\$	764,018	91.46%	0.00%	8.31%	0.23%	\$698,771	\$0	\$63,490	\$1,757	\$764,018
Reconductor Union - Corson 138 kV	b0211	\$	1,302,040	65.23%	25.87%	6.35%	0.00%	\$849,321	\$336,838	\$82,680	\$0	\$1,268,838
New 500/230 Kv Sub on Salem-East Windsor (>500 kV portion) New 500/230 Kv Sub on Salem-East Windsor (>500 kV	b0210.A	\$	1,298,809	1.61%	3.71%	6.19%	0.26%	\$20,911	\$48,186	\$80,396	\$3,377	\$152,870
portion) New 500/230kV Sub on Salem-East	b0210.A_dfax	\$	1,298,809	100.00%	0.00%	0.00%	0.00%	\$1,298,809	\$0	\$0	\$0	\$1,298,809
Windsor (< 500kV)  portion <sup>2</sup> Reconductor the existing Mickleton –	b0210.B	\$	1,852,197	65.23%	25.87%	6.35%	0.00%	\$1,208,188	\$479,163	\$117,615	\$0	\$1,804,966
Goucester 230 kV circuit (AE portion) Build second 230kV parallel from	b1398.5	\$	467,008	0.00%	13.03%	31.99%	1.27%	\$0	\$60,851	\$149,396	\$5,931	\$216,178
Mickelton to Gloucester Upgrade the Mill T2 138/69 kV	b1398.3.1	\$	1,458,835	0.00%	13.03%	31.99%	1.27%	\$0	\$190,086	\$466,681	\$18,527	\$675,295
Transformer	b1600	\$	1,731,177	89.21%	4.76%	5.80%	0.23%	\$1,544,383 <b>\$6,067,557</b>	\$82,404 <b>\$1,244,699</b>	\$100,408 <b>\$1,060,666</b>	\$3,982 <b>\$33,574</b>	\$1,731,177 <b>\$8,406,496</b>
Notes on calculations	>>>							= (a) * (b)	= (a) * (c)	= (a) * (d)	= (a) * (e)	= (f) + (g) + (h) + (i)
			(k)	(1)	(m)	(n)	(0)	(p)				
	Zonal Cost Allocation for New Jersey Zones	lm	erage Monthly pact on Zone omers in 19/20	2019TX Peak Load per PJM website	Rate in \$/MW-mo.	2019 Impact (7 months)	2020 Impact (5 months)	2019-2020 Impact (12 months)				
	PSE&G JCP&L ACE RE Total Impact on NJ	\$ \$ \$	88,388.80 103,724.91 505,629.76 2,797.84	9,978.3 5,976.5 2,591.3 414.8	\$ 17.36 \$ 195.13	\$ 618,722 \$ 726,074 \$ 3,539,408 \$ 19,585	\$ 518,625 \$ 2,528,149	\$ 1,060,666 \$ 1,244,699 \$ 6,067,557 \$ 33,574				
	Zones	\$	700,541.31			\$ 4,903,789	\$ 3,502,707	\$ 8,406,496				
Notes on calculations	>>>				= (k) * (l)	= (k) * 7	= (k) * 5	= (n) * (o)				

#### Notes:

<sup>1) 2019</sup> allocation share percentages are from PJM OATT

#### **SCHEDULE 12 – APPENDIX**

#### (1) Atlantic City Electric Company

Required 1	ransmission Ennancements Ani	nuai Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV		AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor		AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit		AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff		AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit		AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV		AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV		AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit		AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0276	Replace both Monroe 230/69 kV transformers		AEC (91.46%) / PSEG (8.31%) / RE (0.23%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2		AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer		AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation		AEC (100%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

required 1	Tansinission Emancements Amin	ai Kevenue Requiremen	i Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation		AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system		AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV		AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV		AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%)
b0210.1	Orchard – Cumberland – Install second 230 kV line		AEC (65.23%) / JCPL (25.87%) / Neptune * (2.55%) / PSEG (6.35%)††
b0210.2	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)††

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

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

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

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install 10 MVAR capacitor b1244 at Peermont 69 kV AEC (100%) substation Rebuild the Newport-South b1245 AEC (100%) Millville 69 kV line Reconductor the Monroe – b1250 AEC (100%) Glassboro 69 kV Upgrade substation b1250.1 AEC (100%) equipment at Glassboro Sherman: Upgrade 138/69 b1280 AEC (100%) kV transformers Replace Lewis 138 kV b1396 AEC (100%) breaker 'L' JCPL (13.03%) / NEPTUNE Reconductor the existing (1.20%) / PECO (51.93%) / Mickleton – Goucestr 230 b1398.5 PEPCO (0.58%) / PSEG kV circuit (AE portion) (31.99%) / RE (1.27%) Reconductor Sherman Av – b1598 AEC (100%) Carl's Corner 69kV circuit Replace terminal b1599 equipments at Central AEC (100%) North 69 kV substation Upgrade the Mill T2 AEC (89.21%) / JCPL (4.76%) b1600 138/69 kV transformer / PSEG (5.80%) / RE (0.23%) Re-build 5.3 miles of the b2157 Corson - Tuckahoe 69 kV AEC (100%) circuit

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

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

#### **SCHEDULE 12 – APPENDIX A**

#### (1) Atlantic City Electric Company

Required I	ransmission Enhancements An	nual 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 1	Tansinission Enhancements An	nual 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 (100%)
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 1	ransmission Enhancements Annu	iai 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%)
b2945.1	Rebuild the BL England – Middle Tap 138 kV line to 2000A on double circuited steel poles and new foundations		AEC (100%)
b2945.2	Reconductor BL England – Merion 138 kV (1.9 miles) line		AEC (100%)
b2945.3	Reconductor Merion – Corson 138 kV (8 miles) line		AEC (100%)

# Attachment 5E – Cost Allocation of 2019/2020 Delmarva Schedule 12 Charges

# Attachment 5E PJM Schedule 12 - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for Delmarva Projects

		(a)	(b)	(c)	(d)	(e)	<b>(f)</b>	(g)	(h)	(i)	(j)
			Respo	nsible Custon	ners - Schedule 12	Appendix	Estim	ated New Jerse	y EDC Zone Ch	arges by Proje	ct
Required	D.114	June 2019-May 2020	ACE	JCP&L	PSE&G	RE	ACE	JCP&L	PSE&G	RE -	Total
Transmission Enhancement	PJM Upgrade ID	Annual Revenue	Zone Share <sup>1</sup>	Zone Share <sup>1</sup>	Zone Share <sup>1</sup>	Zone Share <sup>1</sup>	Zone	Zone	Zone	Zone	NJ Zones
per PJM website	per PJM spreadsheet	Requirement per PJM website			ccess Transmission		Charges	Charges	Charges	Charges	Charges
Replace line trap-											
Keeney	b0272.1	\$ 11,494	1.61%	3.71%	6.19%	0.26%	\$185	\$426	\$711	\$30	\$1,353
Replace line trap- Keeney	b0272.1_dfax	\$ 11,494	17.53%	0.00%	3.01%	0.12%	\$2,015	\$0	\$346	\$14	\$2,375
Add two breakers-											
Keeney	b0751	\$ 266,944	1.61%	3.71%	6.19%	0.26%	\$4,298	\$9,904	\$16,524	\$694	\$31,419
Add two breakers-											
Keeney <b>Totals</b>	b0751_dfax	\$ 266,944	0.00%	0.00%	0.00%	0.00%	\$0 <b>\$6,498</b>	\$0 <b>\$10,330</b>	\$0 <b>\$17,581</b>	\$0 <b>\$738</b>	\$0 <b>\$35,147</b>

Notes on calculations >>>  $= (a) * (b) \qquad = (a) * (c) \qquad = (a) * (e) \qquad = (f) + (g) + (h) + (i)$ 

			(k)	(1)		(m)	(n)	(0)		(p)
	Zonal Cost Allocation for New Jersey Zones	lm	erage Monthly pact on Zone omers in 19/20	2019TX Peak Load per PJM website		Rate in MW-mo.	2019 Impact (7 months)	2020 Impact (5 months)		019-2020 Impact 2 months)
	PSE&G	\$	1,465.11	9,978.3	\$	0.15	\$ 10,256	\$ 7,326	\$	17,581
	JCP&L	\$	860.84	5,976.5	\$	0.14	\$ 6,026	\$ 4,304	\$	10,330
	ACE	\$	541.48	2,591.3	\$	0.21	\$ 3,790	\$ 2,707	\$	6,498
	RE	\$	61.48	414.8	\$	0.15	\$ 430	\$ 307	\$	738
•	Total Impact on NJ									
	Zones	\$	2,928.90				\$ 20,502	\$ 14,645	\$	35,147
Notes on calculations >:	<b>&gt;&gt;</b>				=	(k) * (l)	= (k) * 7	= (k) * 5	=	= (n) * (o)

