I&E Exhibit No. 1
Witness: D. C. Patel

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY - GAS DIVISION

Docket No. R-2020-3018929

Exhibit to Accompany

the

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

RATE BASE

CASH WORKING CAPITAL

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-35-D

Reference PECO Volume II, Exhibit MJT-1, Schedule D-7 concerning rate case expenses, provide the following:

A. Copies of all current outside/external service contract agreements for rate case-related services;

B. Invoices/receipts for the rate case-related expenses incurred to date for the current filing, and continue to provide updates for invoices as they are incurred;

C. Explanation why it is appropriate to amortize the projected rate case expense of $1,559,000 over a three-year period, rather than normalize it;

D. Explanation for applying a three-year amortization period;

E. A breakdown of rate case expense by consultant or firm for the external Legal Costs: FTY ($398,000) and FTY ($875,000);

F. Breakdown of materials, IT costs, travel, and copies expense of $233,000 and $34,000 claimed in the HTY and FTY respectively;

G. Estimated dollar amount of rate case expense to be incurred by the Company if the case is not fully litigated, and

H. State when PECO intends or expects to file its next base rate case for the Gas Division.

RESPONSE:

A. Refer to Confidential Attachment IE-RE-35-D(a) for copies of all current contract agreements for outside/external services related to the rate case.

B. Refer to Attachment IE-RE-35-D(b) for copies of invoices/receipts incurred to date for the filing, parts of which have been redacted. Refer to Confidential Attachment IE-RE-35-D(b) for copies of the unredacted invoices.

C. The rate case expenses are one-time expenses associated with this filing and are amortized over a three-year period to reflect the timing of the company's next projected gas rate case filing.

D. Refer to response to part C.

E. The external legal costs of $398,000 for the HTY and $875,000 for the FTY are all associated with the law firm Morgan, Lewis, & Bockius.

F. The breakdown is as follows:

(in $1,000)	HTY	FTY
Materials	$ 12	$ 12
IT Costs	183	-
Travel	26	-
Staff Augmentation	12	22
Total	$ 233	$ 34

G. PECO is unable to provide an estimate that it would consider accurate as there are myriad variables that may impact the cost of a case that is not fully litigated. Even if the case is not fully litigated, the Company's costs could vary significantly depending on when a settlement is reached and the nature of such settlement. The Company's costs related to negotiating a settlement and for counsel to prepare a Joint Petition for Settlement and Statement in Support would be dependent, to a degree, on the positions of other parties. In addition, the Company would incur costs for its rate design consultants to develop, perhaps several, iterations of revenue allocations and rate designs during the settlement process and to design final settlement rates and prepare the required proof of revenues. This too would be dependent, to a degree, on the positions of other parties. The Company would also incur costs for counsel and Company representatives to participate in a hearing for presentation of the settlement and admission of testimony and exhibits. If the settlement is not unanimous or if inactive parties raise objections or file exceptions that require answers or replies, the Company would incur additional costs for counsel and potentially for outside expert witnesses to address the outstanding issues or objections. Thus, while as a general matter, the Company would anticipate its settlement costs to be less than a fully litigated case, it is difficult to give a precise estimate of such savings given the multiple variables at play.

H. Refer to response to part C.

THE CONFIDENTIAL ATTACHMENT TO THIS RESPONSE IS BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE FOR A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Michael J. Trzaska

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-36-D

Reference PECO Volume II, Exhibits MJT-1, Schedule D-7 concerning rate case expenses, provide the following:

A. Docket numbers and dates of filing for the last three rate cases filed with the Commission;

B. Total dollar amount of rate case expense claimed in the filing and the actual rate case expense incurred in the last three rate cases; and

C. Indicate the method of resolution (e.g., settlement or full litigation) of the last three rate cases.

RESPONSE:

A. Docket numbers and dates of filing or the company's last three rate cases filed with the Commission are as follows:

    1. R-2010-2161592 – PECO Energy Gas Division filed March 31, 2010
    2. R-2008-2028394 - PECO Energy Gas Division filed March 31, 2008
    3. R-870629 - PECO Energy Gas Division filed April 16, 1987

B. Refer to III-A-20 for a listing of rate case expenses for PECO's two most recent Gas Rate Cases in 2010 and 2008. The expenses for the 1987 case are not available.

C. Both the 2010 and 2008 cases identified in part A. were resolved with Settlement. The 1987 case was litigated.

Responsible Witness: Michael J. Trzaska

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-34-D

Reference PECO Volume II, Exhibits MJT-1, MJT-2 and MJT-3, Schedule D-6 concerning salaries and wages claimed in O&M expenses, provide the following:

A. Explanation with supporting documentation for normalization of one-time contract payment to union staff amounting to $40,000;

B. Reconcile the math of $78,000 in line no. 19 with line nos. 17 and 18 of the FPFTY 2022;

C. Breakdown of salaries and wages claims of $42,671,000 in the HTY 2020, $42,948,000 in the FTY 2021, and $42,209,000 in the FPFTY 2022; and

D. Actual salaries and wages expense with breakdown for the 12-month periods ended June 30, 2018 and June 30, 2019.

RESPONSE:

A. Pursuant to paragraph H of the Memorandum of Agreement dated November 14, 2014, provided as Attachment IE-RE-34-D(a), each bargaining-unit member of Local 614 was to be paid a ratification bonus of $1,000 if the contract was ratified by the Union membership on or before December 31, 2014. The contract was ratified within that time period and the associated payment was paid, only one time, on January 6, 2015. As shown on Schedule D-6 in Exhibits MJT-1, MJT-2 and MJT-3, the total one-time payment of $1.127M is shown on line 6 and allocated to the Gas Operations using the 21.25% allocation percentage shown on line 7. This results in the $0.239M one-time payment for the Gas Operations as shown on line 8. The payment has been normalized over the six-year term of the Memorandum of Agreement.

B. Schedule D-6 reflects rounding of amounts. The $78,370 in line 19 is a result of multiplying the annual salary and wage amount per employee of $66,087 shown on line 18 by the annualization for increase of 1.186 of full-time equivalents (FTEs) during the FPFTY as shown on line 17. The 1.186 increase of FTEs is calculated by subtracting the average number of FTEs projected for the FPFTY of 637.51 shown on line 16 from the number of FTEs projected at the end of the FPFTY of 638.69 shown on line 15.

C. Refer to Attachment IE-RE-34-D(b). Note that the salary and wage claim of $42,209,000 for the HTY was overstated by $477,000 with the inclusion of stock compensation in error.

D. Refer to Attachment IE-RE-34-D(b).

Responsible Witness: Michael J. Trzaska

($ Thousands) Category	(A) Actual 12 Mos. End June, 2018	(B) Actual 12 Mos. End June, 2019	(C) HTY - Actual 12 Mos. End June, 2020	(D) FTY 12 Mos. End June, 2021	(E) FPFTY 12 Mos. End June, 2022
Base Payroll	$ 25,924	$ 26,670	$ 27,095	$ 29,123	$ 28,934
Overtime	8,071	7,950	7,157	6,025	5,548
Paid Time Off	5,707	6,268	6,466	6,517	6,462
Other Premium	1,074	1,121	649	540	546
Stock Compensation			477		
Total Base S&W Expense	$ 40,776	$ 42,008	$ 41,844	$ 42,205	$ 41,490
Add: Pro Forma Adjustments			$ 827	$ 743	$ 720
Pro Forma S&W Claim			$ 42,671	$ 42,948	$ 42,209

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-20-D

Reference PECO Volume IX, SDR-RR-20(a) concerning employee headcounts, provide the following:

A. Similar schedule of employee headcounts for the 12-month periods ended June 30, 2018 and June 30, 2019; and

B. Update for the schedule of employee headcounts for the month of July 2020, August 2020, and September 2020.

RESPONSE:

Please see Attachment IE-RE-20-D(a) for response to subparts A and B.

Responsible Witness: Robert J. Stefani

I&E Exhibit No. 1
Schedule 2
Page 5 of 6

Attachment IE-RE-20-D(a)

PECO Gas Headcount

	Regular			Temporary
Yr/Month	Actual	Budget	Variance	Actual
Jul-17	570	582	12	29
Aug-17	570	582	12	37
Sep-17	573	582	9	17
Oct-17	576	582	7	17
Nov-17	573	583	9	17
Dec-17	573	583	10	17
Jan-18	556	562	6	15
Feb-18	569	577	8	15
Mar-18	564	575	11	9
Apr-18	561	575	14	20
May-18	558	571	13	18
Jun-18	558	570	12	26
Jul-18	557	571	14	27
Aug-18	563	571	8	17
Sep-18	564	570	6	17
Oct-18	581	570	(11)	17
Nov-18	585	570	(15)	18
Dec-18	584	569	(14)	17
Jan-19	600	599	(1)	18
Feb-19	587	597	10	17
Mar-19	585	600	15	12
Apr-19	584	616	32	21
May-19	595	617	22	22
Jun-19	592	613	21	31
Jul-19	585	606	21	30
Aug-19	582	608	26	25
Sep-19	604	607	2	22
Oct-19	606	614	8	17
Nov-19	605	612	7	18
Dec-19	601	613	12	17
Jan-20	599	633	34	17
Feb-20	605	632	27	17
Mar-20	603	631	28	14
Apr-20	603	630	27	14
May-20	599	628	29	17
Jun-20	602	631	29	24
Jul-20	603	631	28	24
Aug-20	602	628	26	20
Sep-20	604	629	25	22
Oct-20		637		
Nov-20		635		
Dec-20		635		
Jan-21		637		
Feb-21		636		
Mar-21		636		
Apr-21		634		
May-21		633		
Jun-21		635		
Jul-21		635		
Aug-21		633		
Sep-21		633		
Oct-21		641		
Nov-21		638		
Dec-21		638		
Jan-22		639		
Feb-22		639		
Mar-22		639		
Apr-22		639		
May-22		639		
Jun-22		639		

Note: Temporary headcount is not included in the Company's official headcount

Note: Temporary headcount is not included in the Company's official headcount. Complement represents the full, approved staffing level where budget represents a 2% vacancy rate applied to that level. The negative variance in Oct - Dec '18 is due to temporary sawtooth positions.

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-37-D

Reference PECO Volume II, Exhibits MJT-1, MJT-2, MJT-3, Schedule D-8 concerning employee benefits expense claimed in O&M expenses, provide the following:

A. Breakdown of employee benefits expense claims of $5,918,000 ($5,907,000 + $11,000 adjustment for employee addition) in the FPFTY 2022; $3,822,000 ($3,814,000 + $8,000 adjustment for employee addition) in the FTY 2021; and $5,830,000 ($5,805,000 + $25,000 adjustment for employee addition) in the HTY 2020;

B. Employee benefits expense incurred in 12-month periods ended June 30, 2018 and June 30, 2019 with similar breakdowns as furnished in response to Part A above;

C. Detailed basis and calculation with supporting documentation for the significant increase in the FPFTY 2022 claim of $5,907,000 from the FTY 2021 claim of $3,814,000; and

D. Detailed basis and calculation for the significant decrease in the FTY 2021 claim of $3,814,000 from the HTY 2020 claim of $5,805,000;

RESPONSE:

A. Refer to Attachment IE-RE-37-D(a) for the requested breakdown. Please note that the FTY claim of $3,822,000 was incorrectly understated due to a transposition of budget activities and is shown both correctly (in column C) and as incorrectly claimed in filing (in column F) in the Attachment. The transposition error does not result in any change to the total O&M expense claim for the FTY.

B. Refer to Attachment IE-RE-37-D(a).

C. The correction to the FTY benefits expense claim noted in part A. eliminates the significant increase moving from FTY to FPFTY that was reflected in the filing.

D. The correction to the FTY benefits expense claim noted in part A. eliminates the significant decrease moving from HTY to FTY that was reflected in the filing.

Responsible Witness: Michael J. Trzaska

I&E Exhibit No. 1
Schedule 3
Page 3 of 3

Attachment IE-RE-37-D(a)

Line	Month	(A) Actual 12 Months Ended June, 2018	(B) Actual 12 Months Ended June, 2019	(C) HTY 12 Months Ended June, 2020	(D) FTY 12 Months Ended June, 2020	(E) FPFTY 12 Months Ended June, 2020	**(F) FTY (As Incorrectly Claimed in Filing) 12 Months Ended June, 2020**
1	Jul	$ 437,022	$ 403,264	$ 378,103	$ 482,503	$ 446,509	$ 315,460
2	Aug	562,152	430,619	387,965	504,227	471,975	330,041
3	Sep	451,897	367,262	405,259	530,236	495,488	347,481
4	Oct	477,679	479,005	612,613	567,837	495,632	372,708
5	Nov	482,447	408,553	481,354	491,037	497,443	321,196
6	Dec	476,837	198,172	441,901	487,850	606,101	319,055
7	Jan	526,029	498,990	485,114	506,138	530,569	331,402
8	Feb	447,519	474,739	490,115	460,637	482,872	301,610
9	Mar	405,837	500,402	572,770	487,342	510,866	319,096
10	Apr	444,021	475,160	566,026	437,423	458,537	286,410
11	May	431,227	448,536	494,894	415,742	435,809	272,214
12	Jun	374,140	417,702	483,817	453,569	475,462	296,982
13	Total Benefits Expensed (Sum L1 to L12)	**$ 5,516,807**	**$ 5,102,405**	**$ 5,799,930**	**$ 5,824,542**	**$ 5,907,263**	**$ 3,813,656**
14	Average Monthly Employees for Test Year			599.7	633.8	637.5	633.8
15	Employees at End of Test Year			602.3	635.2	638.7	635.2
16	Additional Employees for Annualization (L15 - L14)			2.6	1.4	1.2	1.4
17	Budget Expense per Employee (L13 / L14)			$ 9,671	$ 9,189	$ 9,266	$ 6,017
18	Total Benefits Pro Forma Adjustment (L16 * L17)			**$ 24,980**	**$ 12,796**	**$ 10,988**	**$ 8,379**

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

REVISED
Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/18/2020

IE-RE-33-D

Reference PECO Volume IX, SDR-RR-52(a) concerning outside services, provide the following:

A. Similar schedule for outside services for the 12-month periods ended June 30, 2018, June 30, 2019, and projected for the FTY 2021 and FPFTY 2022; and

B. Detailed basis and supporting documentation for the projected increases of $3,402,705 (26.55%) in the FTY 2021 and $741,733 (4.57%) in the FPFTY 2022 in total outside services expense.

REVISED RESPONSE:

A) Refer to Revised Attachment IE-RE-33-D(a).

B) Projected increases in total outside services expense are generally due to inflation adjustments. PECO does not budget by FERC account. For further detail pertaining to the FPFTY and FTY budgets by FERC account, refer to Exhibit MJT-1 and MJT-2, respectively.

Responsible Witness: Robert J. Stefani

PECO Energy Company
Outside Services (FERC 923)
For the 12 months Ended June 30, 2019
Presentation Basis - Gas Distribution ONLY

Function	Service	Vendor	Total ($)
BSC	Communication Services	BSC	219,915
	Executive Services	BSC	1,313,190
	Financial Services	BSC	2,823,630
	Human Resource Services	BSC	1,035,154
	IT Non-Telecom Services	BSC	3,852,596
	Legal Gov Services	BSC	1,102,185
	Other Services	BSC	578,912
	Real Estate Services	BSC	52,197
	Reg & Govt Affair Services	BSC	315,468
	Security Services	BSC	1,033,670
	Supply Services	BSC	71,107
	Utility Services	BSC	1,417,053
BSC Total			13,815,076
Contracting, Professional	Accounting and Actuary	GANNETT FLEMING VALUATION AND RATE	6,461
		KPMG LLP	13,275
		WILLIS TOWERS WATSON US LLC	38,095
	Information Technology	INFOSYS TECHNOLOGIES LIMITED	1,974
		INTERGRAPH CORPORATION	2,712
		TELVENT USA LLC	4,805
	Legal	ALSTON & BIRD	2,546
		BALLARD SPAHR ANDREWS & INGERSOLL LLP	7,104
		BLANK ROME LLP	7,837
		DILWORTH PAXSON LLP	20,854
		GREENBERG TRAURIG LLP	2,016
		GRIESING LAW LLC	4,193
		HOLLAND & KNIGHT LLP	18,431
		HUNTON ANDREWS KURTH LLP	4,809
		JACKSON LEWIS PC	15,734
		JENNER & BLOCK LLP	3,991
		KELLER AND HECKMAN	4,064
		KIRKPATRICK & LOCKHART PRESTON	4,813
		LAW FIRM OF RUSSELL R. JOHNSON	1,563
		MORGAN, LEWIS & BOCKIUS,LLP	63,315
		PAISNER LITVIN LLP	3,861
		REED SMITH, LLP	43,377
		REGER RIZZO & DARNALL LLP	1,320
		SALMON RICCHEZZA SINGER & TURCHI LLP	2,672
		SAUL EWING LLP	6,930
		SIDLEY & AUSTIN	2,056
		STEPTOE & JOHNSON	75,500
		VAN NESS FELDMAN	2,546
	Staff Augmentation	PONTOON SOLUTIONS INC	144,199
	Engineering	BLACK AND VEATCH MANAGEMENT CONSULTING LLC	2,703
	Other Professional	ABSO	12,002
		ACCENTURE LLP	78,807
		DREXEL UNIVERSITY	1,540
		EIRE DIRECT MARKETING LLC	552
		GE ENERGY MANAGEMENT SERVICES LLC	6,736

PECO Energy Company
Outside Services (FERC 923)
For the 12 months Ended June 30, 2019
Presentation Basis - Gas Distribution ONLY