#### Notes:

<sup>1) 2019</sup> allocation share percentages are from PJM OATT

#### **SCHEDULE 12 – APPENDIX**

#### (3) Delmarva Power & Light Company

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

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

Required		nuai Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV		DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line		DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%)
b0282	Install 46 MVAR capacitors on the DPL distribution system		DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor		DPL (100%)

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

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

		annual Revenue Requirement	Responsible Customer(s)
b0295	Raise conductor		DPL (100%)
	temperature of North		
	Seaford – Pine Street –		
	Dupont Seaford		
b0296	Rehoboth/Cedar Neck Tap		DPL (100%)
00270	(6733-2) upgrade		D1 E (10070)
	Create a new 230 kV station		
	that splits the 2 <sup>nd</sup> Milford to		
	Indian River 230 kV line,		
b0320	add a 230/69 kV		DPL (100%)
	transformer, and run a new		
	69 kV line down to		
	Harbeson 69 kV		
b0382	Cambridge Sub – Close		DPL (100%)
00302	through to Todd Substation		DI L (10070)
b0383	Wye Mills AT-1 and AT-2		DPL (100%)
00363	138/69 kV Replacements		DI L (10070)
b0384	Replace Indian River AT-20		DPL (100%)
00304	(400 MVA)		DI L (10070)
b0385	Oak Hall to New Church		DDI (1009/)
00363	(13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768)		DDI (100%)
00380	Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup>		DPL (100%)
00367	138/69 kV autotransformer		DFL (10070)
b0388	Hallwood/Parksley (6790-2)		DDI (100%)
00300	Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-		DDI (1000/)
00389	2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1		DDI (1000/)
00390	and 6751-2) Upgrade		DPL (100%)
b0201	Kent/New Meredith (6704-		DDI (1000/)
b0391	2) Upgrade		DPL (100%)
	East New Market Sub –		
b0392	Establish a 69 kV Bus		DPL (100%)
	Arrangement		`
	Increase the temperature		
	ratings of the Edgemoor –		
b0415	Christiana – New Castle		DPL (100%)
	138 kV by replacing six		
	transmission poles		
	pores		

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

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

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

Required	Transmission Ennancements Ar	inuai Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
	MAPP Project – install new		EKPC (2.13%) / JCPL (3.71%) /
	500 kV transmission from		ME (1.88%) / NEPTUNE*
	Possum Point to Calvert		(0.42%) / PECO (5.34%) /
b0512	Cliffs and install a DC line		PENELEC (1.86%) / PEPCO
00312	from Calvert Cliffs to		(3.98%) / PPL (4.76%) / PSEG
	Vienna and a DC line from		(6.19%) / RE (0.26%)
	Calvert Cliffs to Indian		DFAX Allocation:
	River		AEC (3.94%) / APS (0.33%) /
			BGE (34.54%) / DPL (14.69%) /
			Dominion (0.30%) / JCPL
			(9.43%) / ME (2.16%) /
			NEPTUNE (0.90%) / PECO
			(10.52%) / PEPCO (2.44%) /
			PPL (5.50%) / PSEG (14.71%) /
			RE (0.54%)
	Rebuild the Ocean Bay –		(1000 ()
b0513	Maridel 69 kV line		DPL (100%)
1.0527	Replace existing 12 MVAR		DDI (1000/)
b0527	capacitor at Bethany with a		DPL (100%)
	30 MVAR capacitor		
1.0500	Replace existing 69/12 kV		DDI (1000/)
b0528	transformer at Bethany with		DPL (100%)
	a 138/12 kV transformer		

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

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

Required	Fransmission Enhancements A	nnual Revenue Requirement	Responsible Customer(s)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv		DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor		DPL (100%)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor  – Edgemoor – Silverside 69 kV		DPL (69.65%) / PECO (17.30%) / PSEG (12.56%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

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

Required	I ransmission Enhancements An	inual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%) /
			APS (5.79%) / ATSI (7.95%) /
			BGE (4.11%) / ComEd (13.24%)
			/ Dayton (2.07%) / DEOK
	Add two additional breakers at Keeney 500 kV		(3.22%) / DL (1.73%) / DPL
			(2.48%) / Dominion (13.17%) /
b0751			EKPC (2.13%) / JCPL (3.71%) /
			ME (1.88%) / NEPTUNE*
			(0.42%) / PECO (5.34%) /
			PENELEC (1.86%) / PEPCO
			(3.98%) / PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)
			DFAX Allocation:
			DPL (100%)
	Replace two circuit		
b0752	breakers to bring the		DPL (100%)
	emergency rating up to 348		( = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	MVA		
b0753	Add a second Loretto		DPL (100%)
00733	230/138 kV transformer		DFL (10070)
	Rebuild 10 miles of		
	Glasgow to Mt. Pleasant		
	138 kV line to bring the		(1000)
b0754	normal rating to 298 MVA		DPL (100%)
	and the emergency rating to		
	333 MVA		
	Reconfigure Cecil Sub into		
	230 and 138 kV ring buses,		
b0792	add a 230/138 kV		DPL (100%)
	transformer, and operate the		` ,
	34.5 kV bus normally open		
	D 1 T C .	110	

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Required	Tansmission Enhancements Ai	inuai Revenue Requirement	Responsible Customer(s)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line		DPL (100%)
b0874	Reconfigure Brandywine substation		DPL (100%)
b0876	Install 50 MVAR SVC at 138th St 138 kV		DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line		DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)		DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit		DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit		DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV		DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor		DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Sto ckton - Kenney 69 kV circuit		DPL (100%)
b1604	Replace CT at Reybold 138 kV substation		DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation		DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV		DPL (100%)

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

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

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

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 118	ansmission Enhancements Ar	inuai Revenue Requirement	Responsible Customer(s)
b2288	Build a new 138 kV line from Piney Grove – Wattsville		DPL (100%)
b2395	Reconductor the Harmony - Chapel St 138 kV circuit		DPL (100%)
b2569	Replace Terminal equipment at Silverside 69 kV substation		DPL (100%)
b2633.7	Implement high speed relaying utilizing OPGW on Red Lion – Hope Creek 500 kV line		Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%)
b2633.10	Interconnect the new Silver Run 230 kV substation with existing Red Lion – Cartanza and Red Lion – Cedar Creek 230 kV lines		DPL (100%)

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

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

	distinssion Emidicements 7 till	idai i te vende i tequirement	respension customer(s)
b2695	Rebuild Worcester – Ocean Pine 69 kV ckt. 1 to 1400A capability summer emergency		DPL (100%)
b2946	Convert existing Preston 69 kV substation to DPL's current design standard of a 3-breaker ring bus		DPL (100%)
b2947.1	Upgrade terminal equipment at DPL's Naamans substation (Darley - Naamans 69 kV)		DPL (100%)
b2947.2	Reconductor 0.11 mile section of Darley - Naamans 69 kV circuit		DPL (100%)
b2948	Upgrade terminal equipment at DPL's Silverside Road substation (Dupont Edge Moor – Silver R. 69 kV)		DPL (100%)
b2987	Install a 30 MVAR capacitor bank at DPL's Cool Springs 69 kV substation. The capacitor bank would be installed in two separate 15 MVAR stages allowing DPL operational flexibility		DPL (100%)

# Attachment 5F – Cost Allocation of 2019/2020 PEPCO Schedule 12 Charges

## Attachment 5F PJM Schedule 12 - Transmission Enhancement Charges for June 2019 to May 2020 Calculation of costs and monthly PJM charges for PEPCO Projects

		(a)	(b)	(c)	(d)	(e)	<b>(f)</b>	(g)	(h)	(i)	(j)
Required Transmission Enhancement per PJM website	PJM Upgrade ID per PJM spreadsheet	June 2019-May 2 Annual Reven Requirement per PJM websi	2020 ACE ue Zone Share <sup>1</sup>	JCP&L Zone Share <sup>1</sup>	ners - Schedule 1 PSE&G Zone Share <sup>1</sup> ccess <i>Transmissi</i> e	RE Zone Share <sup>1</sup>	Estim ACE Zone Charges	ated New Jerse JCP&L Zone Charges	ey EDC Zone C PSE&G Zone Charges	harges by Pro RE Zone Charges	ject Total NJ Zones Charges
Reconductor 23035 for Dickerson-Quince	b0367.1-2	\$ 2,718	.446 1.789	% 2.67%	3.82%	0.00%	\$48,388	\$72,583	\$103,845	\$0	\$224,815
Replace 230 1A breaker	b0512.7	\$ 129	763 1.619	% 3.71%	6.19%	0.26%	\$2,089	\$4,814	\$8,032	\$337	\$15,273
Replace 230 1A breaker	b0512.7_dfax	\$ 129	763 3.949	% 9.43%	14.71%	0.54%	\$5,113	\$12,237	\$19,088	\$701	\$37,138
Replace 230 1B breaker	b0512.8	\$ 129	763 1.619	% 3.71%	6.19%	0.26%	\$2,089	\$4,814	\$8,032	\$337	\$15,273
Replace 230 1B breaker	b0512.8_dfax	\$ 129	763 3.949	% 9.43%	14.71%	0.54%	\$5,113	\$12,237	\$19,088	\$701	\$37,138
Replace 230 2A breaker	b0512.9	\$ 129	763 1.619	% 3.71%	6.19%	0.26%	\$2,089	\$4,814	\$8,032	\$337	\$15,273
Replace 230 2A breaker	b0512.9_dfax	\$ 129	763 3.949	% 9.43%	14.71%	0.54%	\$5,113	\$12,237	\$19,088	\$701	\$37,138
Replace 230 3A breaker	b0512.12	\$ 131	028 1.619	% 3.71%	6.19%	0.26%	\$2,110	\$4,861	\$8,111	\$341	\$15,422
Replace 230 3A breaker	b0512.12_dfax	\$ 131	028 3.949	% 9.43%	14.71%	0.54%	\$5,162	\$12,356	\$19,274	\$708	\$37,500
Ritchie-Benning 230 lines  Totals	b0526	\$ 7,786	900 0.779	% 1.39%	2.10%	0.08%	\$59,959 <b>\$137,225</b>	\$108,238 <b>\$249,190</b>	\$163,525 <b>\$376,115</b>	\$6,230 <b>\$10,392</b>	\$337,951 <b>\$772,922</b>
Notes on calculations >>>	•						= (a) * (b)	= (a) * (c)	= (a) * (d)	= (a) * (e)	= (f) + (g) + (h) + (i)
		(k)	(1)	(m)	(n)	(0)	(p)				
	Zonal Cost Allocation for New Jersey Zones	Average Montl Impact on Zor Customers in 19	e Peak Load	d Rate in \$/MW-mo.	2019 Impact (7 months)	2020 Impact (5 months)	2019-2020 Impact (12 months)				
	PSE&G JCP&L ACE RE	\$ 31,34 \$ 20,76 \$ 11,43 \$ 86	2.96 9,978. 5.82 5,976.	5 \$ 3.47 3 \$ 4.41	\$ 145,361 \$ 80,048	\$ 103,829 \$ 57,177	\$ 249,190 \$ 137,225				
	Total Impact on NJ Zones	\$ 64,41	0.20		\$ 450,871	\$ 322,051	\$ 772,922				

= (k) \* (l)

= (k) \* 7

= (k) \* 5

= (n) \* (o)

#### Notes:

Notes on calculations >>>

<sup>1) 2019</sup> allocation share percentages are from PJM OATT

### **SCHEDULE 12 – APPENDIX**

### (10) Potomac Electric Power Company

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Installation of (2) new 230 kV circuit breakers at b0146 Quince Orchard substation on circuits 23028 and 23029 PEPCO (100%) Install two new 230 kV circuits between Palmers b0219 Corner and Blue Plains PEPCO (100%) Upgrade Burtonsville – Sandy Springs 230 kV b0228 circuit PEPCO (100%) Modify Dickerson Station H 230 kV b0238.1 PEPCO (100%) Install 100 MVAR of 230 b0251 kV capacitors at Bells Mill PEPCO (100%) Install 100 MVAR of 230 b0252 kV capacitors at Bells Mill PEPCO (100%) Brighton Substation – add 2<sup>nd</sup> 1000 MVA 500/230 b0288 kV transformer, 2 500 kV circuit breakers and BGE (19.33%) / Dominion miscellaneous bus work (17%) / PEPCO (63.67%) Add a second 1000 MVA b0319 Bruches Hill 500/230 kV transformer PEPCO (100%) Install a 4<sup>th</sup> Ritchie 230/69 b0366 kV transformer PEPCO (100%) AEC (1.78%) / BGE (26.54%) / DPL (3.25%) / JCPL (2.67%) / Reconductor circuit ME (1.16%) / Neptune\* (0.25%) "23035" for Dickerson b0367.1 / PECO (4.80%) / PEPCO Quince Orchard 230 kV (52.50%) / PPL (3.23%) / PSEG (3.82%)

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (1.78%) / BGE (26.54%) / DPL (3.25%) / JCPL (2.67%) / Reconductor circuit ME (1.16%) / Neptune\* (0.25%) b0367.2 "23033" for Dickerson – / PECO (4.80%) / PEPCO Ouince Orchard 230 kV (52.50%) / PPL (3.23%) / PSEG (3.82%)Install 0.5% reactor at AEC (1.02%) / BGE (25.42%) / Dickerson on the Pleasant DPL (2.97%) / ME (1.72%) / b0375 View - Dickerson 230 kV PECO (3.47%) / PEPCO circuit (65.40%)AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / Reconductor the JCPL (0.71%) / ME (2.48%) / b0467.1 Dickerson – Pleasant Neptune\* (0.06%) / PECO View 230 kV circuit (5.54%) / PEPCO (41.86%) / PPL (2.07%) Reconductor the four b0478 circuits from Burches Hill APS (1.68%) / BGE (1.83%) / PEPCO (96.49%) to Palmers Corner Replace existing 500/230 APS (5.67%) / BGE (29.68%) / b0496 kV transformer at Dominion (10.91%) / PEPCO **Brighton** (53.74%)Install third Burches Hill APS (3.54%) / BGE (7.31%) / b0499 500/230 kV transformer PEPCO (89.15%)

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

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

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	Load-Ratio Share Allocation:   AEC (1.61%) / AEP (14.10%) /   APS (5.79%) / ATSI (7.95%) /   BGE (4.11%) / ComEd (13.24%) /   Dayton (2.07%) / DEOK (3.22%) /   DL (1.73%) / DPL (2.48%) /   Dominion (13.17%) / EKPC   (2.13%) / JCPL (3.71%) / ME   (1.88%) / NEPTUNE* (0.42%) /   PECO (5.34%) / PENELEC   (1.86%) / PEPCO (3.98%) / PPL   (4.76%) / PSEG (6.19%) / RE   (0.26%)   DFAX Allocation:   AEC (3.94%) / APS (0.33%) /   BGE (34.54%) / DPL (14.69%) /   Dominion (0.30%) / JCPL (9.43%) /   / ME (2.16%) / NEPTUNE   (0.90%) / PECO (10.52%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / RE (0.54%)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Required Transmission Enhancements		Annual Revenue Requirement Responsible Customer(s)
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	Load-Ratio Share Allocation:   AEC (1.61%) / AEP (14.10%) /   APS (5.79%) / ATSI (7.95%) /   BGE (4.11%) / ComEd (13.24%) /   Dayton (2.07%) / DEOK (3.22%) /   DL (1.73%) / DPL (2.48%) /   Dominion (13.17%) / EKPC   (2.13%) / JCPL (3.71%) / ME   (1.88%) / NEPTUNE* (0.42%) /   PECO (5.34%) / PENELEC   (1.86%) / PEPCO (3.98%) / PPL   (4.76%) / PSEG (6.19%) / RE   (0.26%)   DFAX Allocation:   AEC (3.94%) / APS (0.33%) /   BGE (34.54%) / DPL (14.69%) /   Dominion (0.30%) / JCPL (9.43%) /   /ME (2.16%) / NEPTUNE   (0.90%) / PECO (10.52%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / RE (0.54%)
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Required Transmission Enhancements		Annual Revenue Requirement Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	Load-Ratio Share Allocation:   AEC (1.61%) / AEP (14.10%) /   APS (5.79%) / ATSI (7.95%) /   BGE (4.11%) / ComEd (13.24%) /   Dayton (2.07%) / DEOK (3.22%) /   DL (1.73%) / DPL (2.48%) /   Dominion (13.17%) / EKPC   (2.13%) / JCPL (3.71%) / ME   (1.88%) / NEPTUNE* (0.42%) /   PECO (5.34%) / PENELEC   (1.86%) / PEPCO (3.98%) / PPL   (4.76%) / PSEG (6.19%) / RE   (0.26%)   DFAX Allocation:   AEC (3.94%) / APS (0.33%) /   BGE (34.54%) / DPL (14.69%) /   Dominion (0.30%) / JCPL (9.43%) /   /ME (2.16%) / NEPTUNE   (0.90%) / PECO (10.52%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / RE (0.54%)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Required Transmission Enhancements		Annual Revenue Requirement Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	Load-Ratio Share Allocation:   AEC (1.61%) / AEP (14.10%) /   APS (5.79%) / ATSI (7.95%) /   BGE (4.11%) / ComEd (13.24%) /   Dayton (2.07%) / DEOK (3.22%) /   DL (1.73%) / DPL (2.48%) /   Dominion (13.17%) / EKPC   (2.13%) / JCPL (3.71%) / ME   (1.88%) / NEPTUNE* (0.42%) /   PECO (5.34%) / PENELEC   (1.86%) / PEPCO (3.98%) / PPL   (4.76%) / PSEG (6.19%) / RE   (0.26%)   DFAX Allocation:   AEC (3.94%) / APS (0.33%) /   BGE (34.54%) / DPL (14.69%) /   Dominion (0.30%) / JCPL (9.43%) /   / ME (2.16%) / NEPTUNE   (0.90%) / PECO (10.52%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / RE (0.54%)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

	Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
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Required I	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
		(2.13%) / JCPL (3.71%) / ME
	Advance n0770 (Denless	(1.88%) / NEPTUNE* (0.42%) /
	Advance n0779 (Replace	PECO (5.34%) / PENELEC
b0512.14	Chalk Point 230 kV	(1.86%) / PEPCO (3.98%) / PPL
	breaker (3C) with 80 kA	(4.76%) / PSEG (6.19%) / RE
	breaker)	(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		(0.90%) / PECO (10.52%) /
		PEPCO (2.44%) / PPL (5.50%) /
		PSEG (14.71%) / RE (0.54%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	(2.13%) / JCPL (3.71%) / ME
		(1.88%) / NEPTUNE* (0.42%) /
		PECO (5.34%) / PENELEC
		(1.86%) / PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		· · · · · · · · · · · · · · · · · · ·
		/ ME (2.16%) / NEPTUNE
		/ ME (2.16%) / NEPTŪNE (0.90%) / PECO (10.52%) /

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

Required Transmission Enhancements Annual Revenue Requirement Responsi	ustomer(s)	
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Required I	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
		(2.13%) / JCPL (3.71%) / ME
	Advance n0701 (Denless	(1.88%) / NEPTUNE* (0.42%) /
	Advance n0781 (Replace	PECO (5.34%) / PENELEC
b0512.16	Chalk Point 230 kV	(1.86%) / PEPCO (3.98%) / PPL
	breaker (4B) with 80 kA	(4.76%) / PSEG (6.19%) / RE
	breaker)	(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		(0.90%) / PECO (10.52%) /
		PEPCO (2.44%) / PPL (5.50%) /
		PSEG (14.71%) / RE (0.54%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	(2.13%) / JCPL (3.71%) / ME
		(1.88%) / NEPTUNE* (0.42%) /
		PECO (5.34%) / PENELEC
		(1.86%) / PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		(0.90%) / PECO (10.52%) /
		(0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) /

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

Required Transmission Enhancements		Annual Revenue Requirement Responsible Customer(s)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	Load-Ratio Share Allocation:   AEC (1.61%) / AEP (14.10%) /   APS (5.79%) / ATSI (7.95%) /   BGE (4.11%) / ComEd (13.24%) /   Dayton (2.07%) / DEOK (3.22%) /   DL (1.73%) / DPL (2.48%) /   Dominion (13.17%) / EKPC   (2.13%) / JCPL (3.71%) / ME   (1.88%) / NEPTUNE* (0.42%) /   PECO (5.34%) / PENELEC   (1.86%) / PEPCO (3.98%) / PPL   (4.76%) / PSEG (6.19%) / RE   (0.26%)   DFAX Allocation:   AEC (3.94%) / APS (0.33%) /   BGE (34.54%) / DPL (14.69%) /   Dominion (0.30%) / JCPL (9.43%) /   / ME (2.16%) / NEPTUNE   (0.90%) / PECO (10.52%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / RE (0.54%)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)

Required 1	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
		(2.13%) / JCPL (3.71%) / ME
	A 1	(1.88%) / NEPTUNE* (0.42%) /
	Advance n0785 (Replace	PECO (5.34%) / PENELEC
b0512.20	Chalk Point 230 kV	(1.86%) / PEPCO (3.98%) / PPL
	breaker (6B) with 80 kA	(4.76%) / PSEG (6.19%) / RE
	breaker	(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		(0.90%) / PECO (10.52%) /
		PEPCO (2.44%) / PPL (5.50%) /
		PSEG (14.71%) / RE (0.54%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	Dominion (13.17%) / EKPC
b0512.21		(2.13%) / JCPL (3.71%) / ME
		(1.88%) / NEPTUNE* (0.42%) /
		PECO (5.34%) / PENELEC
		(1.86%) / PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		, , , , , , , , , , , , , , , , , , , ,
		/ ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) /
		/ ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) /
		/ ME (2.16%) / NEPTUNE

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

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	Load-Ratio Share Allocation:   AEC (1.61%) / AEP (14.10%) /   APS (5.79%) / ATSI (7.95%) /   BGE (4.11%) / ComEd (13.24%) /   Dayton (2.07%) / DEOK (3.22%) /   DL (1.73%) / DPL (2.48%) /   Dominion (13.17%) / EKPC   (2.13%) / JCPL (3.71%) / ME   (1.88%) / NEPTUNE* (0.42%) /   PECO (5.34%) / PENELEC   (1.86%) / PEPCO (3.98%) / PPL   (4.76%) / PSEG (6.19%) / RE   (0.26%)   DFAX Allocation:   AEC (3.94%) / APS (0.33%) /   BGE (34.54%) / DPL (14.69%) /   Dominion (0.30%) / JCPL (9.43%) /   / ME (2.16%) / NEPTUNE   (0.90%) / PECO (10.52%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / RE (0.54%)
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / JCPL (3.71%) / ME (1.88%) / NEPTUNE* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)

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

Requ	aired	Transmission	<b>Enhancements</b>	Annual	Revenue R	Lequirement	Res	ponsible	Customer(	(s)	
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Required 1	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
		(2.13%) / JCPL (3.71%) / ME
	Advance n0793 (Replace	(1.88%) / NEPTUNE* (0.42%) /
	Chalk Point 230 Kv	PECO (5.34%) / PENELEC
b0512.28	breaker (6C) with 80 kA	(1.86%) / PEPCO (3.98%) / PPL
	breaker)	(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		(0.90%) / PECO (10.52%) /
		PEPCO (2.44%) / PPL (5.50%) /
		PSEG (14.71%) / RE (0.54%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%) /
		APS (5.79%) / ATSI (7.95%) /
		BGE (4.11%) / ComEd (13.24%) /
		Dayton (2.07%) / DEOK (3.22%) /
		DL (1.73%) / DPL (2.48%) /
		Dominion (13.17%) / EKPC
		(2.13%) / JCPL (3.71%) / ME
	Advance n0794 (Replace	(1.88%) / NEPTUNE* (0.42%) /
	Chalk Point 230 Kv	PECO (5.34%) / PENELEC
b0512.29	breaker (7C) with 80 kA	(1.86%) / PEPCO (3.98%) / PPL
	breaker)	(4.76%) / PSEG (6.19%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (3.94%) / APS (0.33%) /
		BGE (34.54%) / DPL (14.69%) /
		Dominion (0.30%) / JCPL (9.43%)
		/ ME (2.16%) / NEPTUNE
		(0.90%) / PECO (10.52%) /
		PEPCO (2.44%) / PPL (5.50%) /
		PSEG (14.71%) / RE (0.54%)
1	1	, , , , , ,

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

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

Required	ransmission Enhancements	Annual Revenue Requirement	1
b0526	Build two Ritchie – Benning Station A 230 kV lines	Di ME PEC	EC (0.77%) / BGE (16.76%) / PL (1.22%) / JCPL (1.39%) / (0.59%) / Neptune* (0.13%) / CO (2.10%) / PEPCO (74.86%) PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station "D" 230 kV substation	DP ME PE	EC (8.64%) / APS (1.70%) / L (12.33%) / JCPL (18.30%) / (1.56%) / Neptune* (1.78%) / CO (21.94%) / PPL (6.45%) / SEG (26.32%) / RE (0.98%)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation	DP ME PE	EC (8.64%) / APS (1.70%) / L (12.33%) / JCPL (18.30%) / (1.56%) / Neptune* (1.78%) / CO (21.94%) / PPL (6.45%) / SEG (26.32%) / RE (0.98%)
b0637	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)

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

Required	ransmission Ennancements	Annuai Revenue Requireme	ent Responsible Customer(s)
	Expand Benning 230 kV		
	station, add a new 250		
b0701	MVA 230/69 kV		
00701	transformer at Benning		
	Station 'A', new 115 kV		
	Benning switching station		BGE (30.57%) / PEPCO (69.43%)
	Add a second 50 MVAR		
b0702	230 kV shunt reactor at		
00/02	the Benning 230 kV		
	substation		PEPCO (100%)
b0720	Upgrade terminal		
00720	equipment on both lines		PEPCO (100%)
	Upgrade Oak Grove –		
b0721	Ritchie 23061 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0722	Ritchie 23058 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0723	Ritchie 23059 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0724	Ritchie 23060 230 kV		
	line		PEPCO (100%)
	Add slow oil circulation		
	to the four Bells Mill		
	Road – Bethesda 138 kV		
	lines, add slow oil		
	circulation to the two		
b0730	Buzzard Point –		
00750	Southwest 138 kV lines;		
	increasing the thermal		
	ratings of these six lines		
	allows for greater		
	adjustment of the O Street		
	phase shifters		PEPCO (100%)