Function	Service	Vendor	Total ($)
		GLOBAL EXPERIENCE SPECIALISTS INC	2,021
		HUMAN SYSTEMS TECHNOLOGY CORP	243
		INTERNATIONAL BUSINESS MACHINES CORPORATION	116
		JACOBSON LLC	9,240
		L K H & S	50,905
		MCKINSEY & COMPANY, INC.	26,044
		MEDTOX LABORATORIES INC	9,437
		NIGHTOWL DISCOVERY INC	216
		OTHER	9,799
		OUT & EQUAL	1,232
		PABLO PATRIGNANI	108
		PHILADELPHIA YOUTH NETWORK	970
		PINNACLE PERFORMANCE CO	1,224
		PROFESSIONAL ON-SITE TESTING	60
		RED CLAY CONSULTING INC	537
		RIGHT MANAGEMENT INC	22,603
		ROBERT E DIETERS	92
		SHL	691
		TCT COMPUTING GROUP INC	7,732
		THE FELICITY GROUP LTD	18,534
		VANTAGE LEADERSHIP CONSULTING LLC	3,828
		VAULT COMMUNICATIONS INC	387
		VENTANA SYSTEMS	1,391
		VENTANA SYSTEMS INC	589
		XPLORA SEARCH GROUP INC	2,609
Contracting, Professional Total			784,001
Contracting, Services	Accounting and Actuary	DELOITTE CONSULTING LLP	45,831
	Communication Services	RECTOR COMMUNICATIONS INC	11,744
		TIERNEY COMMUNICATIONS	2,742
		VAULT COMMUNICATIONS INC	6,856
	IT Services	BROOKE ASSOCIATES, INC.	35,703
		OLENICK & ASSOCIATES INC	79,088
	Public Relation Services	BRANDYWINE CONSERVANCY & MUSEUM OF ART	172
		DJ BISHOP ENTERTAINMENT	54
		HIGHER THAN 7 PRODUCTIONS LLC	393
		JR RESOURCES INC	2,135
		LEAPING LION PHOTOGRAPHY	158
		ROBERT E DIETERS	2,133
	Staff Augmentation	PONTOON SOLUTIONS INC	6,245
	Engineering	BLACK AND VEATCH MANAGEMENT CONSULTING LLC	(5,414)
		PATRICK ENGINEERING INC	30,000
	Facility Services	ADMIRAL SECURITY SERVICES	60,437
		CSI INTERNATIONAL INC	107
		RED COATS INC	48,289
	Environmental Services	ALL4 LLC	380
	Other Services	A POMERANTZ & CO	188
		ACQUIRE, LLC	614
		BEHAVIORAL SCIENCE TECHNOLOGY INC	5,220

PECO Energy Company
Outside Services (FERC 923)
For the 12 months Ended June 30, 2019
Presentation Basis - Gas Distribution ONLY

Function	Service	Vendor	Total ($)
		BLACKBAUD INC	1,899
		BSC	648
		CYBERGRANTS LLC	1,742
		EASTERN PA ALLIANCE FOR CLEAN TRANSPORTATION	9,596
		FIRST QUARTILE CONSULTING	4,671
		GALLOP PRINTING	1,077
		GREENCASTLE ASSOCIATES CONSULTING LLC	8,656
		GRID ONE SOLUTIONS LLC	(45)
		IRON MOUNTAIN INFORMATION	23,528
		ITRON INC	1,086
		LATHAM & WATKINS LLP	1,925
		MANAGEMENT APPLICATIONS	39
		MARLENE BELL	46
		NORRISTOWN ZOOLOGICAL SOCIETY	49,209
		OTHER	9,500
		PAT THOMAS TOURS	792
		PAUL RESTALL COMPANY INC	2,929
		PROTOTYPE DESIGNS LLC	3,830
		RBN ENERGY LLC	11,396
		RR DONNELLEY & SONS COMPANY	347
		SNAKE HILL ENERGY RESOURCES INC	2,406
		SUE MOSBY	208
		SYNERGETIC SOUNDS INC	2,075
		THE BRATTLE GROUP INC	54,649
		TORRES CREDIT SERVICES, INC.	4,795
		UTILITIES INTERNATIONAL INC	1,769
		VALLEY FORGE CONVENTION CENTER PARTNERS LLC	18,734
		VANTAGE LEADERSHIP CONSULTING LLC	1,516
Contracting, Services Total			552,097
Grand Total			15,151,174

I&E Exhibit No. 1
Schedule 4
Page 5 of 7

PECO Energy Company
Outside Services (FERC 923)
For the 12 months Ended June 30, 2018
Presentation Basis - Gas Distribution ONLY

Function	Service	Vendor	Total ($)
BSC	BSC Exelon Utilities Services	BSC	1,163,845
	BSC Other Services	BSC	247,033
	Communication Services	BSC	232,639
	ESC Business Ctr Svcs	BSC	16,807
	Executive Services	BSC	1,048,170
	Financial Services	BSC	2,288,791
	Human Resource Services	BSC	932,661
	IT Non-Telecom Services	BSC	5,911,345
	Legal Gov Services	BSC	1,064,078
	Reg & Govt Affair Services	BSC	337,828
	Security Services	BSC	1,023,932
	Supply Services	BSC	65,080
BSC Total			14,332,209
Contracting, Professional	Information Technology	GE ENERGY MANAGEMENT SERVICES INC	3,794
		INFOSYS TECHNOLOGIES LIMITED	918
		TELVENT USA LLC	11,245
	Legal	ALSTON & BIRD	2,831
		BALLARD SPAHR ANDREWS & INGERSOLL LLP	20,510
		BLANK ROME LLP	46,570
		CHAMBERLAIN HRDLICKA WHITE WILLIAMS & AUGHTRY PC	907
		DILWORTH PAXSON LLP	16,001
		GREENBERG TRAURIG LLP	409
		GRIESING LAW LLC	3,576
		JACKSON LEWIS PC	15,057
		JENNER & BLOCK LLP	265
		KELLER AND HECKMAN	1,020
		KIRKPATRICK & LOCKHART PRESTON	12,332
		LAW FIRM OF RUSSELL R. JOHNSON	1,523
		MILLER CHEVALIER	2,201
		MORGAN, LEWIS & BOCKIUS,LLP	33,199
		PEPPER HAMILTON LLP	115
		REED SMITH, LLP	21,723
		REGER RIZZO & DARNALL LLP	1,144
		SALMON RICCHEZZA SINGER & TURCHI LLP	9,939
		SAUL EWING LLP	6,390
		STEPTOE & JOHNSON	87,371
		VAN NESS FELDMAN	40,583
		WATSON & RENNER	13,241
	Accounting and Actuary	KPMG LLP	12,155
		WILLIS TOWERS WATSON US LLC	10,215
	Other Professional	ABSO	20,179
		ACCENTURE LLP	30,006
		ATLANTIC RESOURCE PARTNERS PHILADELPHIA LLC	3,686
		CEB INC	637
		CONSULTING TOXICOLOGISTS LLC	852
		GABEL ASSOC	5,840
		GLOBAL HR RESEARCH LLC	161
		HUMAN SYSTEMS TECHNOLOGY CORP	1,500
		IMS TECHNOLOGY SERVICES INC	48,912
		L K H & S	58,374
		LINKEDIN CORP	1,393
		MEDTOX LABORATORIES INC	6,152

I&E Exhibit No. 1
Schedule 4
Page 6 of 7

PECO Energy Company
Outside Services (FERC 923)
For the 12 months Ended June 30, 2018
Presentation Basis - Gas Distribution ONLY

Function	Service	Vendor	Total ($)
		OTHER	(52,534)
		PHILADELPHIA YOUTH NETWORK	1,278
		RIGHT MANAGEMENT INC	8,462
		TALLEY MANAGEMENT GROUP	5,587
		TANGENT ENERGY SOLUTIONS INC	563
		THE FELICITY GROUP LTD	4,964
		VANTAGE LEADERSHIP CONSULTING LLC	8,446
		WMFDP LLC	710
		XPLORA SEARCH GROUP INC	3,124
Contracting, Professional Total			533,526
Contracting, Services	Communication Services	BLACK BOX CORPORATION OF PENNSYLVANIA	172
		JACOBSON LLC	4,260
		RECTOR COMMUNICATIONS INC	18,445
		TIERNEY COMMUNICATIONS	3,680
	IT Services	OLENICK & ASSOCIATES INC	32,625
	Public Relation Services	ALLIANCE FOR TRANSPORTATION ELECTRIFICATION	284
		HANGER CONSULTING	355
		HIGHER THAN 7 PRODUCTIONS LLC	511
		JR RESOURCES INC	486
		LIFELINE MUSIC COALITION, INC.	71
		MADELEINE B BRANN	64
		REPLICA GLOBAL LLC	46
		ROBERT E DIETERS	1,749
		SAMANTHA HYMAN	64
		STAPLES PROMOTIONAL PRODUCTS	17,585
	Staff Augmentation	PONTOON SOLUTIONS INC	260,737
	Engineering	BLACK AND VEATCH MANAGEMENT CONSULTING LLC	60,632
		PATRICK ENGINEERING INC	25,818
	Facility Services	CSI INTERNATIONAL INC	203
		RED COATS INC	93,858
	Environmental Services	ALL4 LLC	3,551
		COMMONWEALTH OF PA	236
		STANTEC CONSULTING SERVICES INC	44,779
	Other Services	BEHAVIORAL SCIENCE TECHNOLOGY INC	49,220
		BLACKBAUD INC	2,737
		BURNS ENGINEERING INC	812
		CHRIST CENTER INTERNATIONAL	777
		COMERICA BANK	1,278
		DANA DIORIO BAND	284
		DREXEL UNIVERSITY	19,155
		EASTERN PA ALLIANCE FOR CLEAN TRANSPORTATION	1,601
		ESRI	1,384
		FIRST QUARTILE CONSULTING	4,307
		GALLOP PRINTING	1,733
		GRID ONE SOLUTIONS LLC	7
		INTRADO INTERACTIVE SERVICES CORP	1,860
		IRON MOUNTAIN INFORMATION	16,200
		ITRON INC	963
		JAN HARGRAVE	1,180
		KEHOE CONSTRUCTION INC	(52,709)
		MANAGEMENT APPLICATIONS	89

PECO Energy Company
Outside Services (FERC 923)
For the 12 months Ended June 30, 2018
Presentation Basis - Gas Distribution ONLY

Function	Service	Vendor	Total ($)
		MASTER LOCATORS INC	17
		MOODYS ANALYTICS INC	3,521
		NEI GLOBAL RELOCATION COMPANY	3,160
		NORRISTOWN ZOOLOGICAL SOCIETY	29,700
		OTHER	83,988
		PAT THOMAS TOURS	721
		PAUL RESTALL COMPANY INC	4,658
		RR DONNELLEY & SONS COMPANY	12,177
		SAGUE AUTO SERVICE INC	61
		SUE MOSBY	861
		THE AYCO COMPANY	10,025
		THE NASDAQ OMX GROUP INC	78
		VALLEY FORGE CONVENTION CENTER PARTNERS LLC	9,208
		WIDENER BURROWS & ASSOCS INC	1,757
Contracting, Services Total			781,020
Grand Total			15,646,755

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-47-D

Reference PECO Volume II, Exhibits MJT-1, Schedule D-15 concerning the parent company allocated O&M cost of $370,000 in the FPFTY to achieve merger saving, provide the following:

A. Breakdown of merger costs allocated to the Gas Division by year 2016 ($601,000), 2017 ($430,000), and 2018 ($80,000) and a detailed basis of allocation;

B. Provide the docket number indicating Commission approval to defer recovery of allocated one-time merger cost aggregating to $1,111,000; and

C. Basis for applying a three-year amortization period to recover the allocated merger costs.

RESPONSE:

A. Refer to the table below for a breakdown of merger costs allocated to the Gas Division:

	($ thousands)		
FERC	2016	2017	2018
923000: Outside Services Employed	$ 594	$ 430	$ 80
926000: Employee Pensions and Benefits	3	0	0
408100: Taxes Other Than Income Taxes	1	0	0
426400: Expenditures for Certain Civic, Political and Related Activities	0	0	0
426500: Other Deductions	4	0	0
Total	$ 601	$ 430	$ 80

B. PECO Energy did not request permission to "defer" for accounting purposes its share of the costs to achieve the merger savings that it is realizing, nor is it PECO Energy's position that permission to record an accounting deferral is necessary to make or substantiate its claim. Because the costs to achieve merger savings were incurred before the merger-related savings could be fully realized and because a full annual level of merger savings was reflected in developing the Company's revenue requirement in this case, it is proper to reflect, by amortization over a reasonable prospective period, the costs-to-achieve associated with the merger savings so that only an appropriate level of net merger savings is flowed-through to customers. Otherwise, customers would receive merger savings, which substantially exceed the costs to achieve the merger, but not bear any of the costs that were incurred to obtain those savings.

C. While the Company intends to carefully monitor its performance to determine when it will need to file another gas base rate case, PECO anticipates that base rate filings for its gas operations will be required every three years.

Responsible Witness: Michael J. Trzaska

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-48-D

Reference PECO Volume II, PECO Statement No. 3, p. 41 concerning PECO's witness statement that the merger of Exelon Corporation with PEPCO Holdings Inc. produced a significant savings and PECO received and continue to receive its allocable share of those savings, which are reflected in the budget data. Provide the following:

A. Quantify allocable share of savings that are reflected in line item of O&M expenses by year from 2016 through the FPFTY 2022 consequent to the merger of Exelon Corporation with PEPCO Holdings Inc.; and

B. Justification of the statement that the merger savings substantially exceed the costs to achieve.

RESPONSE:

A. Please see below the merger savings achieved in each year 2016 – 2022 (Table 1) and the allocation of those savings to PECO Energy Company – Gas (Table 2).). The Company tracks these savings on an annual basis and the amounts below reflect calendar year savings.

$ Rounded to millions (000,000)

	A	B	C	D	E	F	G	H
1	1 - BSC Merger Savings to Legacy Exelon Companies							
2		2016	2017	2018	2019	2020	2021	2022
3	LRP 2.0 (2018-2022)	39.6	64.2	68.8	73.8	76.1	76.1	76.1
4								
5	2 - Merger Savings allocated to PECO							
6		2016	2017	2018	2019	2020	2021	2022
7	PECO - Pre-merger MMF of 9.22%	3.65	5.92	6.34	6.80	7.01	7.01	7.01
8	PECO - Gas Distribution - 14.382%	0.5	0.9	0.9	1.0	1.0	1.0	1.0

B. As shown in Exhibit MJT-1 Schedule D-15, the cumulative costs to achieve claimed in this filing is $1,111,000 incurred from 2016 to 2018. The annual savings summarized in table 2 in Part A. reflect a steady-state annual savings of approximately $1,000,000.

Responsible Witness: Michael J. Trzaska

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-26-D

Reference PECO Volume IX, SDR-RR-30(e) concerning the employee activity cost (picnics, parties, awards) of $139,402 claimed in the FPFTY 2022, provide the following:

A. Employee activity cost incurred for the 12-month periods ended June 30, 2018, June 30, 2019, and June 30, 2020 with breakdown by type of cost; and

B. Explanation for any increases by year in the employee activity costs from the HTY 2020 to FPFTY 2022.

RESPONSE:

A. Refer to Attachment IE-RE-26-D(a).

B. The increase in employee activity costs from the HTY to the FPFTY is attributable to abnormally low spend during the HTY resulting from COVID-19 and many employees working remotely rather than from PECO facilities. The HTY amount does not represent a typical 12-month period of employee activity costs; the periods ending June 2018 and June 2019 are more indicative of normal spend levels.

Responsible Witness: Robert J. Stefani

Employee Activity Costs (e.g. picnics, parties, awards) - Gas only

	July 2017 - June 2018 Actual	July 2018 - June 2019 Actual	July 2019 - June 2020 Actual	SDR-RR-30 (e) July 2020 - June 2021 Budget	July 2021 - June 2022 Budget
Employee Recognition Awards	**$22,549**	**$36,390**	**$6,975**	**$34,101**	**$36,146**
Employee Service Awards pins and small gifts for years of service	**5,110**	**16,404**	**12,128**	**20,375**	**20,884**
Employee Compact:					
Employee Picnic, Celebration, Other Employee Compact expenses	**97,173**	**86,899**	**48,125**	**80,933**	**80,933**
Employee Network Groups	**1,936**	**1,863**	**1,023**	**2,159**	**1,439**
TOTAL EMPLOYEE ACTIVITY COSTS	**$126,769**	**$141,556**	**$68,250**	**$137,567**	**$139,402**

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-28-D

Reference PECO Volume IX, SDR-RR-32(a) concerning the membership of various organizations, provide the following:

A. Similar schedule for the 12-month periods ended June 30, 2018, June 30, 2019, and June 30, 2020; and

B. Basis of projected increase in membership dues of each organization in the FTY 2021 and FPFTY 2022.

RESPONSE:

A. Refer to attachment IE-RE-28-D(a).

B. The projected increase in membership dues in the FTY and FPFTY is largely based on general inflationary increases to memberships for industry organizations.

Responsible Witness: Robert J. Stefani

SDR-RR-32(a)

Industry Organization	12-month periods ended between June 2018 - June 2020 (Gas Only)			Amount Budgeted for July 2020 - June 2022 (Gas Only)	
	July 2017 - June 2018	July 2018 - June 2019	July 2019 - June 2020	July 2020 - June 2021	July 2021 - June 2022
American Gas Association	$ 382,554	$ 383,437	$ 379,034	$ 384,040	$ 393,641
Energy Association of Pennsylvania	93,687	140,274	77,076	118,438	121,399
Northeast Gas Association	42,250	-	27,500	55,688	57,080
R&D Memberships	33,000	33,495	5,005	33,413	34,248
Energy Solutions Center Inc.	16,800	17,220	23,720	20,000	20,000
Greater Philadelphia Chamber	13,490	14,630	14,600	19,405	14,476
Economy League of Greater Philadelphia	4,260	4,620	4,380	5,157	5,286
Pennsylvania Business Council	-	-	-	3,522	3,610
Greater Philadelphia Hispanic Chamber of Commerce	-	2,310	2,190	3,237	2,158
Pennsylvania Bio	-	-	-	1,640	1,640
World Trade Center of Greater Philadelphia	-	-	-	1,640	1,640
Delaware Valley Green Building Council	-	-	-	720	720
Total	586,041	595,986	533,505	646,899	655,897

I&E Exhibit No. 1
Schedule 7

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-41-D

Reference PECO Volume III, PECO Statement No. 9, p. 10 concerning the proposed expansion of the EE&C program.

A. Explain the rate reconciliation mechanism, if the budgeted amount of $4,500,000 is under spent in a particular year and how many months, the Company will take to fully refund the unspent amount to ratepayers through E-factor of Universal Service Fund Charge (USFC) charge (Exhibit JAB-2); and

B. Provide the annual total unspent amount under the current EE&C program in the 12-month periods ended June 30, 2018, June 30, 2019; and the HTY 2020 and the amounts refunded to ratepayers in the 12-month periods ended June 30, 2018, June 30, 2019, and the HTY 2020.

RESPONSE:

A. If the budgeted amount is under spent in a particular year, it will be returned to customers in the next annual USFC filing in accordance with the current recovery mechanism. The credit will be reflected in the E-factor of the USFC and returned over a 12-month period (December 1, 20XX – November 30, 20XX). For example, unspent amounts in the 12-month period ended June 30, 2018 were returned to customers during the December 1, 2018 through November 30, 2019 period.

B. The annual total unspent amounts are as follows:
12-month periods ended June 30, 2018 = $899,521;
12-month periods ended June 30, 2019 = $906,364;
12-month period ended June 30, 2020 (“HTY 2020”) = $925,552.

As described in A above, any underspend is returned to customers over a 12-month period (December 1, 20XX – November 30, 20XX) not by the periods ending June 30, 20XX. PECO has calculated what the amounts refunded would be if the USFC were returned in the requested 12-month periods.

The amounts refunded would be:
12-month period ended June 30, 2018 would = $760,647;
12-month period ended June 30, 2019 would = $903,253;
12-month period ended June 30, 2020 (“HTY 2020”) would = $908,325.

Responsible Witness: Doreen Masalta

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-39-D

Reference PECO Volume II, Exhibits MJT-1, Schedule D-11 concerning the proposed expansion of the Energy Efficiency and Conservation (EE&C) program expense of $4,500,000 claimed in O&M expenses in the FPFTY 2022, provide the following:

A. Detailed basis, assumption and calculation for the estimated/budgeted cost of each rebate/incentive plan and program administration costs as shown in the table on p. 9 and Exhibit DML-2 of the PECO Statement No. 9;

B. Detailed basis, assumption and calculation for the estimated/forecasted increases in the program participation level and gas saving (resource benefits) in the FPFTY 2022 as shown in Exhibit DML-2 of the PECO Statement No. 9; and

C. Number of participants, dollar amount of rebates granted, program cost incurred, and gas saving in MCF achieved for each of the rebate plans covered under the current EE&C program in the 12-month periods ended June 30, 2018, June 30, 2019, HTY 2020, and projected for the FTY 2021.

RESPONSE:

A. Reference “Confidential Attachment IE-RE-39-D(a)”

Guidehouse, along with PECO, produced a rebate measure summary using historical data to forecast participation rates for each proposed and existing rebate. Utilizing historical data, administrative costs were calculated on a percentage basis of total cost from HTY.

B. Reference “Confidential Attachment IE-RE-39-D(a)”

Forecasted increases were based on historical program participation along with the assumption of growth in customer interest as a result of elevated marketing efforts and offerings.

C. See the below chart. The FTY information assumes that no changes are made to the existing EE&C program.

	Participants	Rebate Totals	Program Cost	MCF Savings
12 months end June 2018	3,635	$1,015,700	$1,108,479	34,502
12 months end June 2019	3,399	$1,008,400	$1,101,636	32,122
HTY (end June 2020)	3,470	$1,001,900	$1,082,448	32,680
FTY (end June 2021)	3,746	$1,060,872	$1,146,429	37,197

THIS CONFIDENTIAL RESPONSE IS BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Doreen Masalta

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VII

Response Date: 11/18/2020

IE-RE-65-D

Reference PECO Volume II, Exhibits MJT-2 and MJT-3, and Schedule D-4 concerning the total manufactured gas production expense. Explain in detail the basis for an increase in the FTY pre-adjustment claim of $278,000 compared to the HTY pre-adjustment expense of $234,000.

RESPONSE:

The pre-adjustment expenses by FERC account for the FTY and FPFTY were determined using PECO's budget for the twelve-month periods ending June 30, 2021 and June 30, 2022 as a starting point. Budgeted expenses, which were prepared based on business activities and related cost elements such as payroll, employee benefits, and outside contracting costs, were distributed to FERC accounts based upon the actual distribution of costs experienced by the Company during calendar year-ended December 31, 2019.

Please refer to Attachment IE-RE-65-D(a) for expense variances based on business activities between HTY and FTY, and between FTY and FPFTY.

Responsible Witness: Michael J. Trzaska

I&E Exhibit No. 1
Schedule 9
Page 2 of 6

PECO Energy Company
Gas Business
Operating and Maintenance Expenses
(In Thousands)

	HTY - Actual * Jul 2019 - Jun 2020	FTY - Budget Jul 2020 - Jun 2021	FPFTY - Budget Jul 2021 - Jun 2022
Bad Debt	$ 2,766	$ 2,249	$ 2,718
Base Payroll	34,210	36,180	35,941
BSC Contracting	20,787	21,069	22,142
Contracting/Materials	29,552	44,651	42,955
Incentive	4,935	4,892	5,052
Overtime	7,157	6,025	5,548
Pensions & Benefits	6,987	7,343	$ 7,676
Transportation	4,490	4,651	4,822
Travel Meals & Entertainment	680	845	1,032
Other Net	9,374	8,778	9,107
Total	**$ 120,938**	**$ 136,682**	**$ 136,994**

* Note: Results are GAAP based to align budget values

Bad Debt

HTY to FTY: The decrease from HTY is due to higher than expected Bad Debt expense in the HTY driven by the extension of the customer termination moratorium period related to the COVID-19 pandemic.

FTY to FPFTY: The increase from FTY is primarily due to higher forecasted revenue billings.

Contracting/Materials

HTY to FTY: The increase from HTY is due to lower than expected spend in the HTY driven by the impact of COVID-19 pandemic related restrictions.

FTY to FPFTY: No significant variances.

Travel Meals & Entertainment

HTY to FTY: The increase from HTY is due to lower than expected spend in the HTY driven by the impact of COVID-19 pandemic related restrictions.

FTY to FPFTY: The increase from FTY is primarily due to the inflation rate.

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-4-D

Reference PECO Volume II, Exhibits MJT-1, Schedule D-4 (pp. 55-56), concerning Operation and Maintenance Expense, provide the following:

A. Comparative information in the same template excluding columns 15 and 16 showing the budgeted and actual (incurred) O&M expenses for the 12-month periods ended June 30, 2018, June 30, 2019, and HTY 2020 in side-by-side columns and include an explanation for variances exceeding 10% between the budgeted and actual expense of each line item; and

B. Corresponding Excel spreadsheets with formulas intact for the information furnished in Part A above.

RESPONSE:

A. The company does not budget O&M by FERC account. Refer to Attachment IE-RE-4-D(a) for budgeted and actual O&M expenses incurred for the 12-month periods ended June 30, 2018, June 30, 2019, and the HTY, and related variance explanations.

B. Refer to Attachment IE-RE-4-D(a).

Responsible Witness: Michael J. Trzaska

PECO Energy Company
Gas Business
Operating and Maintenance Actual Vs Planned Dollars
(In Thousands)

	Jul 2019 - Jun 2020			
	Actual	Planned	Variance	%
Bad Debt	$ 2,660	$ 1,757	$ (903)	-51%
Base Payroll	34,175	35,155	981	3%
BSC Contracting	21,554	21,733	179	1%
Contracting/Materials	29,886	39,119	9,233	24%
Incentive	4,928	4,575	(353)	-8%
Overtime	7,146	5,666	(1,480)	-26%
Pensions & Benefits	6,979	6,366	(613)	-10%
Transportation	4,483	4,523	40	1%
Travel Meals & Entertainment	682	940	258	27%
Other Net	7,638	8,957	1,318	15%
Total	$ 120,130	$ 128,791	$ 8,661	6.7%

Bad Debt

The unfavorability is being driven by the extension of the customer termination moratorium period related to the ongoing pandemic.

Contracting/Materials

The variance in contracting is attributable to 2019 O&M timing and the impact of pandemic related restrictions on planned operations in 2020.

Overtime

The unfavorable variance relates to gas odor response activities driven by higher than expected gas odor call volume.

Pensions & Benefits

The increase in Pension and OPEB is being driven by a shorter average remaining service life as well as demographic experience.

Travel, Meals & Entertainment

The variance is mainly driven by a delay in project execution resulting from COVID-19 restrictions. This has resulted in a proportionate slowdown in associated Business Travel and T&E.

Other Net

The favorable variance is driven by IT circuit savings. These savings are due to the Lease Line Optimization project in IT Circuit - Local & Long Distance.

PECO Energy Company
Gas Business
Operating and Maintenance Actual Vs. Planned Dollars
(In Thousands)

Jul 2018 - Jun 2019

	Actual	Planned	Variance	%
Bad Debt	$ 1,454	$ 2,040	$ 586	29%
Base Payroll	34,058	33,399	(659)	-2%
BSC Contracting	22,479	20,678	(1,801)	-9%
Contracting/Materials	37,005	38,056	1,051	3%
Incentive	4,099	3,864	(235)	-6%
Overtime	7,950	4,858	(3,092)	-64%
Pensions & Benefits	6,847	6,811	(36)	-1%
Transportation	4,380	4,138	(242)	-6%
Travel Meals & Entertainment	1,035	913	(121)	-13%
Other Net	9,717	7,861	(1,856)	-24%
Total	$ 129,022	$ 122,618	$ (6,404)	-5.2%

Bad Debt

Bad debt is favorable for the 12 months period ending June 2019 due to lower revenue billings.

Overtime

The unfavorable overtime variance is driven by odor investigation

Travel & Entertainment

Unfavorable variance relates to the travel and meals while working overtime on odor investigation and leak repairs.

Other Net

The variance in Other Net category is driven primarily by back office (IT licensing and maintenance, telecommunications and property rentals).

PECO Energy Company
Gas Business
Operating and Maintenance Actual Vs. Planned Dollars
(In Thousands)

Jul 2017 - Jun 2018

	Actual	Planned	Variance	%
Bad Debt	$ 1,355	$ 1,619	$ 264	16%
Base Payroll	32,825	30,623	(2,203)	-7%
BSC Contracting	22,888	19,569	(3,319)	-17%
Contracting/Materials	32,262	36,421	4,159	11%
Incentive	4,698	3,518	(1,179)	-34%
Overtime	8,072	4,636	(3,437)	-74%
Pensions & Benefits	8,582	7,507	(1,075)	-14%
Transportation	4,220	4,349	128	3%
Travel Meals & Entertainment	1,013	867	(145)	-17%
Other Net	10,053	7,194	(2,859)	-40%
Total	$ 125,968	$ 116,303	$ (9,665)	-8.3%

Bad Debt

Total company bad debt was unfavorable to plan for the 12 month period ending June 2018 due to higher billings and unfavorable AR volume and mix. However, the gas product was favorable to plan. The portion of the total company bad debt budget allocated to the gas product was higher than the allocated portion of bad debt actual cost.

BSC Contracting

Unfavorable variance was attributable to transition of the Exelon's HR/Payroll from People Team to the Oracle HCM Cloud.

Contracting/Materials

Favorable variance is primarily due to delays in real estate projects,lower than anticipated janitorial costs and timing of Low Income Program spending.

Incentive

Incentive compensation was higher than plan as key performance indicator targets were exceeded.

Overtime

Unfavorable overtime variance was driven by extreme cold weather in January 2018 requiring response to higher levels of gas odors and gas leaks.

Pensions & Benefits

Benefit cost was higher than plan primarily due key performance indicators exceeding target for the year.

Travel, Meals & Entertainment

Unfavorable variance relates to the travel and meals while working overtime on odor investigation and leak repairs.

Other Net

Unfavorable variance is driven primarily by regulatory assessments, back office (telecommunications, IT licensing and maintenance, training) and permit costs.

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 11/04/2020

IE-RE-30-D

Reference PECO Volume IX, SDR-RR-39 and 40 concerning OPEB cost (SFAS 106/ASC 715), provide the following:

A. Actual OPEB cost of the Gas Division allocated between O&M expense and capitalized cost for the 12-month periods ended June 30, 2018, June 30, 2019, and June 30, 2020, and projected in the FTY 2021 and FPFTY 2022;

B. Explanation for the accounting method (pay as you go/accrual) applied and supporting calculation with actuarial reports for the OPEB cost provided in response to Part A above; and

C. Changes in the accounting method for OPEB cost made since the last rate case filed in 2010.

RESPONSE:

A. Refer to Attachment IE-RE-30D(a).

B. Exelon is the sponsor of the postretirement plans. PECO and Exelon's other subsidiaries participate in the Exelon plans, which employ multiemployer accounting, and which require recording allocated costs and contributions in PECO's financial statement. Refer to Confidential Attachments submitted with IE-RE-10-D subpart (E).

C. There have been no changes in the accounting method for OPEB cost since the last rate case.

Responsible Witness: Robert J. Stefani

PECO Energy
Postretirement Benefits Other than Pension Capital
(in thousands)

	12 Months Ended 6/30/2018	12 Months Ended 6/30/2019	12 Months Ended 6/30/2020	12 Months Ended 6/30/2021	12 Months Ended 6/30/2022
Gas O&M	$ (59)	$ 27	$ (72)	$ 270	$ 1,050
Gas Capital	$ (37)	$ 17	$ (43)	$ 159	$ 619

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set XI

Response Date: 12/11/2020

IE-RE-88-D

Reference PECO's response to I&E-RE-30-D concerning OPEB cost, provide the following:

A. Detailed basis and calculation for the OPEB claim of $429,000 in the FTY and $1,869,000 in the FPFTY;

B. Explanation for the significant increase in the FTY and FPFTY OPEB claims compared with the negative OPEB cost of $96,000 and $115,000 in the fiscal years ended June 30, 2018 and June 30, 2020 respectively; and

C. Explanation for negative OPEB cost of $96,000 and $115,000 in the fiscal years ended June 30, 2018 and June 30, 2020 respectively.

RESPONSE:

A. THE OPEB claim for the FPFTY is $1,669,000; not $1,869,000. Refer to Attachment IE-RE-88-D(a) for the calculation.

B. The increase in projected OPEB cost is a result of expiring prior service credit amortization in the East plan, which PECO participates in. The prior service credit amortization is a result of a plan design change made in 2014 that is amortized into pension cost over the average remaining service period of active participants.

C. OPEB cost is negative for the periods ending June 30, 2018 and 2020 mainly due to existing prior service credits from plan amendments made in 2014 impacting the PECO Energy Company Retiree Medical Plan. The prior service credits are amortized to net periodic pension cost over the average remaining service period of active participants.

Responsible Witness: Robert J. Stefani

PECO's OPEB assumptions are provided on a calendar year basis and allocated to gas as demonstrated below. The monthly costs are allocated based on the labor profile on a calendar year basis.

(in thousands)	**For the twelve months ending December 31, 2020**	**For the twelve months ending December 31, 2021**	**For the twelve months ending December 31, 2022**
Annual OPEB Assumption	(2,194)	6,717	9,112
Capital Split	39%	39%	39%
Gas Allocator	22%	22%	22%
Gas OPEB - Capital	(190)	576	775
O&M Split	61%	61%	61%
Gas Allocator	21%	21%	21%
Gas OPEB - O&M	(278)	857	1,169

We take six months of each calendar year period to come up with the stub period amount.

	For the six months ending December 31, 2020	+	**For the six months ending June 30, 2021**	=	**For the twelve months ending June 30, 2021**
Gas OPEB - Capital	(94)		253		159
Gas OPEB - O&M	(141)		410		270
	(235)		663		429

	For the six months ending December 31, 2021	+	**For the six months ending June 30, 2022**	=	**For the twelve months ending June 30, 2022**
Gas OPEB - Capital	323		296		619
Gas OPEB - O&M	447		603		1,050
	770		899		1,669

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Office of Consumer Advocate
OCA Set II

Response Date: 11/13/2020

OCA-II-22

Reference Exhibit MJT-1, Schedule C-5, Page 32 (Fully Projected Future Test Year). For the period of June 2010 to June 2020, please provide a workpaper showing:

(a) the annual level of pension expense included in rates;

(b) the actual annual level of pension contribution;

(c) the actual annual level of pension cost reported for financial reporting pursuant to (ASC 715)/(SFAS 87) broken down by the expense and capitalized amounts; and,

(d) the annual pension asset or liability balance.