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

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

Required	I ransmission Enhancements	Annual Revenue Requireme	ent Responsible Customer(s)
	Implement an SPS to		
	automatically shed load		
	on the 34 kV Bells Mill		
	Road bus for this N-2		
b0731	condition. The SPS will		
	be in effect for 2013 and		
	2014 until a third Bells		
	Mill 230/34 kV is placed		
	in-service in 2015		PEPCO (100%)
	Upgrade circuit for 3,000		AEC (0.73%) / BGE (31.05%) /
b0746	amps using the ACCR		DPL (1.45%) / PECO (2.46%) /
	1 0		PEPCO (62.88%) / PPL (1.43%)
	Upgrade terminal		
	equipment on both lines:		
b0747	Quince Orchard - Bells		
	Mill 230 kV (030) and		
	(028)		PEPCO (100%)
	Advance n0259 (Replace		
b0802	Dickerson Station H		
	Circuit Breaker 412A)		PEPCO (100%)
	Advance n0260 (Replace		
b0803	Dickerson Station H		
	Circuit Breaker 42A)		PEPCO (100%)
	Advance n0261 (Replace		
b0804	Dickerson Station H		
	Circuit Breaker 42C)		PEPCO (100%)
	Advance n0262 (Replace		
b0805	Dickerson Station H		
	Circuit Breaker 43A)		PEPCO (100%)
	Advance n0264 (Replace		
b0806	Dickerson Station H		
	Circuit Breaker 44A)		PEPCO (100%)

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

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

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

Required	Transmission Enhancements	Annual Revenue Requirement	nt Responsible Customer(s)
	Replace Chalk Point 230		
b0856	kV breaker (5B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		7
b0857	kV breaker (6A) with 80		
0000,	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		12100 (10070)
b0858	kV breaker (6B) with 80		
00030	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		1 E1 CO (10070)
b0859	-		
00839	kV breaker (7B) with 80		DEDCO (1000/)
	kA breaker		PEPCO (100%)
1.0060	Replace Chalk Point 230		
b0860	kV breaker (8A) with 80		DED GO (1000/)
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0861	kV breaker (8B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0862	kV breaker (7A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0863	kV breaker (1C) with 80		
	kA breaker		PEPCO (100%)
1 1 1 0 4	Replace Burtonsville 230		
b1104	kV breaker '1C'		PEPCO (100%)
1 1 1 0 7	Replace Burtonsville 230		
b1105	kV breaker '2C'		PEPCO (100%)
1.1106	Replace Burtonsville 230		
b1106	kV breaker '3C'		PEPCO (100%)
1 1 1 0 5	Replace Burtonsville 230		
b1107	kV breaker '4C'		PEPCO (100%)
	Convert the 138 kV line		· /
	from Buzzard 138 -		
	Ritchie 851 to a 230 kV		
	line and Remove 230/138		
b1125	kV Transformer at Ritchie		
	and install a spare 230/138		
	kV transformer at Buzzard		
	Pt		APS (4.74%) / PEPCO (95.26%)
	· ·	A	11 5 (4.7470) / FLFCO (95.20%)
h1126	Upgrade the 230 kV line from Buzzard 016 –		
b1126			DC (4.740/) / DEDCO (05.260/)
	Ritchie 059	A	APS (4.74%) / PEPCO (95.26%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor the Oak AEC (2.40%) / APS (3.83%) / Grove – Bowie 230 kV BGE (65.87%) / DPL (4.44%) / circuit and upgrade JCPL (3.94%) / ME (2.16%) / b1592 terminal equipments at Neptune\* (0.39%) / PECO Oak Grove and Bowie 230 (8.37%) / PPL (2.84%) / PSEG kV substations (5.54%) / RE (0.22%) Reconductor the AEC (2.40%) / APS (3.83%) / Bowie - Burtonsville 230 BGE (65.87%) / DPL (4.44%) / kV circuit and upgrade JCPL (3.94%) / ME (2.16%) / b1593 terminal equipments at Neptune\* (0.39%) / PECO Bowie and Burtonsville (8.37%) / PPL (2.84%) / PSEG 230 kV substations (5.54%) / RE (0.22%) Reconductor the Oak Grove – Bowie 230 kV AEC (2.40%) / APS (3.83%) / '23042' circuit and BGE (65.87%) / DPL (4.44%) / b1594 upgrade terminal JCPL (3.94%) / ME (2.16%) / Neptune\* (0.39%) / PECO equipments at Oak Grove (8.37%) / PPL (2.84%) / PSEG and Bowie 230 kV substations (5.54%) / RE (0.22%) Reconductor the Bowie -Burtonsville 230 kV AEC (2.40%) / APS (3.83%) / '23042' circuit and BGE (65.87%) / DPL (4.44%) / b1595 upgrade terminal JCPL (3.94%) / ME (2.16%) / equipments at Oak Grove Neptune\* (0.39%) / PECO and Burtonsville 230 kV (8.37%) / PPL (2.84%) / PSEG substations (5.54%) / RE (0.22%) Reconductor the Dickerson station "H" -Ouince Orchard 230 kV '23032' circuit and b1596 upgrade terminal equipments at Dickerson station "H" and Quince AEC (0.80%) / BGE (33.68%) / Orchard 230 kV DPL (2.09%) / PECO (3.07%) / substations PEPCO (60.36%)

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

Required '	Transmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
	Reconductor the Oak	•	
	Grove - Aquasco 230 kV		
	'23062' circuit and		
b1597	upgrade terminal		
	equipments at Oak Grove		AEC (1.44%) / BGE (48.60%) /
	and Aquasco 230 kV		DPL (2.52%) / PECO (5.00%) /
	substations		PEPCO (42.44%)
	Reconductor feeder 23032		BGE (33.05%) / DPL (1.38%) /
b2008	and 23034 to high temp.		PECO (1.35%) / PEPCO
	conductor (10 miles)		(64.22%) /
	Reconductor the		
	Morgantown - V3-017		
b2136	230 kV '23086' circuit and		
02130	replace terminal		
	equipments at		
	Morgantown		PEPCO (100%)
	Reconductor the		
	Morgantown - Talbert 230		
b2137	kV '23085' circuit and		
	replace terminal		
	equipment at Morgantown		PEPCO (100%)
	Replace terminal		
b2138	equipments at Hawkins		
	230 kV substation		PEPCO (100%)

## SCHEDULE 12 – APPENDIX A

## (10) Potomac Electric Power Company

Required Ti	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Add two 100 MVAR		
	reactors at Dickerson		
<i>b2279</i>	Station H and two 100		PEPCO (100%)
022/9	MVAR reactors at		1 E1 CO (10076)
	Brighton 230 kV		
	substation		
	Upgrade the Chalk Point -		
	T133TAP 230 kV Ck. 1		
b2372	(23063) and Ckt. 2		BGE (100%)
	(23065) to 1200 MVA		
	ACCR		

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

# Attachment 58 – Cost Allocation of 2019/2020 PECO Schedule 12 Charges

Attachment 5G - Transmission Enhancement Charges for June 2019 - May 2020 Calculation of costs and monthly PJM charges for PECO Energy Company Transmission Projects

(a)

(b)

(c)

(d)

(e)

(f)

(g)

(h)

(i)

(j)