RESPONSE:

In regard to item (a), PECO's 2010 rate case settled, and the pension expense recovery in rates was not stipulated in the settlement. Refer to Attachment OCA-II-22(a) for items (b)-(d).

Responsible Witness: Robert J. Stefani

PECO Energy Company
For the period ending June 30,
(in Thousands)

Year	Contribution Amount	O&M Pension Cost	Capitalized Pension Cost	Pension Asset Balance
2010	46,117	(10,184)	(5,043)	237,283
2011	162,186	(9,086)	(4,366)	386,018
2012	9,214	(10,433)	(5,401)	379,398
2013	15,653	(14,438)	(7,228)	373,385
2014	11,322	(17,334)	(8,312)	359,061
2015	15,908	(22,842)	(11,038)	341,088
2016	54,288	(23,379)	(11,289)	360,707
2017	23,576	(20,121)	(10,074)	354,088
2018	24,534	(16,045)	(7,899)	354,677
2019	29,860	(9,047)	(4,923)	370,567
2020	17,990	(5,963)	(3,886)	378,708

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Office of Consumer Advocate
OCA Set II

Response Date: 11/13/2020

OCA-II-31

Please confirm that the ASC 715 pension costs that are capitalized are recovered through depreciation expense. If no, please explain.

RESPONSE:

The portion of pension cost that is capitalized and included as part of the cost of plant is recovered through depreciation.

Responsible Witness: Robert J. Stefani

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Office of Consumer Advocate
OCA Set II

Response Date: 11/13/2020

OCA-II-33

Please provide a cite showing any rate proceeding where the Pennsylvania Commission has allowed the inclusion of a pension asset or liability in the measures of value.

RESPONSE:

The Company believes it is appropriate and necessary to include the pension asset in its rate base in order to adhere to the Commission's policy and practice on pension expense recovery while also properly recognizing the amount of pension costs that, for ratemaking purposes, has not been recovered as an expense or capitalized to plant in service, as fully explained in PECO Statement No. 3, at pages 22 to 24.

The Commission has previously approved the inclusion in rate base of a pension asset, similar to the one claimed by PECO in this case, in its final order approving the settlement of Duquesne Light Company's electric distribution base rate case at Docket No. R-2013-2372129. In that order, the Commission, approving the inclusion of the pension asset in rate case, stated:

"The Settlement also will allow Duquesne Light to include in rate base the capitalized amount of actual pension contributions (50%), net of related accumulated deferred income taxes, for ratemaking purposes. (Settlement ¶ 29.) However, depreciation expense will be based on the amounts capitalized under ASC 715 recorded on the Company's books. This approach allows the Company to maintain its books in accordance with Generally Accepted Accounting Principles ("GAAP") and also reflect in rate base the excess of cash contributions to be capitalized over amounts of pension costs capitalized per books, net of deferred taxes . . ."

The Company made a claim for pension asset recovery in its 2015 Electric Distribution Rate Case (Docket No. R-2015-2468981), and that case was settled without attribution to any claim about recovery by the Company or other party to the case.

The Company also made a claim for pension asset recovery in its 2018 Electric Distribution Rate Case (Docket No. R-2018-3000164), and that case was settled without attribution to any claim about recovery by the Company or other party to the case.

Responsible Witness: Michael J. Trzaska

I&E Exhibit No. 1
Schedule 12
Page 1 of 1

	PECO Gas Operations C-4 - CWC Summary			**Exhibit MJT-1**	
			I&E Modified Schedule C-4, Page 23		
		(1)	(2)	(3)	(4)
Line No.	**Description**	**Reference**	**FPFTY Expenses**	**(Lead)/Lag Days**	**Dollar-Days**
1	**Working Capital Requirement**				
2					
3	Revenue Lag Days			43.17	
4					
5	Expense Lag				
6	**Payroll (Dist Only)**		**$41,350,285**	13.67	$565,258,396
7	Pension Expense		$2,513,000	14.00	$35,182,000
8	Commodity Purchased - Gas		$226,710,000	36.51	$8,277,182,100
9	Payment to Suppliers		$63,454,000	56.21	$3,566,749,340
10	**Other Expenses**		**$80,816,846**	37.54	$3,033,864,398
11	Total O&M and POR Payments	SUM L6 to L10	$414,844,131		$15,478,236,234
12					
13	O&M Expense / POR Payment Lag Days			37.31	
14					
15	Net (Lead)/Lag Days	L3 - L13		5.86	
16					
17	Days in Current Year			365	
18					
19	Operating Expenses Per Day		$1,136,559		
20					
21	Working Capital for O&M Expense	L15 x L19	$6,660,236		
23	Average Prepayments		$2,048,000		
24	Accrued Taxes		$189,000		
25	Interest Payments		-$5,995,000		
27	**Total Working Capital Requirement**	SUM L21 to L25	**$2,902,236**		
28					
29	Pro Forma O&M Expense		$371,101,000		
30	Uncollectible Expense		$2,585,000		
31	Pro Forma Cash O&M Expense	L29 - L30	$368,516,000		

I&E Exhibit No. 1-SR
Witness: D. C. Patel

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY - GAS DIVISION

Docket No. R-2020-3018929

Exhibit to Accompany

the

Surrebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

RATE BASE

CASH WORKING CAPITAL

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Revised Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set II

Response Date: 01/15/2021

IE-RE-28-D

Reference PECO Volume IX, SDR-RR-32(a) concerning the membership of various organizations, provide the following:

A. Similar schedule for the 12-month periods ended June 30, 2018, June 30, 2019, and June 30, 2020; and

B. Basis of projected increase in membership dues of each organization in the FTY 2021 and FPFTY 2022.

REVISED RESPONSE:

A. Refer to Revised Attachment IE-RE-28-D(a). The revised response adds historical actuals for membership dues.

B. The projected increase in membership dues in the FTY and FPFTY is largely based on general inflationary increases to memberships for industry organizations.

Responsible Witness: Robert J. Stefani

	12-month periods ended between June 2018 - June 2020 (Gas Only)			SDR-RR-32(a) Amount Budgeted for July 2020 - June 2022 (Gas Only)	
Industry Organization	**July 2017 - June 2018**	**July 2018 - June 2019**	**July 2019 - June 2020**	**July 2020 - June 2021**	**July 2021 - June 2022**
American Gas Association	$ 382,554	$ 383,437	$ 379,034	$ 384,040	$ 393,641
Energy Association of Pennsylvania	93,687	140,274	77,076	118,438	121,399
Northeast Gas Association	42,250	94,000	27,500	55,688	57,080
R&D Memberships	33,000	33,495	32,505	33,413	34,248
Energy Solutions Center Inc.	16,800	17,220	23,720	20,000	20,000
Greater Philadelphia Chamber	13,490	14,630	14,600	19,405	14,476
Economy League of Greater Philadelphia	4,260	4,620	4,380	5,157	5,286
Pennsylvania Business Council	-	-	-	3,522	3,610
Greater Philadelphia Hispanic Chamber of Commerce	-	2,310	2,190	3,237	2,158
Pennsylvania Bio	-	-	-	1,640	1,640
World Trade Center of Greater Philadelphia	-	-	-	1,640	1,640
Delaware Valley Green Building Council	-	-	-	720	720
Total	586,041	689,986	561,005	646,899	655,897

	PECO Gas Operations C-4 - CWC Summary			Exhibit MJT-1 Revised	
			I&E Modified Schedule C-4, Page 23		
		(1)	(2)	(3)	(4)
Line No.	**Description**	**Reference**	**FPFTY Expenses**	**(Lead)/Lag Days**	**Dollar-Days**
1	**Working Capital Requirement**				
2					
3	Revenue Lag Days			43.17	
4					
5	Expense Lag				
6	**Payroll (Dist Only)**		**$41,350,285**	13.67	$565,258,396
7	Pension Expense		$2,525,000	14.00	$35,350,000
8	Commodity Purchased - Gas		$226,900,000	36.51	$8,284,119,000
9	Payment to Suppliers		$63,454,000	56.21	$3,566,749,340
10	**Other Expenses**		**$79,959,277**	37.54	$3,001,671,259
11	Total O&M and POR Payments	SUM L6 to L10	$414,188,562		$15,453,147,995
12					
13	O&M Expense / POR Payment Lag Days			37.31	
14					
15	Net (Lead)/Lag Days	L3 - L13		5.86	
16					
17	Days in Current Year			365	
18					
19	Operating Expenses Per Day		$1,134,763		
20					
21	Working Capital for O&M Expense	L15 x L19	$6,665,234		
23	Average Prepayments		$2,091,000		
24	Accrued Taxes		$181,000		
25	Interest Payments		-$5,802,000		
27	**Total Working Capital Requirement**	SUM L21 to L25	**$3,135,234**		
28					
29	Pro Forma O&M Expense		$370,135,000		
30	Uncollectible Expense		$2,586,000		
31	Pro Forma Cash O&M Expense	L29 - L30	$367,549,000		

I&E Exhibit No. 2
Witness: Christopher Keller
NON-PROPRIETARY

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3018929

Exhibit to Accompany

the

Direct Testimony

of

Christopher Keller

Bureau of Investigation and Enforcement

Concerning:

Rate of Return
Neighborhood Gas Pilot Rider

I&E Exhibit No. 2
Schedule 1
Page 1 of 1

I&E
Summary of Cost of Capital

Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost**
PECO Energy Company - Gas Division			
Long Term Debt	46.62%	3.97%	1.85%
Common Equity	53.38%	10.24%	5.47%
Total	100.00%		7.32%

Proxy Group Capital Structure

	2019		2018		2017		2016		2015		Average
Atmos Energy Corp											
Long-term Debt	$ 3,529.452	36.22%	$ 2,493.665	31.81%	$ 3,067.045	41.37%	$ 2,188.779	33.77%	$ 2,455.388	40.20%	36.67%
Short-term Debt	464.915	4.77%	575.780	7.34%	447.745	6.04%	829.811	12.80%	457.927	7.50%	7.69%
Common Equity	5,750.223	59.01%	4,769.950	60.85%	3,898.666	52.59%	3,463.059	53.43%	3,194.797	52.30%	55.64%
	9,744.590	100.00%	7,839.395	100.00%	7,413.456	100.00%	6,481.649	100.00%	6,108.112	100.00%	100.00%
Chesapeake Utilities											
Long-term Debt	450.064	35.75%	316.020	27.99%	197.395	21.12%	136.954	17.27%	149.340	21.93%	24.81%
Short-term Debt	247.371	19.65%	294.458	26.08%	250.969	26.85%	209.871	26.47%	173.397	25.47%	24.90%
Common Equity	561.577	44.60%	518.439	45.92%	486.294	52.03%	446.086	56.26%	358.138	52.60%	50.28%
	1,259.012	100.00%	1,128.917	100.00%	934.658	100.00%	792.911	100.00%	680.875	100.00%	100.00%
Nisource Inc											
Long-term Debt	7,907.800	53.48%	7,105.400	50.92%	7,512.200	57.62%	6,058.200	52.15%	5,948.500	57.42%	54.32%
Short-term Debt	1,773.200	11.99%	1,977.200	14.17%	1,205.700	9.25%	1,488.000	12.81%	567.400	5.48%	10.74%
Common Equity	5,106.700	34.53%	4,870.900	34.91%	4,320.100	33.13%	4,071.200	35.04%	3,843.500	37.10%	34.94%
	14,787.700	100.00%	13,953.500	100.00%	13,038.000	100.00%	11,617.400	100.00%	10,359.400	100.00%	100.00%
Northwest Natural Gas Co											
Long-term Debt	806.796	44.28%	706.247	41.88%	683.184	46.16%	679.334	42.91%	576.700	35.43%	42.13%
Short-term Debt	149.100	8.18%	217.620	12.90%	54.200	3.66%	53.300	3.37%	270.035	16.59%	8.94%
Common Equity	865.999	47.53%	762.634	45.22%	742.776	50.18%	850.497	53.72%	780.972	47.98%	48.93%
	1,821.895	100.00%	1,686.501	100.00%	1,480.160	100.00%	1,583.131	100.00%	1,627.707	100.00%	100.00%
One Gas Inc.											
Long-term Debt	1,314.064	33.18%	1,285.483	35.44%	1,193.257	33.99%	1,192.446	36.97%	1,201.305	39.32%	35.78%
Short-term Debt	516.500	13.04%	299.500	8.26%	357.215	10.18%	145.000	4.50%	12.500	0.41%	7.28%
Common Equity	2,129.390	53.77%	2,042.656	56.31%	1,960.209	55.84%	1,888.280	58.54%	1,841.555	60.27%	56.95%
	3,959.954	100.00%	3,627.639	100.00%	3,510.681	100.00%	3,225.726	100.00%	3,055.360	100.00%	100.00%
South Jersey Industries Inc											
Long-term Debt	2,070.767	47.68%	2,106.863	57.81%	1,122.999	42.19%	808.005	33.76%	1,006.394	40.65%	44.42%
Short-term Debt	848.700	19.54%	270.500	7.42%	346.400	13.01%	296.100	12.37%	431.700	17.44%	13.96%
Common Equity	1,423.785	32.78%	1,267.022	34.77%	1,192.409	44.80%	1,289.240	53.87%	1,037.539	41.91%	41.62%
	4,343.252	100.00%	3,644.385	100.00%	2,661.808	100.00%	2,393.345	100.00%	2,475.633	100.00%	100.00%
Spire Inc.											
Long-term Debt	2,082.600	40.62%	1,900.100	40.35%	1,995.000	44.69%	1,833.700	45.84%	1,771.500	48.10%	43.92%
Short-term Debt	743.200	14.50%	553.600	11.76%	477.300	10.69%	398.700	9.97%	338.000	9.18%	11.22%
Common Equity	2,301.000	44.88%	2,255.400	47.89%	1,991.300	44.61%	1,768.200	44.20%	1,573.600	42.72%	44.86%
	5,126.800	100.00%	4,709.100	100.00%	4,463.600	100.00%	4,000.600	100.00%	3,683.100	100.00%	100.00%

Five-Year Average Capital Structure	
Long-term Debt	40.29%
Short-term Debt	12.10%
Common Equity	47.60%
	100.00%

Source: Compustat (data in millions)
April 2020

Accessed on December 3, 2020

I&E Exhibit No. 2
Schedule 3
Page 1 of 1

	2019		
	Interest Charges	**Long-term Debt**	**Debt Cost**
Atmos Energy Corp	110.80	3,529.45	3.14%
Chesapeake Utilities	22.92	450.06	5.09%
Nisource Inc	386.40	7,907.80	4.89%
Northwest Natural Gas Co	42.69	806.80	5.29%
One Gas Inc.	67.28	1,314.06	5.12%
South Jersey Industries Inc	120.48	2,070.77	5.82%
Spire Inc.	104.40	2,082.60	5.01%
	Range:	**Low**	**3.14%**
		High	**5.82%**
		Average	**4.91%**

Source: Compustat
April 2020

Accessed on December 3, 2020

Dividend Yields of Seven Company Proxy Group

Company	Atmos Energy Corp	Chesapeake Utilities	Nisource Inc	Northwest Natural Gas Co	One Gas Inc.	South Jersey Industries Inc	Spire Inc.
Symbol	*ATO*	*CPK*	*NI*	*NWN*	*OGS*	*SJI*	*SR*
Div	2.50	1.83	0.92	1.92	2.32	1.25	2.60
52-wk low	77.92	69.47	19.56	42.33	63.67	18.24	50.58
52-wk high	121.08	111.31	30.46	77.26	96.97	33.43	87.96
Spot Price	96.19	104.07	24.62	48.51	79.12	23.02	64.06
Spot Div Yield	2.60%	1.76%	3.74%	3.96%	2.93%	5.43%	4.06%
52-wk Div Yield	2.51%	2.02%	3.68%	3.21%	2.89%	4.84%	3.75%
Average	2.56%	1.89%	3.71%	3.58%	2.91%	5.13%	3.91%

	Average
Spot Div Yield	3.50%
52-wk Div Yield	3.27%
Average	3.38%

Source:	Barrons	December 3, 2020
	Value Line	November 27, 2020

Five-Year Growth Estimate Forecast for Proxy Group (Actual)

Company	Symbol	Yahoo	Zacks	Morningstar	Value Line	Average
		Source				
Atmos Energy Corp	ATO	7.10%	7.10%	7.60%	7.00%	7.20%
Chesapeake Utilities	CPK	4.74%	NMF	NMF	9.00%	6.87%
Nisource Inc	NI	1.65%	5.60%	4.60%	13.00%	6.21%
Northwest Natural Gas Co	NWN	3.10%	3.10%	2.80%	24.60%	8.38%
One Gas Inc.	OGS	5.00%	5.50%	NMF	6.50%	5.67%
South Jersey Industries Inc	SJI	10.40%	10.40%	NMF	12.50%	11.10%
Spire Inc.	SR	5.37%	16.50%	4.50%	5.50%	7.97%
Average						7.63%

Source:
(From Internet)
December 3, 2020

Five-Year Growth Estimate Forecast for Proxy Group (Adjusted)

Company	Symbol	Yahoo	Zacks	Morningstar	Value Line	Average
		Source				
Atmos Energy Corp	ATO	7.10%	7.10%	7.60%	7.00%	7.20%
Chesapeake Utilities	CPK	4.74%	NMF	NMF	9.00%	6.87%
Nisource Inc	NI	1.65%	5.60%	4.60%	13.00%	6.21%
Northwest Natural Gas Co	NWN	3.10%	3.10%	2.80%	X	3.00%
One Gas Inc.	OGS	5.00%	5.50%	NMF	6.50%	5.67%
South Jersey Industries Inc	SJI	10.40%	10.40%	NMF	12.50%	11.10%
Spire Inc.	SR	5.37%	16.50%	4.50%	5.50%	7.97%
Average						6.86%