				Responsible Customers - Schedule 12 Appendix					arges by Project	ges by Project		
Required	D 184		2019/2020	ACE	JCP&L	PSE&G	RE	ACE	JCP&L	PSE&G	RE	Total
Transmission Enhancement	PJM Upgrade ID	4	Annual Revenue Requirement	Zone Share <sup>1</sup>	Zone Share <sup>1</sup>	Zone Share <sup>1</sup>	Zone Share <sup>1</sup>	Zone Charges	Zone Charges	Zone Charges	Zone Charges	NJ Zones Charges
per PJM website	per PJM spreadsheet		per PJM website			cess Transmission		Charges	Charges	Charges	Charges	Charges
Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV circuit.	b0269	\$	3,378,121.65	1.61%	3.71%	6.19%	0.26%	\$54,388	\$125,328	\$209,106	\$8,783	\$397,605
Add a new 230 kV circuit between Whitpain and Heaton substations	b0269.1	\$	882,294.21	8.25%	0.00%	0.00%	0.00%	\$72,789	\$0	\$0	\$0	\$72,789
Add a new 500kV brkr. at Whitpain bet. #3 transfmr. and 5029 line	b0269.6	\$	237,369.27	1.61%	3.71%	6.19%	0.26%	\$3,822	\$8,806	\$14,693	\$617	\$27,938
Replace 2-500 kV circt brkrs and 2 wave traps at Elroy subs to increase rating of Elroy - Hosensack 500kV	b0171.1	\$	319,923.95	1.61%	3.71%	6.19%	0.26%	\$5,151	\$11,869	\$19,803	\$832	\$37,655
Replace 2-500 kV circt brkrs and 2 wave traps at Elroy subs to increase rating of Elroy - Hosensack 500kV	b0171.1_dfax	\$	319,923.95	0.00%	12.94%	29.10%	1.19%	\$0	\$41,398	\$93,098	\$3,807	\$138,303
Increase the rating of lines 220-39 and 220-43 (Linwood-Chicester 230kV lines) and install reactors.	b1900	\$	4,796,812.75	0.00%	6.07%	21.01%	0.84%	\$0	\$291,167	\$1,007,810	\$40,293	\$1,339,270
Rebuild Bryn Mawr-Plymouth Meeting 138 kV line (130-35 Line)	b0727	\$	2,945,772.00	1.25%	0.00%	0.00%	0.00%	\$36,822	\$0	\$0	\$0	\$36,822
Recndr Chichester - Saville 138 kV line and upgrade term equip	b1182	\$	2,746,065.09	0.00%	5.12%	14.31%	0.57%	\$0	\$140,599	\$392,962	\$15,653	\$549,213
Add a second 230/138 kV trans at Chichester. Add an inductor in series with the parallel tranfmrs	b1178	\$	1,251,556.67	0.00%	4.17%	12.18%	0.48%	\$0	\$52,190	\$152,440	\$6,007	\$210,637
Increase Bradford - Planebrook 230 kV Ckt.220-31 line rating. Replace terminal equipment	b0790	\$	265,191.75	0.00%	17.46%	34.00%	1.32%	\$0	\$46,302	\$90,165	\$3,501	\$139,968
Reconductor the North Wales - Hartman 230 kV circuit	b0506	\$	331,812.32	8.58%	0.00%	0.00%	0.00%	\$28,469	\$0	\$0	\$0	\$28,469
Reconductor the North Wales - Whitpain 230 kV circuit	b0505	\$	371,342.75	8.58%	0.00%	0.00%	0.00%	\$31,861	\$0	\$0	\$0	\$31,861
Increase Bradford - Planebrook 230 kV Ckt.220-02 line rating. Replace terminal equipment	b0789	\$	363,012.34	0.73%	17.52%	33.83%	1.32%	\$2,650	\$63,600	\$122,807	\$4,792	\$193,849
Install 161MVAR capacitor at Planebrook 230kV substation	b0206	\$	495,601.63	14.20%	0.00%	3.47%	0.00%	\$70,375	\$0	\$17,197	\$0	\$87,573
Install 161MVAR capacitor at Newlinville 230kV substation	b0207	\$	667,605.55	14.20%	0.00%	3.47%	0.00%	\$94,800	\$0	\$23,166	\$0	\$117,966
Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	b0209	\$	378,186.04	65.23%	25.87%	6.35%	0.00%	\$246,691	\$97,837	\$24,015	\$0	\$368,542
Upgrade Chichester - Delco Tap 230kV and the PECO portion of the Delco Tap - Mickleton 230kV cicuit	b0264	\$	316,077.96	89.87%	9.48%	0.00%	0.00%	\$284,059	\$29,964	\$0	\$0	\$314,023

Attachment 5G - Transmission Enhancement Charges for June 2019 - May 2020 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 per PJM website	PJM Upgrade ID per PJM spreadsheet	2019/2020 Annual Revenue Requirement per PJM website	ACE Zone Share <sup>1</sup>	JCP&L Zone Share <sup>1</sup>	ners - Schedule 12 PSE&G Zone Share <sup>1</sup> ccess Transmission	RE Zone Share <sup>1</sup>	Est ACE Zone Charges	imated New Jers JCP&L Zone Charges	ey EDC Zone Cha PSE&G Zone Charges	arges by Project RE Zone Charges	Total NJ Zones Charges
Reconductor Buckingham - Pleasant Valley 230kV; same impedance as existing line; ratings of 760MVA normal/882MVA emergency	b0357	\$ 314,952.76	0.00%	37.89%	55.19%	2.37%	\$0	\$119,336	\$173,822	\$7,464	\$300,622
Reconductor Richmond-Waneeta kv and replace terminal equipment at Waneeta Substation	b1398.8	\$ 245,146.61	0.00%	13.03%	31.99%	1.27%	\$0	\$31,943	\$78,422	\$3,113	\$113,478
Install 600 MVAR cap banks at Elroy 500kv Substation Install 600 MVAR cap banks at Elroy	b0287	\$ 400,413.89	1.61%	3.71%	6.19%	0.26%	\$6,447	\$14,855	\$24,786	\$1,041	\$47,129
500kv Substation Install 161 MVAR capcitor at Heaton	b2087_dfax	\$ 400,413.89	0.00%	12.94%	29.10%	1.19%	\$0	\$51,814	\$116,520	\$4,765	\$173,099
230kV Substation	b0208	\$ 598,700.69	14.20%	0.00%	3.47%	0.00%	\$85,015	\$0	\$20,775	\$0	\$105,790
Increase Ratings at Peach Bottom 500/230kV Tfmr to 1839 MVA Emgcy	b2694	\$ 635,490.45	4.04%	6.95%	14.37%	0.45%	\$25,674	\$44,167	\$91,320	\$2,860	\$164,020
							\$1,049,014	\$1,171,174	\$2,672,908	\$103,528	\$4,996,624
Notes on calculations >>>							= (a) * (b)	= (a) * (c)	= (a) * (d)	= (a) * (e)	= (f) + (g) + (h) + (i)

		(k)	(I)		(m)	(n)	(o)	(n)
Zonal Cost Allocation for New Jersey Zones	(	Average Monthly Impact on Zone Customers in 19/20	2019TX Peak Load per PJM website		Rate in /MW-mo.	2019 Impact (7 months)	2020 Impact (5 months)	2019-2020 Impact (12 months)
PSE&G	\$	222.742.34	9.978.3	\$	22.32	\$ 1.559.196	\$ 1,113,712	\$ 2,672,908
JCP&L	\$	97,597.82	5,976.5	\$	16.33	\$ 683,185	\$ 487,989	\$ 1,171,174
ACE	\$	87,417.81	2,591.3	\$	33.74	\$ 611,925	\$ 437,089	\$ 1,049,014
RE	\$	8,627.35	414.8	\$	20.80	\$ 60,391	\$ 43,137	\$ 103,528
Total Impact on NJ								
Zones	\$	416,385.32				\$ 2,914,697	\$ 2,081,927	\$ 4,996,624
				_	= (k) * (l)	= (k) * 7	= (k) * 5	= (k) *12

#### Notes:

Notes on calculations >>>

<sup>1) 2019</sup> allocation share percentages are from PJM OATT

## **SCHEDULE 12 – APPENDIX**

## (8) PECO Energy Company

Required T	ransmission Enhancements	Annual Revenue Requireme	nt Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.61%) / AEP (14.10%)
			/ APS (5.79%) / ATSI (7.95%)
			/ BGE (4.11%) / ComEd
			(13.24%) / Dayton (2.07%) /
			DEOK (3.22%) / DL (1.73%) /
	Replace two 500 kV		DPL (2.48%) / Dominion
	circuit breakers and two		(13.17%) / EKPC (2.13%) /
b0171.1	wave traps at Elroy		JCPL (3.71%) / ME (1.88%) /
001/1.1	substation to increase		NEPTUNE* (0.42%) / PECO
	rating of Elroy -		(5.34%) / PENELEC (1.86%) /
	Hosensack 500 kV		PEPCO (3.98%) / PPL
			(4.76%) / PSEG (6.19%) / RE
			(0.26%)
			DFAX Allocation:
			DPL (5.31%) / JCPL (12.94%)
			/ PECO (51.46%) / PSEG
			(29.10%) / RE (1.19%)
	Replace Whitpain 230kV		
b0180	circuit breaker #165		PECO (100%)
	Replace Whitpain 230kV		
b0181	circuit breaker #J105		PECO (100%)
	Upgrade Plymouth		
	Meeting 230kV circuit		
b0182	breaker #125		PECO (100%)
	Install three 28.8Mvar		
	capacitors at Planebrook		
b0205	35kV substation		PECO (100%)
	Install 161Mvar capacitor		AEC (14.20%) / DPL
b0206	at Planebrook 230kV		(24.39%) / PECO (57.94%) /
	substation		PSEG (3.47%)

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

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

required 1	Tansmission Emancements Amuai Revenue Requir	1 ()
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) /
	Substation	PSEG (3.47%)
	Install 161Mvar capacitor	AEC (14.20%) / DPL
b0208	Heaton 230kV substation	(24.39%) / PECO (57.94%) /
		PSEG (3.47%)
	Install 2% series reactor at	
50200	Chichester substation on	AEC (65.23%) / JCPL
b0209	the Chichester -	(25.87%)/ Neptune* (2.55%) /
	Mickleton 230kV circuit	PSEG (6.35%)
	Upgrade Chichester –	,
	Delco Tap 230 kV and the	
b0264	PECO portion of the	
00201	Delco Tap – Mickleton	AEC (89.87%) / JCPL (9.48%)
	230 kV circuit	/ Neptune* (0.65%)
	Replace two wave traps	/ Neptune (0.0370)
	and ammeter at Peach	
b0266	Bottom, and two wave	
	traps and ammeter at	
	Newlinville 230 kV	PEGO (1000()
	substations	PECO (100%)
		Load-Ratio Share Allocation:
		AEC (1.61%) / AEP (14.10%)
		/ APS (5.79%) / ATSI (7.95%)
		/ BGE (4.11%) / ComEd
		(13.24%) / Dayton (2.07%) /
	Lucto 11 500 1-X/	DEOK (3.22%) / DL (1.73%) /
	Install a new 500 kV	DPL (2.48%) / Dominion
1.02.60	Center Point substation in	(13.17%) / EKPC (2.13%) /
b0269	PECO by tapping the	JCPL (3.71%) / ME (1.88%) /
	Elroy – Whitpain 500 kV	NEPTUNE* (0.42%) / PECO
	circuit	(5.34%) / PENELEC (1.86%) /
		PEPCO (3.98%) / PPL
		(4.76%) / PSEG (6.19%) / RE
		(0.26%)†
		DFAX Allocation:
		PECO (100%)
		1 ECO (10070)