Expected Market Cost Rate of Equity

Using Data for the Proxy Group of Seven Natural Gas Companies

5-Year Forecasted Growth Rates

	Time Period	Adjusted Dividend Yield (1)	Growth Rate (2)	Expected Return on Equity (3=1+2)
(1)	**52-Week Average** **Ending:** December 3, 2020	3.27%	6.86%	10.13%
(2)	**Spot Price** **Ending:** December 3, 2020	3.50%	6.86%	10.36%
(3)	**Average:**	**3.38%**	**6.86%**	**10.24%**

Sources: Value Line November 27, 2020
Barrons December 3, 2020

Company	Beta
Atmos Energy Corp	0.80
Chesapeake Utilities	0.80
Nisource Inc	0.85
Northwest Natural Gas Co	0.80
One Gas Inc.	0.80
South Jersey Industries Inc	1.05
Spire Inc.	0.85
Average beta for CAPM	**0.85**

Source:
Value Line
November 27, 2020

Risk-Free Rate

Treasury note 10-yr Note	Yield
1Q 2021	0.90
2Q 2021	0.90
3Q 2021	1.00
4Q 2021	1.10
1Q 2022	1.20
2022-2026	2.30
Average	1.23

Source:
Blue Chip
November 1, 2020 and June 1, 2020

Required Rate of Return on Market as a Whole Forecasted

	Dividend Yield	+	Growth Rate	=	Expected Market Return
Value Line Estimate	2.00%		7.79%	(a)	9.79%
S&P 500	1.73%	(b)	9.40%		11.13%
Average Expected Market Return				=	**10.46%**

(a) ((1+35%)^.25) -1) Value Line forecast for the 3 to 5 year index appreciation is 35%
(b) S&P 500 multiplied by half the growth rate

Sources:

Value Line	12/4/2020
S&P 500 Dividend Yield (Barrons)	12/3/2020
S&P 500 Growth Rate (Morningstar)	12/3/2020

CAPM with Forecasted Return

Re	Required return on individual equity security
Rf	Risk-free rate
Rm	Required return on the market as a whole
Be	Beta on individual equity security

Re = Rf+Be(Rm-Rf)

Rf	=	1.2333
Rm	=	10.4594
Be	=	0.85
Re	=	**9.08**

Sources:

Value Line	November 27, 2020
Blue Chip	November 1, 2020 and June 1, 2020

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
I&E Set I

Response Date: 10/28/2020

IE-RR-9-D

Reference PECO Energy Statement No. 5, page 10, lines 2-8. List the companies in Mr. Moul's Gas Group that are not susceptible to bypass risk.

RESPONSE:

Mr. Moul did not study in detail the bypass risk of each company in his proxy group (i.e., the Gas Group). However, he is aware that bypass is usually a risk to LDCs when there are a number of interstate pipelines in close proximity to large volume users served by an LDC or when customers of the LDC are in close proximity to gas producing wells. As to the issue of bypass by interstate pipelines, most LDCs, including companies in the Gas Group, are faced with this risk. Notably, PECO has three interstate pipelines traversing its service territory.

Responsible Witness: Paul R. Moul

I&E Exhibit No. 2
Schedule 12
Page 1 of 1

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set I

Response Date: 10/28/2020

IE-RR-13-D

Reference PECO Energy Statement No. 5, pages 9-10. Identify all major account customers lost and gained in the twelve months ended December 31, 2017, December 31, 2018, and December 31, 2019.

RESPONSE:

PECO has not lost any major accounts in the twelve months ended December 31, 2017, December 31, 2018 and December 31, 2019.

The table below summarizes major account customers added for the gas business during the same time period:

Year Added	Customer name	MCF	Description
2017	Astra Foods	23,268	New gas process installation
2018	KVK Tech	23,000	New warehouse
	Penn Color	24,509	Installation of Gas drying process
2019	Gateway to New Hope	21,000	New boutique hotel
	Provco Partners	38,760	New retail restaurant depot
	Green Lane Properties	29,630	New commercial office building
	Villanova Iniversity	20,950	New dormitory

Responsible Witness: Paul R. Moul

I&E Exhibit No. 3
Witness: Ethan H. Cline

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3018929

Exhibit to Accompany

the

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Rate Base
FPFTY Reporting Requirements
Cost of Service Study
Customer Cost Analysis
Revenue Allocation
Negotiated Rate Service
Scale Back of Rates

I&E Exhibit No. 3
Schedule 1

PECO Energy Company
Rate Base
R-2020-3018929
(in thousands)

Line No.	Description	Company Proposed (A)	Company Adjustments (B)	FPFTY Company Adjusted Claim (C)	Adjustments (D)	I&E Recommendation (E)
1	Utility Plant	$ 3,537,669	$ -	$ 3,537,669	$ (47,625)	$ 3,490,044
2	Accumulated Depreciation	$ 893,447	$ (1,064)	$ 892,383	$ (804)	$ 891,579
3	Common Plant	$ 136,770		$ 136,770	$ -	$ 136,770
4	**Net Plant in Service**	$ 2,780,992	$ 1,064	$ 2,782,056	$ (46,821)	$ 2,735,235
	Additions:					
5	Working Capital	$ 3,223	$ -	$ 3,223	$ -	$ 3,223
6	Pension Assets / (Liabilities)	$ 35,059	$ -	$ 35,059	$ -	$ 35,059
7	Materials and Supplies	$ 489	$ -	$ 489	$ (45)	$ 444
8	Gas Storage	$ 30,870	$ -	$ 30,870	$ 286	$ 31,156
9	**Total Additions:**	$ 69,641	$ -	$ 69,641	$ 241	$ 69,882
	Deductions:					
10	Accumulated Deferred Income Taxes	$ 247,620	$ -	$ 247,620	$ -	$ 247,620
11	Customer Deposits	$ 13,418	$ -	$ 13,418	$ (17)	$ 13,401
12	Customer Advances for Construction	$ 1,334	$ -	$ 1,334	$ (79)	$ 1,255
13	ADIT - Reg Liability	$ 126,322	$ -	$ 126,322	$ -	$ 126,322
14	**Total Deductions:**	$ 388,694	$ -	$ 388,694	$ (97)	$ 388,597
15	**Total Measure of Value**	$ 2,461,939	$ 1,064	$ 2,463,003	$ (46,483)	$ 2,416,520
16	**Depreciation and Amortization Expense**	$ 86,146	$ -	$ 86,146	$ (804)	$ 85,342

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VIII

Response Date: 12/04/2020

IE-RB-4-D

Reference PECO Exhibit MJT-1, Schedule C-2, p. 16 regarding Additions to Plant. For each plant addition listed, please provide the following:

A. Brief description;

B. Start date;

C. Amount spent to date;

D. Anticipated completion date;

E. Estimation of percent completion.

RESPONSE:

There are several classifications of assets included on Schedule C-2: Baseline, Program, and Specific Projects. Baseline Projects are typical work that is short in duration and is capitalized on a monthly or quarterly basis. Program work are work programs that have a defined period of time but are longer in duration (6 months to 1 year). Once detailed program work is identified, costs are assigned to specific projects. In both Program and Baseline, the costs incurred today are generally not in the FPFTY Capital Additions as these costs would be placed into service in the FTY. The Specific projects have a beginning an end date associated with them.

Refer to Attachment IE-RB-4-D(a) for the project information.

Responsible Witness: Robert Stefani

I&E Exhibit No. 3
Schedule 2
Page 3.of.3

PECO Energy Company

Project Type	Project Description	Short Description	Additions to Capital per Schedule C-2 for the FPFTY	Start Date	Completion Date	Spend to Date	% of Completion
Baseline	NB Gas GAMs by contractor	NB Gas along the Mains by Contractor (provide Gas to customers that have a main in front of the homes	10,029,684	Various	Various	N/A	N/A
	NB Gas C&I	New Business Commercial and Industrial	8,071,115	Various	Various	N/A	N/A
	NRCG Gas Residential Inside Developments	New Residential Construction	5,750,396	Various	Various	N/A	N/A
	Public Relo GAS Baseline Work PADOT Requ	Public Relocation Baseline Work Pennsylvania Department of Transportation	4,537,663	Various	Various	N/A	N/A
	Plant Improvements - Gas Winter Critical	Additions associated with Gas Winter Critical program	2,741,255	Various	Various	N/A	N/A
	Winter Critical Capacity Upgrades Baseline	Winter Critical Capacity Upgrades Baseline Work	2,625,810	Various	Various	N/A	N/A
	Locate & repair #1 & #2A Leaks - Services	Locate & repair #1 & #2A Leaks - Services Only	2,621,749	Various	Various	N/A	N/A
	Locate & Repair #2B Leaks - Services	Locate & Repair Non Critical Gas Leaks #2B Leaks - Services Only	2,522,690	Various	Various	N/A	N/A
	NB Gas NRCG Approach Mains	NB Gas NRCG Approach Mains (Extension of Gas Facilities to new development	2,003,909	Various	Various	N/A	N/A
	Gas- Service Maintenance	Gas- Service Maintenance	1,970,112	Various	Various	N/A	N/A
	NB Gas Residential	NB Gas Residential (not included in New Residential Construction)	1,888,999	Various	Various	N/A	N/A
	Regulatory (Gas) Plant Additions	Additions associated with Regulatory required spend	1,594,199	Various	Various	N/A	N/A
	Purchase Gas Meters for Residential NB	Purchase Gas Meters for Residential New Business Replacement	1,590,631	Various	Various	N/A	N/A
	Gas- Once-cathodically protected BS Main Re	Gas- Once-cathodically protected Bare Steel Main Replacement Program	1,340,787	Various	Various	N/A	N/A
	Abandonment of Inactive Gas services.	Abandonment of Inactive Gas services.	1,292,689	Various	Various	N/A	N/A
	Regulator Station Upgrades	General Work - Sealing of underground Regulator Station Vaults	846,367	Various	Various	N/A	N/A
	Capital Tools Corrosion/Leak Survey/Regula	Capital Tools Corrosion/Leak Survey/Regulatory Equipment necessary for regulatory required surveys	817,157	Various	Various	N/A	N/A
	PECO Capital Overhead- Gas	The capitalization of Overhead costs	526,098	Various	Various	N/A	N/A
	Purchase Gas Meters for Plant Replacement	Purchase Gas Meters for Plant Replacement	269,815	Various	Various	N/A	N/A
	Replace Nonoperable Valves Identified by In	Replace Nonoperable Valves Identified by Inspection Program	259,129	Various	Various	N/A	N/A
	Gas Cathodic Protection Reg. Work & OIR's	Gas Cathodic Protection Regulatory Work	245,777	Various	Various	N/A	N/A
	Gas Meter & House Regulator Maint.	Gas Meter & House Regulator Maintanance	127,840	Various	Various	N/A	N/A
Baseline Total			**53,673,870**				
Programmatic	Accelerated Mod - Cast Iron	Part of Gas Modernization Program. Accelerate Cast Iron replacement.	70,886,989	Apr-11	Apr-35	N/A	N/A
	Main Replacements - Large Diameter	Large Diameter main replacements	31,614,529	Jan-18	Dec-35	N/A	N/A
	Restoration Blanket for AGIMP	This is the restoration/paving required on any AGIMP construction project that requires a specific ITN.	21,565,364	Apr-11	Apr-35	N/A	N/A
	Replace (Leaking) Bare Steel Mains (Optimai	Replace (Leaking) Bare Steel Mains (Optimain)	20,971,247	Apr-11	Dec-22	N/A	N/A
	Accelerated Mod - Bare Steel Services	Part of Gas Modernization Program. Accelerate Bare Steel Services replacement.	17,579,226	Apr-11	Dec-22	N/A	N/A
	Residential HP Regulator Replacement	HP residential regulators could cause build-up pressures of > 2 psig under failure conditions per ANSI standard B109.4. This is the plan to replace 35k-40k regulators installed after 1998.	7,964,269	Jan-20	Apr-26	N/A	N/A
	NB Neighborhood Gas Program	NB Neighborhood Gas Program	7,502,347	Jul-16	Dec-22	N/A	N/A
	Bare Steel Service Replacement Program	Bare Steel Service Replacement Program- utilizing graphical leak analysis	3,872,808	Jan-04	Dec-22	N/A	N/A
	Replacement Cast Iron Mains	Replacement Cast Iron Mains	3,473,387	Jan-04	Dec-35	N/A	N/A
	FEP - Tier 2 Gas	Facility Enhancement Program - Security Upgrade	1,903,652	Oct-17	Jun-22	N/A	N/A
	Bolt-On Tee Replacements	Bolt-On tees have failed in the industry. PECO used these tees from mid 1990s-2004. The PUC requirement is to remove any bolt-on tees when identified.	1,000,000	Oct-19	Dec-35	N/A	N/A
	Relocate Indoor Gas Meters	Relocate Indoor Gas Meters to Outdoor	820,636	Aug-16	Dec-35	N/A	N/A
Programmatic Total			**189,154,454**				
Specific Project	Natural Gas Reliability	Install 11.5 miles OHP gas main, upgrade LNG plant and construct a new gate station	82,481,428	Oct-19	Jun-23	33,888,385	28%
	FR - Rte 202 - Section 61N	PennDOT relocation project on route 202 in Montgomery County. This is for Section 61N.	3,547,125	Nov-18	Dec-22	4,304,905	22%
	EU Analytics - Advanced Metering Infrastructure (AMI)	AMI will deliver a multi-year use case roadmap to enhance and optimize today's meter analytics while building towards the Utility of the Future.	1,113,070	May-17	Oct-21	1,309,493	12%
	LNG Plant BOC	Install two new boil off compressors in LNG Plant.	807,114	Sep-19	Jun-22	2,052,628	18%
	2020 AGIMP – Abington Twp. Small Diameter	~5.64 miles of cast iron and bare steel pipe will be replaced with plastic or coated steel main which will result in ~5.17 miles of main being retired in 2020.	752,064	Jul-19	Dec-21	2,025,563	50%
	2020 AGIMP – Springfield Twp. Small Diameter	~2.09 miles of cast iron and bare steel pipe will be replaced with plastic or coated steel main which will result in ~1.99 miles of main being retired in 2020.	480,559	Jun-19	Jan-22	452,682	50%
	Oracle Implementation	Oracle Project Implementation	101,116	Jun-17	Jan-21	375,856	15%
Specific Project Total			**89,282,476**				
		FPTY Gross Plant Additions	**332,110,800**				
		Calculated Cost of Removal	**(9,964,378)**				
		FPTY Plant Additions	**322,146,422**				

NOTES

Baseline Costs spend to Date go back many years however the amount included under the heading "Additions to Capital per Schedule C-2 for the FPFTY" would not be spent until the period of July 1, 2021 - June 30, 2022.
Amounts reflected in the column "Additions to Capital per Schedule C-2 for the FPTY" represents Cap Additions for the FPFTY, while the start and completion date is the beginning and ending of the program

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VIII

Response Date: 12/04/2020

IE-RB-6-D

Reference PECO Exhibit MJT-1, Schedule C-11, p. 37 Materials and Supplies. Provide the actual levels of materials and supplies and undistributed stores expense, by month, for the period starting January 2018 through the most recent month available.

RESPONSE:

See Attachment IE-RB-6-D(a).

Responsible Witness: Caroline Fulginiti

PECO
As of 09/30/2020
(In Thousands)

Line #	Description		Gas Materials & Supplies	Stores Expense Undistributed
1	January	2018	$ 426	$ 113
2	February	2018	$ 426	$ 66
3	March	2018	$ 385	$ (0)
4	April	2018	$ 415	$ (66)
5	May	2018	$ 437	$ 72
6	June	2018	$ 410	$ (0)
7	July	2018	$ 423	$ (148)
8	August	2018	$ 423	$ (43)
9	September	2018	$ 590	$ (0)
10	October	2018	$ 608	$ (90)
11	November	2018	$ 594	$ 528
12	December	2018	$ 603	$ (0)
13	January	2019	$ 607	$ 179
14	February	2019	$ 597	$ (246)
15	March	2019	$ 581	$ (0)
16	April	2019	$ 581	$ (390)
17	May	2019	$ 588	$ (439)
18	June	2019	$ 599	$ (0)
19	July	2019	$ 601	$ (482)
20	August	2019	$ 611	$ (527)
21	September	2019	$ 602	$ (0)
22	October	2019	$ 595	$ (670)
23	November	2019	$ 590	$ (664)
24	December	2019	$ 592	$ (0)
25	January	2020	$ 443	$ 107
26	February	2020	$ 434	$ 151
27	March	2020	$ 453	$ (0)
28	April	2020	$ 461	$ (6)
29	May	2020	$ 434	$ (32)
30	June	2020	$ 436	$ (242)
31	July	2020	$ 464	$ (209)
32	August	2020	$ 450	$ (486)
33	September	2020	$ 398	$ (478)

PECO Energy Company
Materials and Supplies
R-2020-3018929
(in thousands)

Month	Gas Materials and Supplies (A)	Stores Expense Undistributed (B)
Jan-18	$ 426	$ 113
Feb-18	$ 426	$ 66
Mar-18	$ 385	$ -
Apr-18	$ 415	$ (66)
May-18	$ 437	$ 72
Jun-18	$ 410	$ -
Jul-18	$ 423	$ (148)
Aug-18	$ 423	$ (43)
Sep-18	$ 590	$ -
Oct-18	$ 608	$ (90)
Nov-18	$ 594	$ 528
Dec-18	$ 603	$ -
Jan-19	$ 607	$ 179
Feb-19	$ 597	$ (246)
Mar-19	$ 581	$ -
Apr-19	$ 581	$ (390)
May-19	$ 588	$ (439)
Jun-19	$ 599	$ -
Jul-19	$ 601	$ (482)
Aug-19	$ 611	$ (527)
Sep-19	$ 602	$ -
Oct-19	$ 595	$ (670)
Nov-19	$ 590	$ (664)
Dec-19	$ 592	$ -
Jan-20	$ 443	$ 107
Feb-20	$ 434	$ 151
Mar-20	$ 453	$ -
Apr-20	$ 461	$ (6)
May-20	$ 434	$ (32)
Jun-20	$ 436	$ (242)
Jul-20	$ 464	$ (209)
Aug-20	$ 450	$ (486)
Sep-20	$ 398	$ (478)
13-month Total:	$ 6,352	$ (2,529)
Distribution Expense Allocation Factor:	100.00%	23.03%
13-month Average:	$ 489	$ (45)
Total Materials and Supplies:	$ 444	

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VIII

Response Date: 12/04/2020

IE-RB-5-D

Reference PECO Exhibit MJT-1, Schedule C-9, p. 36 Customer Advances for Construction. Provide the actual levels of customer advances for construction, by month, for the period starting January 2018 through the most recent month available.