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

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

required 1	Tarishinssion Emilancements A	annual Revenue Requirement	Responsible Cusionici(s)
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations		AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit		AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus		AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit		AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster  – Buckingham 230 kV circuit		AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

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

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

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

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

Load-Ratio Share Allo	cation:
AEC (1.61%) / AEP (1.61%)	
/ APS (5.79%) / ATSI (	/
/ BGE (4.11%) / Cor	
(13.24%) / Dayton (2.0	-
DEOK (3.22%) / DL (1	/
Add a new 500 kV DPL (2.48%) / Domi	
b0269.6 breaker at Whitpain (13.17%) / EKPC (2.1	/
between #3 transformer   JCPL (3.71%) / ME (1.	/
and 5029 line NEPTUNE* (0.42%) /	
(5.34%) / PENELEC (1	/
PEPCO (3.98%) / P	
(4.76%) / PSEG (6.19%)	6) / RE
(0.26%)	
DFAX Allocation	:
PECO (100%)	
b0269.7 Replace North Wales 230	
b0209.7 kV breaker #105 PECO (100%)	
Install a new 230 kV	
Center Point substation in	
PECO by tapping the	
b0269.10   North Wales – Perkiomen	
230 kV circuit. Install a	
new 500/230 kV Center AEC (8.25%) / DPL (9.	
Point transformer PECO (82.19%)†	†
Install 161 MVAR	
b0280.1 capacitor at Warrington	
230 kV substation PECO 100%	
Install 161 MVAR	
b0280.2   capacitor at Bradford 230	
kV substation PECO 100%	
Install 28.8 MVAR	
b0280.3 capacitor at Warrington	
34 kV substation PECO 100%	
Install 18 MVAR	
b0280.4   capacitor at Waverly 13.8	
kV substation PECO 100%	

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Load-Ratio Share Allocation: AEC (1.61%) / AEP (14.10%) / APS (5.79%) / ATSI (7.95%) / BGE (4.11%) / ComEd (13.24%) / Dayton (2.07%) / DEOK (3.22%) / DL (1.73%) / DPL (2.48%) / Dominion (13.17%) / EKPC (2.13%) / Install 600 MVAR JCPL (3.71%) / ME (1.88%) / Dynamic Reactive Device b0287 in Whitpain 500 kV NEPTUNE\* (0.42%) / PECO (5.34%) / PENELEC (1.86%) / vicinity PEPCO (3.98%) / PPL (4.76%) / PSEG (6.19%) / RE (0.26%)DFAX Allocation: DPL (5.31%) / JCPL (12.94%) / PECO (51.46%) / PSEG (29.10%) / RE (1.19%) Reconductor Tunnel b0351 Grays Ferry 230 kV PECO (100%) Reconductor Tunnel b0352 Parrish 230 kV PECO (100%) Install 2% reactors on b0353 1 both lines from Eddystone - Llanerch 138 kV PECO (100%) Install identical second 230/138 kV transformer b0353.2 in parallel with existing 230/138 kV transformer at Plymouth Meeting PECO 100% Replace Whitpain 230 kV b0353.3 breaker 135 PECO (100%) Replace Whitpain 230 kV b0353.4 breaker 145 PECO (100%) Eddystone – Island Road Upgrade line terminal b0354 equipment PECO 100%

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

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

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

ransmission Enhancements	Annuai Revenue Requirement	Responsible Customer(s)
Reconductor Master – North Philadelphia 230		DEGO 1000/
kV line		PECO 100%
Reconductor Buckingham	1	JCPL (37.89%) / Neptune*
		(4.55%) / PSEG (55.19%) /
		RE (2.37%)
230 kV circuit		PECO 100%
Replace Whitpain 230 kV		
breaker #245		PECO (100%)
Replace Whitpain 230 kV	,	
breaker #255		PECO (100%)
Spare Whitpain 500/230		1200 (10070)
		PECO (100%)
		1 LCC (10070)
		DECC (1000/)
		PECO (100%)
	,	A F.C. (0. 500 () / D.D.I.
		AEC (8.58%) / DPL
		(7.76%) / PECO (83.66%)
		176 (0.500() / 777
		AEC (8.58%) / DPL
		(7.76%) / PECO (83.66%)
		AEC (8.58%) / DPL
Whitpain 230 kV circuit		(7.76%) PECO (83.66%)
Replace station cable at		
Hartman on the		
Warrington - Hartman		
230 kV circuit		PECO (100%)
Reconductor the Jarrett –		
Heaton 230 kV circuit		PECO (100%)
	Reconductor Master – North Philadelphia 230 kV line  Reconductor Buckingham – Pleasant Valley 230 kV  Reconductor North Philadelphia – Waneeta 230 kV circuit  Replace Whitpain 230 kV breaker #245  Replace Whitpain 230 kV breaker #255  Spare Whitpain 500/230 kV transformer  Spare Peach Bottom 500/230 kV transformer  Reconductor the North Wales – Whitpain 230 kV circuit  Reconductor the North Wales – Hartman 230 kV circuit  Reconductor the Jarrett – Whitpain 230 kV circuit  Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit  Reconductor the Jarrett –	Reconductor Master — North Philadelphia 230 kV line  Reconductor Buckingham — Pleasant Valley 230 kV  Reconductor North Philadelphia — Waneeta 230 kV circuit  Replace Whitpain 230 kV breaker #245  Replace Whitpain 230 kV breaker #255  Spare Whitpain 500/230 kV transformer  Spare Peach Bottom 500/230 kV transformer  Reconductor the North Wales — Whitpain 230 kV circuit  Reconductor the North Wales — Hartman 230 kV circuit  Reconductor the Jarrett — Whitpain 230 kV circuit  Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit  Reconductor the Jarrett —

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

required 1		Alliuai Kevenue Kequilement	Responsible Customer(s)
	Rebuild Bryn Mawr –		
b0727	Plymouth Meeting 138		AEC (1.25%) / DPL
	kV line		(3.11%) / PECO (95.64%)
	Reconductor the line to		AEC (0.73%) / JCPL
	provide a normal rating of		(17.52%) / NEPTUNE*
b0789	677 MVA and an		(1.72%) / PECO (44.88%) /
	emergency rating of 827		PSEG (33.83%) / RE
	MVA		(1.32%)
	Reconductor the Bradford		· · · · · · · · · · · · · · · · · · ·
	– Planebrook 230 kV Ckt.		
b0790	220-31 to provide a		JCPL (17.46%) /
00/90	normal rating of 677		NEPTUNE* (1.71%) /
	MVA and emergency		PECO (45.51%) / PSEG
	rating of 827 MVA		(34.00%) / RE (1.32%)
1.0020.1	Replace Whitpain 230 kV		
b0829.1	breaker '155'		PECO (100%)
	Install 2 new 230 kV		
	breakers at Planebrook		
1 1072	(on the 220-02 line		
b1073	terminal and on the 230		
	kV side of the #9		
	transformer)		PECO (100%)
1,0020,2	Replace Whitpain 230 kV		
b0829.2	breaker '525'		PECO (100%)
1.0020.2	Replace Whitpain 230 kV		
b0829.3	breaker '175'		PECO (100%)
	Replace Plymouth		
b0829.4	Meeting 230 kV breaker		
	'225'		PECO (100%)
	Replace Plymouth		
b0829.5	Meeting 230 kV breaker		
	'335'		PECO (100%)
	Move the connection		
1.0041	points for the 2nd		
b0841	Plymouth Meeting		
	230/138 kV XFMR		PECO (100%)
	•	•	

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

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

required 11	ansinission enhancements Ai	iliuai Keveliue Kequilellielli	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 Eddistone 230 kV		PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV		PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation		PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'		PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'		PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'		PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'		PECO (100%)

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

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

required 110	ansimission Emiancements Ai	iliuai Kevenue Kequilement	responsible Customer(s)
b1156.5	Upgrade at Richmond 230 kV breaker '185'		PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'		PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'		PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'		PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'		PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'		PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'		PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'		PECO (100%)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers		JCPL (4.17%) / Neptune (0.44%) / PECO (82.73%) / PSEG (12.18%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line		PECO (100%)
b1180.1	Replace terminal equipment at Chichester		PECO (100%)
b1180.2	Replace terminal equipment at Chichester		PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone		PECO (100%)