RESPONSE:

Month	Customer Advances for Construction
January 31, 2018	(367,262)
February 28, 2018	(396,592)
March 31, 2018	(401,176)
April 30, 2018	(417,966)
May 31, 2018	(559,265)
June 30, 2018	(601,829)
July 31, 2018	(495,455)
August 31, 2018	(503,592)
September 30, 2018	(526,853)
October 31, 2018	(547,085)
November 30, 2018	(565,472)
December 31, 2018	(626,890)
January 31, 2019	(659,211)
February 28, 2019	(680,943)
March 31, 2019	(799,048)

April 30, 2019	(1,084,962)
May 31, 2019	(1,105,775)
June 30, 2019	(1,242,780)
July 31, 2019	(1,253,624)
August 31, 2019	(1,419,568)
September 30, 2019	(1,429,449)
October 31, 2019	(1,900,548)
November 30, 2019	(1,879,291)
December 31, 2019	(1,081,894)
January 31, 2020	(1,319,431)
February 29, 2020	(1,355,003)
March 31, 2020	(1,198,321)
April 30, 2020	(1,227,776)
May 31, 2020	(1,031,939)
June 30, 2020	(1,003,867)
July 31, 2020	(983,190)
August 31, 2020	(999,916)
September 30, 2020	(899,268)

Responsible Witness: Caroline Fulginiti

PECO Energy Company
Gas Storage
R-2020-3018929

Month	Stored Underground (A)	LNG (B)	Propane Gas (C)	Total (D)
Jan-18	$ 22,377,598	$ 3,005,179	$ 1,724,781	$ 27,107,558
Feb-18	$ 17,003,405	$ 3,269,729	$ 1,724,781	$ 21,997,915
Mar-18	$ 10,830,585	$ 3,188,462	$ 1,724,781	$ 15,743,828
Apr-18	$ 10,499,338	$ 3,124,655	$ 1,724,781	$ 15,348,774
May-18	$ 15,147,149	$ 3,050,000	$ 1,724,781	$ 19,921,930
Jun-18	$ 18,679,496	$ 3,154,200	$ 1,724,781	$ 23,558,477
Jul-18	$ 22,908,301	$ 3,745,634	$ 1,724,781	$ 28,378,716
Aug-18	$ 27,101,946	$ 4,356,414	$ 1,724,781	$ 33,183,141
Sep-18	$ 31,842,867	$ 4,979,152	$ 1,724,781	$ 38,546,800
Oct-18	$ 41,634,015	$ 5,150,023	$ 1,724,781	$ 48,508,819
Nov-18	$ 38,455,031	$ 5,094,525	$ 1,724,781	$ 45,274,337
Dec-18	$ 31,497,636	$ 5,036,718	$ 1,724,781	$ 38,259,135
Jan-19	$ 21,355,029	$ 4,017,915	$ 1,652,582	$ 27,025,526
Feb-19	$ 14,519,396	$ 3,909,263	$ 1,652,582	$ 20,081,241
Mar-19	$ 9,189,383	$ 3,672,775	$ 1,652,582	$ 14,514,740
Apr-19	$ 11,204,313	$ 3,613,135	$ 1,652,582	$ 16,470,030
May-19	$ 15,747,997	$ 3,551,365	$ 1,652,582	$ 20,951,944
Jun-19	$ 21,179,676	$ 3,562,515	$ 1,652,582	$ 26,394,773
Jul-19	$ 25,467,848	$ 4,096,101	$ 1,652,582	$ 31,216,531
Aug-19	$ 29,677,719	$ 4,533,307	$ 1,652,582	$ 35,863,608
Sep-19	$ 34,092,281	$ 4,486,321	$ 1,652,582	$ 40,231,184
Oct-19	$ 38,278,234	$ 4,433,990	$ 1,652,582	$ 44,364,806
Nov-19	$ 37,130,938	$ 4,382,518	$ 1,652,582	$ 43,166,038
Dec-19	$ 30,931,562	$ 4,349,337	$ 1,628,987	$ 36,909,886
Jan-20	$ 23,880,240	$ 4,270,717	$ 1,628,987	$ 29,779,944
Feb-20	$ 17,294,703	$ 4,208,634	$ 1,628,987	$ 23,132,324
Mar-20	$ 15,107,069	$ 4,150,836	$ 1,628,987	$ 20,886,892
Apr-20	$ 14,412,786	$ 4,100,682	$ 1,628,987	$ 20,142,455
May-20	$ 17,455,437	$ 4,052,095	$ 1,628,987	$ 23,136,519
Jun-20	$ 20,461,253	$ 3,997,130	$ 1,628,987	$ 26,087,370
Jul-20	$ 23,691,079	$ 3,942,041	$ 1,628,987	$ 29,262,107
Aug-20	$ 26,851,801	$ 3,891,442	$ 1,628,987	$ 32,372,230
Sep-20	$ 29,888,945	$ 4,039,712	$ 1,628,987	$ 35,557,644
		13-month Total:		$ 405,029,399
		13-month Average:		$ 31,156,108

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VIII

Response Date: 12/04/2020

IE-RB-3-D

Reference PECO Exhibit MJT-1, Schedule C-7, p. 34 Customer Deposits. Provide the actual levels of customer deposits, by month, for the period starting January 2018 through the most recent month available.

RESPONSE:

Customer Deposits
January 2018 through September 2020
($ in thousands)

Description	Residential	Non- Residential	Total
Jan-18	3,931	7,419	11,350
Feb-18	3,917	7,327	11,244
Mar-18	3,928	7,350	11,277
Apr-18	3,912	7,300	11,212
May-18	3,939	7,334	11,274
Jun-18	3,966	7,401	11,368
Jul-18	3,917	7,411	11,328
Aug-18	3,959	7,563	11,522
Sep-18	3,921	7,496	11,417
Oct-18	3,947	7,553	11,499
Nov-18	3,953	7,596	11,549
Dec-18	3,956	7,641	11,597
Jan-19	4,479	8,098	12,577
Feb-19	4,511	8,104	12,615
Mar-19	4,546	8,148	12,694
Apr-19	4,606	8,188	12,794
May-19	4,643	8,343	12,986
Jun-19	4,674	8,369	13,043
Jul-19	4,665	8,323	12,988
Aug-19	4,705	8,359	13,064
Sep-19	4,721	8,273	12,994
Oct-19	4,764	8,269	13,033
Nov-19	4,743	8,286	13,029
Dec-19	4,739	8,319	13,058
Jan-20	4,766	9,268	14,034
Feb-20	4,765	9,250	14,014
Mar-20	4,769	9,296	14,065
Apr-20	4,713	9,203	13,916
May-20	4,632	9,079	13,711
Jun-20	4,540	8,948	13,488
Jul-20	4,445	8,780	13,226
Aug-20	4,342	8,630	12,971
Sep-20	4,203	8,464	12,667

Responsible Witness: Caroline Fulginiti

PECO Energy Company
Customer Deposits
R-2020-3018929
(in thousands)

Month		Residential		Non-Residential		Total
		(A)		(B)		(C)
Jan-18	$	3,931	$	7,419	$	11,350
Feb-18	$	3,917	$	7,327	$	11,244
Mar-18	$	3,928	$	7,350	$	11,278
Apr-18	$	3,912	$	7,300	$	11,212
May-18	$	3,939	$	7,334	$	11,273
Jun-18	$	3,966	$	7,401	$	11,367
Jul-18	$	3,917	$	7,411	$	11,328
Aug-18	$	3,959	$	7,563	$	11,522
Sep-18	$	3,921	$	7,496	$	11,417
Oct-18	$	3,947	$	7,553	$	11,500
Nov-18	$	3,953	$	7,596	$	11,549
Dec-18	$	3,956	$	7,641	$	11,597
Jan-19	$	4,479	$	8,098	$	12,577
Feb-19	$	4,511	$	8,104	$	12,615
Mar-19	$	4,546	$	8,148	$	12,694
Apr-19	$	4,606	$	8,188	$	12,794
May-19	$	4,643	$	8,343	$	12,986
Jun-19	$	4,674	$	8,369	$	13,043
Jul-19	$	4,665	$	8,323	$	12,988
Aug-19	$	4,705	$	8,359	$	13,064
Sep-19	$	4,721	$	8,273	$	12,994
Oct-19	$	4,764	$	8,269	$	13,033
Nov-19	$	4,743	$	8,286	$	13,029
Dec-19	$	4,739	$	8,319	$	13,058
Jan-20	$	4,766	$	9,268	$	14,034
Feb-20	$	4,765	$	9,250	$	14,015
Mar-20	$	4,769	$	9,296	$	14,065
Apr-20	$	4,713	$	9,203	$	13,916
May-20	$	4,632	$	9,079	$	13,711
Jun-20	$	4,540	$	8,948	$	13,488
Jul-20	$	4,445	$	8,780	$	13,225
Aug-20	$	4,342	$	8,630	$	12,972
Sep-20	$	4,203	$	8,464	$	12,667
			13-month Total:		$	174,207
			13-month Average:		$	13,401

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VIII

Response Date: 12/04/2020

IE-RB-5-D

Reference PECO Exhibit MJT-1, Schedule C-9, p. 36 Customer Advances for Construction. Provide the actual levels of customer advances for construction, by month, for the period starting January 2018 through the most recent month available.

RESPONSE:

Month	**Customer Advances for Construction**
January 31, 2018	(367,262)
February 28, 2018	(396,592)
March 31, 2018	(401,176)
April 30, 2018	(417,966)
May 31, 2018	(559,265)
June 30, 2018	(601,829)
July 31, 2018	(495,455)
August 31, 2018	(503,592)
September 30, 2018	(526,853)
October 31, 2018	(547,085)
November 30, 2018	(565,472)
December 31, 2018	(626,890)
January 31, 2019	(659,211)
February 28, 2019	(680,943)
March 31, 2019	(799,048)

April 30, 2019	(1,084,962)
May 31, 2019	(1,105,775)
June 30, 2019	(1,242,780)
July 31, 2019	(1,253,624)
August 31, 2019	(1,419,568)
September 30, 2019	(1,429,449)
October 31, 2019	(1,900,548)
November 30, 2019	(1,879,291)
December 31, 2019	(1,081,894)
January 31, 2020	(1,319,431)
February 29, 2020	(1,355,003)
March 31, 2020	(1,198,321)
April 30, 2020	(1,227,776)
May 31, 2020	(1,031,939)
June 30, 2020	(1,003,867)
July 31, 2020	(983,190)
August 31, 2020	(999,916)
September 30, 2020	(899,268)

Responsible Witness: Caroline Fulginiti

PECO Energy Company
Customer Advances for Construction
R-2020-3018929

Month		Customer Advances for Construction (C)
Jan-18	$	(367,262)
Feb-18	$	(396,592)
Mar-18	$	(401,176)
Apr-18	$	(417,966)
May-18	$	(559,265)
Jun-18	$	(601,829)
Jul-18	$	(495,455)
Aug-18	$	(503,592)
Sep-18	$	(526,853)
Oct-18	$	(547,085)
Nov-18	$	(565,472)
Dec-18	$	(626,890)
Jan-19	$	(659,211)
Feb-19	$	(680,943)
Mar-19	$	(799,048)
Apr-19	$	(1,084,962)
May-19	$	(1,105,775)
Jun-19	$	(1,242,780)
Jul-19	$	(1,253,624)
Aug-19	$	(1,419,568)
Sep-19	$	(1,429,449)
Oct-19	$	(1,900,548)
Nov-19	$	(1,879,291)
Dec-19	$	(1,081,894)
Jan-20	$	(1,319,431)
Feb-20	$	(1,355,003)
Mar-20	$	(1,198,321)
Apr-20	$	(1,227,776)
May-20	$	(1,031,939)
Jun-20	$	(1,003,867)
Jul-20	$	(983,190)
Aug-20	$	(999,916)
Sep-20	$	(899,268)
13-month Total	$	(16,309,893)
13-month Ave.	$	(1,254,607)

PECO Energy Company
Forfeited Discounts
R-2020-3018929

ln.	Year Ended		Sales Revenue	Forfeited Discounts	Percent FD to Sales Revenue	
	A		B	C	D	
1	6/30/2018	(a)	$527,954,650	$1,104,343	0.209%	
2	6/30/2019	(a)	$607,334,224	$1,445,847	0.238%	
3	6/30/2020	(a)	$541,829,470	$718,591	0.133%	
4	Total		$1,677,118,344	$3,268,781	0.195%	3 year ave
5	6/30/2022	(b)	$589,780,000	$838,000	0.142%	at present rates
6	6/30/2022	(b)	$658,591,000	$926,000	0.141%	at proposed rates

7 (a): PECO SDR-RR-35

8 (b): PECO Ex. MJT-1, Schedule D-1

9 Annualized Forfeited Discounts for the FTY at Proposed Rates = 0.00195 * $658,591,000 = **$1,283,624**

10 Forfeited Discounts adjustment at proposed rates = $1,283,624 - $926,000 = **$357,624**

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set IX

Response Date: 12/04/2020

IE-RS-13-D

Regarding PECO Exhibit JAB-1 showing the rate of return and relative rate of return for each class under columns 11 and 12, provide a schedule that shows the proposed revenue, expenses, taxes, net income and rate base by class that supports each rate of return and relative rate of return. Provide the schedule in Excel if available.

RESPONSE:

The Company develops its proposed relative rates of return by class (Exhibit JAB-1, Column 12) based on consideration of the various ratemaking principles discussed in Mr. Bisti's direct testimony.

The Company's proposed rates of return by class (Exhibit JAB-1, Column 11) are then calculated as the product of the proposed relative rates of return by class and the system average rate of return.