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

# PECO Energy Company (cont.)

Required 11	ansinission Enhancements A	iniuai Nevenue Nequirement	Responsible Customer(s)
	Reconductor Chichester		JCPL (5.12%) / Neptune
b1182	– Saville 138 kV line and		(0.54%) / PECO (79.46%) /
01102	upgrade terminal		PSEG (14.31%) / RE
	equipment		(0.57%)
	Replace 230/69 kV		
	transformer #6 at		
b1183	Cromby. Add two 50		
	MVAR 230 kV banks at		PEGG (1000()
	Cromby		PECO (100%)
	Add 138 kV breakers at		
1 1 1 0 4	Cromby, Perkiomen, and		
b1184	North Wales; add a 35		
	MVAR capacitor at		DECO (1000()
	Perkiomen 138 kV		PECO (100%)
b1185	Upgrade Eddystone 230		7777
	kV breaker #365		PECO (100%)
b1186	Upgrade Eddystone 230		
01100	kV breaker #785		PECO (100%)
	Reconductor the PECO		
b1197	portion of the Burlington		
	- Croydon circuit		PECO (100%)
	Replace terminal		
1.1.00	equipments including		
b1198	station cable, disconnects		
	and relay at Conowingo		DECO (1000/)
	230 kV station		PECO (100%)
b1338	Replace Printz 230 kV		7777
	breaker '225'		PECO (100%)
b1339	Replace Printz 230 kV		
01007	breaker '315'		PECO (100%)
b1340	Replace Printz 230 kV		
015 10	breaker '215'		PECO (100%)
	Reconductor the Camden		
	- Richmond 230 kV		JCPL (13.03%) /
b1398.6	circuit (PECO portion)		NEPTUNE (1.20%) /
01570.0	and upgrade terminal		PECO (51.93%) / PEPCO
	equipments at Camden		(0.58%) / PSEG (31.99%) /
	substations		RE (1.27%)

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

Required 118		nnuai Revenue Requirement	Responsible Customer(s)
	Reconductor Richmond –		
	Waneeta 230 kV and		JCPL (13.03%) / NEPTUNE
b1398.8	replace terminal		(1.20%) / PECO (51.93%) /
	equipments at Richmond		PEPCO (0.58%) / PSEG
	and Waneeta substations		(31.99%) / RE (1.27%)
b1398.12	Replace Graysferry 230		
01398.12	kV breaker '115'		PECO (100%)
			AEC (1.61%) / AEP
			(14.10%) / APS (5.79%) /
			ATSI (7.95%) / BGE
			(4.11%) / ComEd (13.24%) /
			Dayton (2.07%) / DEOK
			(3.22%) / DL (1.73%) / DPL
1 1200 12	Upgrade Peach Bottom		(2.48%) / Dominion
b1398.13	500 kV breaker '225'		(13.17%) / EKPC (2.13%) /
			JCPL (3.71%) / ME (1.88%)
			/ NEPTUNE* (0.42%) /
			PECO (5.34%) / PENELEC
			(1.86%) / PEPCO (3.98%) /
			PPL (4.76%) / PSEG
			(6.19%) / RE (0.26%)†
	Replace Whitpain 230		(0.1370)7 TEE (0.2070)
b1398.14	kV breaker '105'		PECO (100%)
	Upgrade the PECO		
	portion of the Camden –		
1 1 500 1	Richmond 230 kV to a		
b1590.1	six wire conductor and		BGE (3.06%) / ME (0.83%) /
	replace terminal		PECO (91.70%) / PEPCO
	equipment at Richmond.		(1.94%) / PPL (2.47%)
	Reconductor the		
	underground portion of		BGE (4.54%) / DL (0.27%) /
b1591	the Richmond – Waneeta		ME (1.04%) / PECO
	230 kV and replace		(88.11%) / PEPCO (2.79%) /
	terminal equipment		PPL (3.25%)
<u> </u>	· · · · · · · · · · · · · · · · · · ·	116	

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

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

Required 11	ansinission Enhancements A	inuai Revenue Requirement	responsible customer(s)
b1717	Install a second Waneeta		
	230/138 kV transformer		77.50 (1000)
	on a separate bus section		PECO (100%)
	Reconductor the		
b1718	Crescentville - Foxchase		
	138 kV circuit		PECO (100%)
	Reconductor the		
b1719	Foxchase - Bluegrass 138		
	kV circuit		PECO (100%)
	Increase the effective		
	rating of the Eddystone		
b1720	230/138 kV transformer		
	by replacing a circuit		
	breaker at Eddystone		PECO (100%)
	Increase the rating of the		
b1721	Waneeta - Tuna 138 kV		
01/21	circuit by replacing two		
	138 kV CTs at Waneeta		PECO (100%)
	Increase the normal		
b1722	rating of the Cedarbrook		
	- Whitemarsh 69 kV		
	circuit by changing the		
	CT ratio and replacing		
	station cable at		
	Whitemarsh 69 kV		PECO (100%)
	Install 39 MVAR		
b1768	capacitor at Cromby 138		
	kV bus		PECO (100%)
	Add a 3rd 230 kV		PECO (70.24%) / JCPL
	transmission line between		(6.07%) / ATSI (1.24%) /
b1900	Chichester and Linwood		PSEG (21.01%) / RE
	substations and remove		(0.84%) / NEPTUNE*
	the Linwood SPS		(0.60%)
b2140	Install a 3rd Emilie		
	230/138 kV transformer		PECO (100%)
b2145	Replace two sections of		, , ,
	conductor inside		
	Richmond substation		PECO (100%)
	<u> </u>		. /

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

## SCHEDULE 12 – APPENDIX A

## (8) PECO Energy Company

Required Tr	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Replace Waneeta 138 kV		
b2130	breaker '15' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2131	breaker '35' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2132	breaker '875' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2133	breaker '895' with 63 kA		PECO (100%)
	rated breaker		
	Plymouth Meeting 230		
b2134	kV breaker '115' with 63		PECO (100%)
	kA rated breaker		
	Install a second		
b2222	Eddystone 230/138 kV		PECO (100%)
	transformer		
	Replace the Eddystone		
b2222.1	138 kV #205 breaker with		PECO (100%)
	63kA breaker		
	Increase Rating of		
b2222.2	Eddystone #415 138kV		PECO (100%)
	Breaker		
b2236	50 MVAR reactor at		PECO (100%)
02250	Buckingham 230 kV		1200 (10070)
	Replace Whitpain 230 kV		
b2527	breaker '155' with 80kA		PECO (100%)
	breaker		
b2528	Replace Whitpain 230 kV		
	breaker '525' with 80kA		PECO (100%)
	breaker		
b2529	Replace Whitpain 230 kV		
	breaker '175' with 80 kA		PECO (100%)
	breaker		
b2549	Replace terminal		
	equipment inside		
	Chichester substation on		PECO (100%)
	the 220-36 (Chichester –		
	Eddystone) 230 kV line		

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

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

# PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirem	ent Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
	Upgrade substation equipment at Peach Bottom 500 kV to increase facility rating to 2826 MVA normal and 3525 MVA emergency		AEC (1.61%) / AEP (14.10%)
			/ APS (5.79%) / ATSI (7.95%)
			/ BGE (4.11%) / ComEd
			(13.24%) / Dayton (2.07%) /
			DEOK (3.22%) / DL (1.73%) /
			DPL (2.48%) / Dominion
			(13.17%) / EKPC (2.13%) /
			JCPL (3.71%) / ME (1.88%) /
			NEPTUNE* (0.42%) / PECO
h2766 2			(5.34%) / PENELEC (1.86%) /
b2766.2			PEPCO (3.98%) / PPL (4.76%)
			/ PSEG (6.19%) / RE (0.26%)
			DFAX Allocation:
			AEC (0.05%) / APS (11.48%) /
			BGE (22.98%) / Dayton
			(2.24%) / DEOK (4.30%) /
			DPL (0.20%) / EKPC (2.00%)
			/ JCPL (11.13%) / NEPTUNE*
			(1.17%) / PENELEC (0.06%) /
			PEPCO (19.51%) / PSEG
			(23.92%) / RECO (0.96%)

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

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

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

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the Grays Ferry 230 kV "985" with 63kA b2863 PECO (100%) breaker Replace the Grays Ferry 230 kV "775" with 63kA b2864 PECO (100%) breaker Replace the China Tap b2923 230 kV 'CS 15' breaker PECO (100%) with a 63 kA breaker Replace the Emilie 230 b2924 kV 'CS 15' breaker with PECO (100%) 63 kA breaker Replace the Emilie 230 b2925 kV 'CS 25' breaker with PECO (100%) 63 kA breaker Replace the Chichester b2926 230 kV '215' breaker PECO (100%) with 63 kA breaker Replace the Plymouth Meeting 230 kV '125' b2927 PECO (100%) breaker with 63 kA breaker Replace the 230 kV CB #225 at Linwood Substation (PECO) with a b2985 PECO (100%) double circuit breaker (back to back circuit breakers in one device) Peach Bottom - Furnace b3041 Run 500 kV terminal PECO (100%) equipment