Responsible Witness: Joseph A. Bisti

I&E Exhibit No. 3
Schedule 13

PECO Energy Company
Gas Class Cost of Service Study
For Fully Projected Future Test Year Ended June 30, 2022 ($000'S)

SCH	LINE NO.	DESCRIPTION (A)	ALLOCATION BASIS (B)	TOTAL GAS DIVISION (C)	RESID (D)	GC (E)	LARGE (F)	MOTOR VEHICLE FIRM (G)	MOTOR VEHICLE INTER (H)	INTER SERV (I)	TEMP CONTROL (J)	TRANSP SERV FIRM (K)	TRANSP SERV INTER (L)
	1	**OPERATING REVENUES**											
	2	**Change in Revenue (Change in Return * 1.414)**		**68,723**	**43,213**	**17,566**	**35**	**104**	**1**	**0**	**56**	**5,370**	**2,378**
	3	Distribution Base Rate Revenue (Present Rates)		361,580	233,528	100,579	75	475	5	0	690	16,719	9,509
	4	**Total Dist Base Rate Revenue (Proposed Rate)**		430,303	276,741	118,145	110	579	6	0	745	22,090	11,887
	5												
	6	Forfeited Discounts Revenues		88	67	17	0	0	0	0	0	3	1
	7	Other Operating Revenue (Present Rates)		1,528	1,105	331	1	1	0	0	1	58	30
	8	**TOTAL OPERATING REVENUES**		431,920	277,914	118,494	111	580	6	0	747	22,150	11,918
	9												
	10	**OPERATING EXPENSES**											
	11	Operation and Maintenance Expense Excl Pur Gas		144,391	106,071	30,306	105	109	1	9	59	5,268	2,464
	12	Depreciation and Amortization Expense		88,958	61,121	21,396	69	83	0	7	47	3,981	2,255
	13	Additional Bad Debt Expense		239	150	61	0	0	0	0	0	19	8
	14	Additional PUC / OTS & SBA Fee Expense		212	133	54	0	0	0	0	0	17	7
	15	Taxes Other Than Income Taxes-General		7,545	5,291	1,756	6	6	0	1	3	328	154
	16	Taxes Other Than Income Taxes-Distribution GRT		0	0	0	0	0	0	0	0	0	0
	17	**TOTAL OPERATING EXPENSES BEFORE TAXES**		241,345	172,765	53,573	180	200	1	17	109	9,613	4,887
	18	State and Federal Income Taxes @ Effective Tax Rate	-0.4995%	(952)	(525)	(324)	0	(2)	(0)	0	(3)	(63)	(35)
	19	State and Federal Income Taxes @ Statutory Rates											
	20	**TOTAL OPERATING EXPENSES**		240,393	172,240	53,248	180	198	1	17	106	9,550	4,852
	21												
	22	**NET OPERATING INCOME EXCL PURCHASED GAS**		191,527	105,674	65,245	(70)	382	5	(17)	641	12,600	7,066
	23												
	24												
	25	**Rate Base Excluding Purchased Gas**		2,458,260	1,684,764	595,511	2,118	2,037	10	178	1,083	119,729	52,830
	26												
	27	**PROPOSED RATE OF RETURN**		7.79%	6.27%	10.96%	-3.29%	18.77%	45.09%	-9.46%	59.20%	10.52%	13.37%
	28												
	29	**PROPOSED RELATIVE RATE OF RETURN**		**1.00**	**0.81**	**1.41**	**-0.42**	**2.41**	**5.79**	**-1.21**	**7.60**	**1.35**	**1.72**

I&E Exhibit No. 3
Schedule 14

PECO Energy Company
Gas Class Cost of Service Study
For Fully Projected Future Test Year Ended June 30, 2022 ($000'S)

LINE NO.	DESCRIPTION (A)	ALLOCATION BASIS (B)	TOTAL GAS DIVISION (C)	RESID (D)	GC (E)	LARGE (F)	MOTOR VEHICLE FIRM (G)	MOTOR VEHICLE INTER (H)	INTER SERV (I)	TEMP CONTROL (J)	TRANSP SERV FIRM (K)	TRANSP SERV INTER (L)
1	**OPERATING REVENUES**											
2	**INCREASE**		**68,723**	**66,662**	**(1,818)**	**35**	**(14)**	**(0)**	**0**	**(30)**	**2,549**	**1,338**
3	Distribution Base Rate Revenue (Present Rates)		361,580	233,528	100,579	75	475	5	0	690	16,719	9,509
4	**Total Dist Base Rate Revenue (Proposed Rate)**		430,303	300,191	98,761	110	461	5	0	660	19,268	10,847
5												
6	Forfeited Discounts Revenues		88	67	17	0	0	0	0	0	3	1
7	Other Operating Revenue (Present Rates)		1,528	1,105	331	1	1	0	0	1	58	30
8	**TOTAL OPERATING REVENUES**		431,919	301,363	99,109	111	462	5	0	662	19,329	10,878
9												
10	**OPERATING EXPENSES**											
11	Operation and Maintenance Expense Excl Pur Gas		144,391	106,071	30,306	105	109	1	9	59	5,268	2,464
12	Depreciation and Amortization Expense		88,958	61,121	21,396	69	83	0	7	47	3,981	2,255
13	Additional Bad Debt Expense		239	231	(6)	0	(0)	(0)	0	(0)	9	5
14	Additional PUC / OTS & SBA Fee Expense		212	205	(6)	0	(0)	(0)	0	(0)	8	4
15	Taxes Other Than Income Taxes-General		7,545	5,291	1,756	6	6	0	1	3	328	154
16	Taxes Other Than Income Taxes-Distribution GRT		0	0	0	0	0	0	0	0	0	0
17	**TOTAL OPERATING EXPENSES BEFORE TAXES**		241,345	172,919	53,446	180	199	1	17	109	9,594	4,880
18	State and Federal Income Taxes @ Effective Tax Rate	-0.4995%	(952)	(642)	(228)	0	(1)	(0)	0	(3)	(49)	(30)
19	State and Federal Income Taxes @ Statutory Rates											
20	**TOTAL OPERATING EXPENSES**		240,393	172,277	53,218	180	198	1	17	106	9,546	4,851
21												
22	**NET OPERATING INCOME EXCL PURCHASED GAS**		191,526	129,086	45,892	(70)	265	4	(17)	556	9,783	6,028
23												
24												
25	**Rate Base Excluding Purchased Gas**		2,458,260	1,684,764	595,511	2,118	2,037	10	178	1,083	119,729	52,830
26												
27	**PROPOSED RATE OF RETURN**		7.79%	7.66%	7.71%	-3.29%	12.99%	39.71%	-9.46%	51.34%	8.17%	11.41%
28												
29	**PROPOSED RELATIVE RATE OF RETURN**		**1.00**	**0.98**	**0.99**	**-0.42**	**1.67**	**5.10**	**-1.21**	**6.59**	**1.05**	**1.46**

PECO Energy Company
Proposed Revenue Allocation and Rates of Return by Rate Class

	Rate	Current Distribution Revenue *(a)*	Proposed Distribution Revenue	Increase In Distribution Revenue	GPC Reduction *(b)*	MFC Reduction *(c)*	Net Revenue Ask	Adjusted Proposed Distribution Revenue	% Increase
		(A)	(B)	(C = B - A)	(D)	(E)	(F = C + D + E)	(G = A+F)	(H = H / A)
1	Residential (GR)	$ 233,528,109	$ 300,190,557	$ 66,662,448	$ (693,000)	$ (800,000)	$ 65,169,448	$ 298,697,557	27.9%
2	General Service (GC)	$ 100,578,711	$ 98,760,403	$ (1,818,308)	$ (370,000)	$ (66,000)	$ (2,254,308)	$ 98,324,403	-2.2%
3	Outdoor Lighting (OL)	$ 423	$ 497	$ 74	$ -	$ -	$ -	$ 423	0.0%
4	Large High Load Factor (L)	$ 75,475	$ 110,172	$ 34,697	$ -	$ -	$ 34,697	$ 110,172	46.0%
5	Motor Vehicle Service - Firm (MV-F)	$ 474,506	$ 460,999	$ (13,508)	$ (7,000)	$ -	$ (20,508)	$ 453,999	-4.3%
6	Motor Vehicle Service - Interruptible (MV-I)	$ 5,022	$ 5,015	$ (7)	$ -	$ -	$ (7)	$ 5,015	-0.1%
7	Interruptible Service (IS)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
8	Temperature-Controlled Service (TCS)	$ 689,833	$ 660,178	$ (29,655)	$ -	$ -	$ (29,655)	$ 660,178	-4.3%
9	Gas Transportation - Interruptible (TS-I)	$ 9,508,783	$ 10,846,912	$ 1,338,129	$ -	$ -	$ 1,338,129	$ 10,846,912	14.1%
10	Gas Transportation - Firm (TS-F)	$ 16,719,224	$ 19,267,854	$ 2,548,631	$ -	$ -	$ 2,548,631	$ 19,267,854	15.2%
11	**Total**	$ 361,580,088	$ 430,302,588	$ 68,722,501	$ (1,070,000)	$ (866,000)	$ 66,786,501	$ 428,366,588	18.5%

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Office of Consumer Advocate
OCA Set I

Response Date: 10/30/2020

OCA-I-4

Rate Schedules OL (Outdoor Lighting Service) and NGS (Negotiated Gas Service) do not appear to be separated as separate classes in the Company's CCOSS. In this regard, please provide:

(a) an indication as to where (what classes) the rate base, expenses and revenues associated with these rate schedules are included in the Company's CCOSS; and,
(b) an itemization of each external class allocation factor for each of these two rate schedules.

RESPONSE:

(a) OL (Outdoor Lighting Service) is included in rate class GC (General Service – Commercial and Industrial). Negotiated Gas Service (NGS) is included in rate classes GC, TS-F (Gas Transportation Service – Firm), and TS-I (Gas Transportation Service – Interruptible), dependent on the specific rate that customers are served under.

(b) Costs associated with OL are included in rate class GC, while NGS costs are included in rate classes GC, TS-F, and TS-I as appropriate. PECO Exhibit JD-6 lists the external allocation factors for rate classes GC, TS-F, and TS-I. No separate external allocation factor was developed for OL and NGS.

Responsible Witness: Jiang Ding

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set IX

Response Date: 12/04/2020

IE-RS-10-D

Regarding the Company's negotiated or reduced rate customers, identify whether the Company has policy of verifying the competitive alternatives of those customers outside of when the contracts are signed. If yes, identify the policy and the time frame that the Company has for verifying the competitive alternatives.

RESPONSE:

The Company's contracts with negotiated rate customers do not include provisions to periodically verify each customer's original competitive alternative. They were negotiated based on the Company's evaluation of each customer's viable competitive alternative as they existed at the time of contract negotiation. However, when a contract with one of these customers approaches expiration, the Company re-evaluates that customer's existing viable competitive alternatives at that particular point in time before considering whether to negotiate a new or renewed contract with that customer.

Responsible Witness: Joseph A. Bisti

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set IX

Response Date: 12/04/2020

IE-RS-11-D

For each negotiated or reduced rate customers, provide the date each customers' alternate fuel source was last verified by either the Company or the customer.

RESPONSE:

The Company does not require customers to have an alternate fuel source to be eligible for a negotiated or reduced rate. Therefore, the Company has no records of related verification dates.

Responsible Witness: Joseph A. Bisti

I&E Exhibit No. 3-SR
Witness: Ethan H. Cline

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3019829

Exhibit to Accompany

the

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Rate Base
FPFTY Reporting Requirements
Cost of Service Study
Customer Cost Analysis
Revenue Allocation
Negotiated Rate Service
Scale Back of Rates

PECO Energy Company
Rate Base
R-2020-3018929
(in thousands)

Line No.	Description	Company Rebuttal Claim (A)	FPFTY I&E Adjustments (B)	I&E Recommendation (C)
1	Utility Plant	$3,537,669	-$47,625	$3,490,044
2	Accumulated Depreciation	$892,383	-$804	$891,579
3	Common Plant	$136,770	$0	$136,770
4	**Net Plant in Service**	$2,782,056	-$46,821	$2,735,235
	Additions:			
5	Working Capital	$3,437	$0	$3,437
6	Pension Assets / (Liabilities)	$35,059	$0	$35,059
7	Materials and Supplies	$444	$0	$444
8	Gas Storage	$31,156	$0	$31,156
9	**Total Additions:**	$70,096	$0	$70,096
	Deductions:			
10	Accumulated Deferred Income Taxes	$247,620	$0	$247,620
11	Customer Deposits	$13,400	$0	$13,400
12	Customer Advances for Construction	$1,255	$0	$1,255
13	ADIT - Reg Liability	$126,322	$0	$126,322
14	**Total Deductions:**	$388,597	$0	$388,597
15	**Total Measure of Value**	$2,463,555	-$46,821	$2,416,734
16	Depreciation Expense	$86,146	-$804	$85,342
17	Amortization Expense	$2,812	$0	$2,812
18	**Depreciation and Amortization Expense**	$88,958	-$804	$88,154

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set XIII

Response Date: 12/21/2020

IE-RB-8-D

Reference the Company's response to I&E-RB-4 regarding plant addition project descriptions. For each project listed on Attachment I&E-RB-4-D(a), reconcile the amounts listed in the column "Additions to Capital per Schedule C-2 for the FPFTY" with the amounts listed per account on PECO Exhibit MJT-1, Schedule C-2, p. 16 of 94. Identify the amount of each project that applies to each specific account number.

RESPONSE:

The Company's budget process uses one depreciation group per utility product (e.g., electricity, gas, transmission). The total in that depreciation group is then allocated to each utility account based on a 3-year average of historical additions for each utility account. As such, the budget process does not allocate at the project level but rather at the depreciation group level.

Responsible Witness: Robert J. Stefani

PECO Energy Company
Gas Class Cost of Service Study
For Fully Projected Future Test Year Ended June 30, 2022 ($000'S)

SCH	LINE NO.	DESCRIPTION	ALLOCATION BASIS	TOTAL GAS DIVISION	RESID	GC	LARGE	MOTOR VEHICLE FIRM	MOTOR VEHICLE INTER	INTER SERV	TEMP CONTROL	TRANSP SERV FIRM	TRANSP SERV INTER
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
	1	**OPERATING REVENUES**											
	2	**INCREASE**		**$64,257**	**$62,074**	**$0**	**$32**	**-$34**	**$0**	**-$2**	**$7**	**$1,515**	**$664**
	3	Distribution Base Rate Revenue (Present Rates)		$361,576	$234,455	$100,030	$75	$470	$3	$35	$682	$16,565	$9,262
	4	**Total Dist Base Rate Revenue (Proposed Rate)**		$425,833	$296,529	$100,030	$108	$436	$3	$33	$689	$18,080	$9,926
	5												
	6	Forfeited Discounts Revenues		$88	$67	$17	$0	$0	$0	$0	$0	$3	$1
	7	Other Operating Revenue (Present Rates)		$1,528	$1,105	$331	$1	$1	$0	$0	$1	$58	$30
	8	**TOTAL OPERATING REVENUES**		$427,450	$297,701	$100,378	$108	$437	$3	$33	$690	$18,141	$9,957
	9												
	10	**OPERATING EXPENSES**											
	11	Operation and Maintenance Expense Excl Pur Gas		$143,235	$105,486	$29,895	$105	$109	$1	$10	$58	$5,112	$2,460
	12	Depreciation and Amortization Expense		$88,958	$61,185	$21,430	$69	$84	$0	$7	$47	$3,878	$2,258
	13	Additional Bad Debt Expense		$229	$239	-$12	$1	$0	$0	$0	-$2	$5	-$2
	14	Additional PUC / OTS & SBA Fee Expense		$203	$212	-$11	$1	$0	$0	$0	-$2	$5	-$2
	15	Taxes Other Than Income Taxes-General		$7,545	$5,297	$1,759	$6	$6	$0	$1	$3	$319	$154
	16	Taxes Other Than Income Taxes-Distribution GRT		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	17	**TOTAL OPERATING EXPENSES BEFORE TAXES**		$240,170	$172,418	$53,061	$182	$198	$1	$18	$105	$9,319	$4,868
	18	State and Federal Income Taxes @ Effective Tax Rate	-0.482%	-$903	-$604	-$228	$0	-$1	$0	$0	-$3	-$43	-$25
	19	State and Federal Income Taxes @ Statutory Rates											
	20	**TOTAL OPERATING EXPENSES**		$239,267	$171,814	$52,833	$182	$197	$1	$18	$102	$9,277	$4,843
	21												
	22	**NET OPERATING INCOME EXCL PURCHASED GAS**		$188,183	$125,887	$47,545	-$74	$240	$2	$15	$588	$8,864	$5,114
	23												
	24												
	25	**Rate Base Excluding Purchased Gas**		$2,459,873	$1,687,913	$597,037	$2,125	$2,042	$10	$180	$1,085	$116,510	$52,971
	26												
	27	**PROPOSED RATE OF RETURN**		7.65%	7.46%	7.96%	-3.46%	11.76%	19.20%	8.51%	54.23%	7.61%	9.65%
	28												
	29	**PROPOSED RELATIVE RATE OF RETURN**		**1.00**	**0.97**	**1.04**	**-0.45**	**1.54**	**2.51**	**1.11**	**7.09**	**0.99**	**1.26**

I&E Exhibit No. 3-SR
Schedule 4

PECO Energy Company
Proposed Revenue Allocation and Rates of Return by Rate Class

	Rate	Current Distribution Revenue *(a)*	Proposed Distribution Revenue	Increase In Distribution Revenue	GPC Reduction *(b)*	MFC Reduction *(c)*	Net Revenue Ask	Adjusted Proposed Distribution Revenue	% Increase
		(A)	(B)	(C = B - A)	(D)	(E)	(F = C + D + E)	(G = A+F)	(H = H / A)
1	Residential (GR)	$234,493,528	$298,060,650	$63,567,121	-$693,000	-$800,000	$62,074,121	$296,567,650	26.5%
2	General Service (GC)	$100,029,711	$100,465,726	$436,014	-$370,000	-$66,000	$14	$100,029,726	0.0%
3	Outdoor Lighting (OL)	$414	$398	-$16	$0	$0	$0	$414	0.0%
4	Large High Load Factor (L)	$75,475	$107,903	$32,428	$0	$0	$32,428	$107,903	43.0%
5	Motor Vehicle Service - Firm (MV-F)	$469,852	$442,803	-$27,049	-$7,000	$0	-$34,049	$435,803	-7.2%
6	Motor Vehicle Service - Interruptible (MV-I)	$2,676	$2,972	$296	$0	$0	$296	$2,972	11.1%
7	Interruptible Service (IS)	$34,964	$32,897	-$2,068	$0	$0	-$2,068	$32,897	0.0%
8	Temperature-Controlled Service (TCS)	$681,833	$688,708	$6,875	$0	$0	$6,875	$688,708	1.0%
9	Gas Transportation - Interruptible (TS-I)	$9,261,536	$10,776,981	$1,515,445	$0	$0	$1,515,445	$10,776,981	16.4%
10	Gas Transportation - Firm (TS-F)	$16,564,871	$17,229,205	$664,334	$0	$0	$664,334	$17,229,205	4.0%
11	**Total**	$361,614,860	$427,808,242	$66,193,381	-$1,070,000	-$866,000	$64,257,381	$425,872,242	17.8%

I&E Exhibit No. 4
Witness: Elena Bozhko
NON-PROPRIETARY VERSION

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY

Docket No. R-2020-3018929

Exhibit to Accompany

the

Direct Testimony

of

Elena Bozhko

Bureau of Investigation & Enforcement

Concerning:

DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM
LEAK MANAGEMENT
FACILITY EXCAVATION DAMAGE

CONFIDENTIAL

CONFIDENTIAL

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-1-D

Reference gas "distribution system" on page 4 lines 8-11 of PECO Statement No 1. For each year from 2015 through 2019:

A. Provide a schedule in Excel format showing the total miles of main by pressure, size and pipe material (categorized by corrosion protection status, including "once protected", when applicable);

B. Provide a schedule in Excel format showing the total number of services by pressure, size and pipe material (include corrosion protection status when applicable).

RESPONSE:

In response to (A) see Confidential Attachment IE-GS-1-D(a). In response to (B) see Confidential Attachment IE-GS-1-D(b).

THE CONFIDENTIAL ATTACHMENTS ARE BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-1-D

Reference gas "distribution system" on page 4 lines 8-11 of PECO Statement No 1. For each year from 2015 through 2019:

A. Provide a schedule in Excel format showing the total miles of main by pressure, size and pipe material (categorized by corrosion protection status, including "once protected", when applicable);

B. Provide a schedule in Excel format showing the total number of services by pressure, size and pipe material (include corrosion protection status when applicable).

RESPONSE:

In response to (A) see Confidential Attachment IE-GS-1-D(a). In response to (B) see Confidential Attachment IE-GS-1-D(b).

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Responsible Witness: Ronald A. Bradley

[CONTAINS PROTECTED MATERIALS]
Confidential Attachment IE-GS-1-D(b)
Page 1 of 1

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-3-D

Reference distribution system leaks on page 15 of PECO Statement No 1. For each year from 2015 through 2019:

A. Provide a schedule in Excel format showing the total leaks found and repaired on mains by leak grade, pipeline size, pressure, installation date and material (categorized by corrosion protection status, including "once protected", when applicable); for all repaired leaks provide the cause of failure.

B. Provide a schedule in Excel format showing the total leaks found and repaired on services by leak grade, pipeline size, pressure, installation date and material (include corrosion protection status when applicable); for all repaired leaks provide the cause of failure.

C. Provide a schedule in Excel format showing the company's current total leaks on mains by leak grade, pipeline size, pressure, installation date and material (categorized by corrosion protection status, including "once protected", when applicable); and

D. Provide a schedule in Excel format showing the company's current total leaks on services by leak grade, pipeline size, pressure, installation date and material (including corrosion protection status when applicable).

E. Provide a schedule in Excel format showing number of known system leaks at the end of the year by leak grade, facility type, pipeline size, pressure, installation date and material (including corrosion protection status when applicable).

RESPONSE:

In response to (A) see Confidential Attachment IE-GS-3-D(a).

In response to (B) see Confidential Attachment IE-GS-3-D(b).

In response to (C) and (D) see Confidential Attachment IE-GS-3-D(c). Current Leak data as of 11/05/2020. Please note, leak tracking does not track pressure, installation date or material and does not make an association to an asset for an open leak. Pressure, installation date or material are tracked when leak is repaired.

In response to (E) see Confidential Attachment IE-GS-3-D(d). Please note, leak tracking does not differentiate between main and service leaks for open leaks.

THE CONFIDENTIAL ATTACHMENTS TO THIS RESPONSE ARE BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-3-D

Reference distribution system leaks on page 15 of PECO Statement No 1. For each year from 2015 through 2019:

A. Provide a schedule in Excel format showing the total leaks found and repaired on mains by leak grade, pipeline size, pressure, installation date and material (categorized by corrosion protection status, including "once protected", when applicable); for all repaired leaks provide the cause of failure.

B. Provide a schedule in Excel format showing the total leaks found and repaired on services by leak grade, pipeline size, pressure, installation date and material (include corrosion protection status when applicable); for all repaired leaks provide the cause of failure.

C. Provide a schedule in Excel format showing the company's current total leaks on mains by leak grade, pipeline size, pressure, installation date and material (categorized by corrosion protection status, including "once protected", when applicable); and

D. Provide a schedule in Excel format showing the company's current total leaks on services by leak grade, pipeline size, pressure, installation date and material (including corrosion protection status when applicable).

E. Provide a schedule in Excel format showing number of known system leaks at the end of the year by leak grade, facility type, pipeline size, pressure, installation date and material (including corrosion protection status when applicable).

RESPONSE:

In response to (A) see Confidential Attachment IE-GS-3-D(a).

In response to (B) see Confidential Attachment IE-GS-3-D(b).

In response to (C) and (D) see Confidential Attachment IE-GS-3-D(c). Current Leak data as of 11/05/2020. Please note, leak tracking does not track pressure, installation date or material and does not make an association to an asset for an open leak. Pressure, installation date or material are tracked when leak is repaired.

In response to (E) see Confidential Attachment IE-GS-3-D(d). Please note, leak tracking does not differentiate between main and service leaks for open leaks.

THE CONFIDENTIAL ATTACHMENTS TO THIS RESPONSE ARE BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-3-D

Reference distribution system leaks on page 15 of PECO Statement No 1. For each year from 2015 through 2019:

A. Provide a schedule in Excel format showing the total leaks found and repaired on mains by leak grade, pipeline size, pressure, installation date and material (categorized by corrosion protection status, including "once protected", when applicable); for all repaired leaks provide the cause of failure.

B. Provide a schedule in Excel format showing the total leaks found and repaired on services by leak grade, pipeline size, pressure, installation date and material (include corrosion protection status when applicable); for all repaired leaks provide the cause of failure.

C. Provide a schedule in Excel format showing the company's current total leaks on mains by leak grade, pipeline size, pressure, installation date and material (categorized by corrosion protection status, including "once protected", when applicable); and

D. Provide a schedule in Excel format showing the company's current total leaks on services by leak grade, pipeline size, pressure, installation date and material (including corrosion protection status when applicable).

E. Provide a schedule in Excel format showing number of known system leaks at the end of the year by leak grade, facility type, pipeline size, pressure, installation date and material (including corrosion protection status when applicable).

RESPONSE:

In response to (A) see Confidential Attachment IE-GS-3-D(a).

In response to (B) see Confidential Attachment IE-GS-3-D(b).

In response to (C) and (D) see Confidential Attachment IE-GS-3-D(c). Current Leak data as of 11/05/2020. Please note, leak tracking does not track pressure, installation date or material and does not make an association to an asset for an open leak. Pressure, installation date or material are tracked when leak is repaired.

In response to (E) see Confidential Attachment IE-GS-3-D(d). Please note, leak tracking does not differentiate between main and service leaks for open leaks.

THE CONFIDENTIAL ATTACHMENTS TO THIS RESPONSE ARE BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Ronald A. Bradley

[Confidential Attachment]
IE-GS-3-D(d)
Page 1 of 1

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set X

Response Date: 12/10/2020

IE-GS-36

Reference PECO's response to I&E-GS-3-D(b). For "pipe size" column in a spreadsheet provided, confirm that:

- size 0.5.5 represent 0.5" diameter service line,
- size 0.5.75 represent 0.75" diameter service line,
- PECO has service lines of 6", 8", 10.5", 12", 16" and 20.5" diameters as reported.

RESPONSE:

Size 0.5.5 represents 0.5" diameter service line, and 0.5.75 represents 0.75" diameter service line. PECO has services lines of 6", 8", 10", 12", 16" and 20". In the report, 10.5 and 20.5 represent 10" and 20" service lines, respectively.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-13-D

Reference PA One Call requests on page 6 of PECO Statement No. 2. For gas operations for each year, from 2010 through 2019, provide in Excel format the following:

A. The total tickets received;

B. The total tickets marked per KARL response;

C. The total number of line hits; and

D. The total tickets cleared per KARL response.

RESPONSE:

Please see Confidential Attachment IE-GS-13-D(a).

As noted in the Attachment, the KARL data response as requested in (B) and (D)are not available prior to 2016.

THE CONFIDENTIAL ATTTACHMENT IS BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Ronald A. Bradley

[CONTAINS PROTECTED MATERIALS]
Confidential Attachment IE-GS-13-D(a)

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-14-D

Reference facility damages on page 19 of PECO Statement No. 1. For each year, from 2015 through 2019, provide a breakdown in Excel format of the damages, including information on facility type, size, pressure, installation date and material, by:

A. Mapping errors;
B. Poor records;
C. Facilities not marked;
D. Facilities marked incorrectly;
E. Excavator failed to expose the facilities;
F. No locates requested;
G. Insufficient notifications;
H. Deliberate;
I. Natural forces;
J. Excavator error; and
K. If other, explain.

RESPONSE:

Please see Confidential Attachment IE-GS-14-D (a), pages 1 through 5. As it pertains to damage claims, PECO does not track pressure or installation date of the damaged pipe.

THE CONFIDENTIAL ATTACHMENTS TO THIS RESPONSE ARE BEING PROVIDED ONLY SUBJECT TO THE EXECUTION OF A SUITABLE STIPULATED PROTECTIVE AGREEMENT WITH THE RECIPIENT PENDING THE ISSUANCE OF A PROTECTIVE ORDER IN THIS CASE. PECO WILL PROVIDE A STIPULATED PROTECTIVE AGREEMENT DEEMED SUITABLE TO THE COMPANY FOR

EXECUTION, WHICH IS SIMILAR TO THE STIPULATED PROTECTIVE AGREEMENT EMPLOYED IN PECO'S PRIOR BASE RATE CASE.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Office of Consumer Advocate
OCA Set XI

Response Date: 12/11/2020

OCA-XI-3

Reference the Company's settlement with the PUC's Bureau of Investigation and Enforcement as approved by the PUC in Docket No. C-2015-2479970 (entered October 27, 2016) ("Penrose Lane Settlement").

a. Confirm that the Company agreed to "develop a gas mapping plan" and make investments in "mapping system enhancements" as a condition of the Penrose Lane Settlement.
b. When did the Company commence the gas mapping activities described in Paragraph 22 of the Penrose Lane Settlement?
c. When does the Company project it will complete the mapping program?
d. Identify the dates of the Company's most recent four meetings with the Commission's Gas Safety Division, pursuant to the Penrose Lane Settlement.
e. Provide copies of the Company's presentations to the Commission's Gas Safety Division in the most recent four meetings. (Excluding any confidential security information.)

RESPONSE:

a. PECO did agree to develop a gas mapping program geared at enhancing PECO infrastructure maps as part of the Penrose Lane Settlement.
b. PECO's Gas Mapping Program officially began in 2018.
c. PECO's Gas Mapping Program is projected to be complete by the end of 2037.

d. PECO provides quarterly updates to the Pennsylvania Public Utility Commission Safety Division. The most recent dates of communication occurred on:

  a. January 8, 2020
  b. April 9, 2020
  c. July 10, 2020
  d. October 6, 2020

e. Refer to Confidential Attachment OCA-XI-3(a) through Confidential Attachment OCA-XI-3(d) for materials sent to the Pennsylvania Public Utility Commission Safety Division.

THE ATTACHMENTS ARE CONFIDENTIAL AND ARE PROVIDED ONLY TO THOSE WHO HAVE EXECUTED NON-DISCLOSURE AGREEMENTS UNDER PROTECTIVE ORDER.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set X

Response Date: 12/10/2020

IE-GS-40

Reference PECO's response to I&E-GS-8 and the discussion regarding the Gas Mapping Plan. Provide detailed explanation on how the program is set up. What is a challenge point? Include information on when was it implemented, how many service line locations and challenge points were identified, annual targets for resolving discrepancies for each category and completion metrics. How are the review updates of legacy records prioritized? How many records remain to be reviewed?

RESPONSE:

The Gas Mapping Program's purpose-is to investigate and correct known or suspected gas asset mapped locations to within seven inches of real world coordinates. The Gas Mapping Process provides guidelines to manage the Gas Mapping Program utilizing the Field Data Capture, Gas Mapping Investigation and Maintenance, and Gas Mapping Program Controls Processes.

1. The Field Data Capture Process defines the roles and responsibilities for use of the field data capture technology including arrival on site, installing new assets, locating legacy assets, repairing or replacing assets, completing field forms, and closing out the job.
2. The Gas Mapping Investigation Process defines and executes the work streams associated with locating gas assets to a higher degree of accuracy. This work includes assignment, field execution, quality review, and approval responsibilities.
3. The Gas Mapping Maintenance Process manages the scope initiation, prioritization, assignment, quality review, and system of record update phases.
4. The Gas Mapping Program Controls Process outlines the monitoring and control of the Program.

A challenge point is defined as:

- An issue identified during the gas quad conversion project where the gas asset location was questionable and required further investigation beyond the scope of that project
- New issues identified where a gas asset location was questionable and required further investigation

The 20-yr program started January 2018 and the team has completed 18,540 of 145,000 service locations and 1,610 of 9,606 challenge points to date, which is 13% and 17% complete respectively.

Areas were ranked to have the greatest potential to reduce at-fault damages. The ranking equals the number of at-fault damages by the number of challenge points by footage of non-outmoded main divided by total miles of main within a political sub.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set X

Response Date: 12/15/2020

IE-GS-43

Reference PECO's response to I&E-GS-13-D(a). Please reconcile number of "Total Tickets Received" with the "Total Tickets Marked Per Karl" and "Total Tickets Cleared per KARL Response." For example, in 2019 "total tickets received" is reported as 237,964, but the summary of "total tickets marked" and "total tickets cleared per KARL Response" is 221,841. Provide clarification on what causes the discrepancy for each year from 2016 to 2019.

RESPONSE:

As shown in Confidential Attachment IE-GS-43(a), all Categories, inclusive of tickets "Marked per KARL" (Section 1B) and "Tickets cleared per KARL" (Sections 1C) add up to the "Total Tickets Received" (Section 1D). The use of the term "total" in the IE-GS-13D(a) was used to express the "total" in a specific category.

Confidential Attachment IE-GS-43(a) provides a breakdown of One-Call Tickets Received categories, by year.

THE ATTACHMENTS ARE CONFIDENTIAL AND ARE PROVIDED ONLY TO THOSE WHO HAVE EXECUTED NON-DISCLOSURE AGREEMENTS UNDER PROTECTIVE ORDER.

Responsible Witness: Ronald A. Bradley

Pennsylvania Public Utility Commission
v.
PECO Energy Company – Gas Division

Docket No. R-2020-3018929

Response of PECO Energy Company
To Interrogatories of the
Bureau of Investigation and Enforcement
IE Set VI

Response Date: 11/13/2020

IE-GS-2-D

Reference gas distribution facilities replacement on page 16 of PECO Statement No 1. For each year from 2015 through 2019:

A. Provide a schedule in Excel format showing the total miles of main replaced by pressure, size and pipe material (categorized by corrosion protection status, including "once protected", when applicable);

B. Provide a schedule in Excel format showing the total number of services replaced by pressure, size and pipe material (include corrosion protection status when applicable).

RESPONSE:

In response to (A) see Confidential Attachment IE-GS-2-D(a). In response to (B) see Confidential Attachment IE-GS-2-D(b).

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Responsible Witness: Ronald A. Bradley

I&E Exhibit No. 4 - SR
Witness: Elena Bozhko
NON-PROPRIETARY VERSION

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY

Docket No. R-2020-3018929

Exhibit to Accompany

the

Direct Testimony

of

Elena Bozhko

Bureau of Investigation & Enforcement

Concerning:

DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM
LEAK MANAGEMENT
FACILITY EXCAVATION DAMAGE

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

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I&E Statement No. 1
Witness: D. C. Patel

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY - GAS DIVISION

Docket No. R-2020-3018929

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

RATE BASE

CASH WORKING CAPITAL

TABLE OF CONTENTS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel, and my business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND?

A. An outline of my education and employment background is set forth in the attached Appendix A.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for protecting the public interest in proceedings before the Commission. I&E's analysis in the proceeding is based on its responsibility to represent the public interest. This responsibility requires the balancing of the interests of ratepayers, the regulated utility, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to review the base rate filing of PECO Energy Company - Gas Division (PECO or Company) and make recommended adjustments to the Company's proposed operating and maintenance (O&M) expenses, rate base, and cash working capital claims for the fully projected future test year (FPFTY) ending June 30, 2022.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 1 contains schedules that support my direct testimony.

Q. WHAT TEST YEARS IS PECO USING IN THIS PROCEEDING?

A. PECO is using the twelve months ended June 30, 2020 as the historic test year (HTY), the twelve months ending June 30, 2021 as the future test year (FTY), and the twelve months ending June 30, 2022 as the FPFTY in this proceeding (PECO Statement No. 1, p. 8).

Q. WHAT IS PECO'S REQUESTED REVENUE INCREASE?

A. PECO is requesting an annual total revenue increase of $68,812,000 for its gas operations (PECO Exhibit MJT-1, Schedule A-1, p. 1).

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS.

A. The following table summarizes my recommended adjustments:

	Company Claim	**I&E Recommended Allowance**	**I&E Adjustment**
O&M Expenses:			
Rate Case Expense	$520,000	$311,800	($208,200)
Payroll Expense	$42,209,000	$41,350,285	($858,715)
Employee Benefits	$5,918,000	$5,797,603	($120,397)
Payroll Taxes	$3,776,000	$3,699,145	($76,855)
Outside Services (net of cost to achieve)	$16,572,000	$13,437,856	($3,134,144)
Cost to Achieve	$370,000	$0	($370,000)
Employee Activity Cost	$139,402	$58,469	($80,933)
Industry Org. Memberships	$655,897	$559,304	($96,593)
Regulatory Initiative Cost	$753,000	$451,600	($301,400)
Energy Efficiency & Conservation	$4,500,000	$2,727,500	($1,772,500)
Contracting/Materials	$42,955,000	$32,940,000	($10,015,000)
Travel Meals and Entertainment	$1,032,000	$862,153	($169,847)
Other Post-Employment Benefits	$1,050,000	$270,000	($780,000)
Total O&M Adjustments			**($17,984,584)**
Rate Base Adjustments:			
Pension Asset	$35,059,000	$0	($35,059,000)
Cash Working Capital	$3,223,000	$2,902,236	($320,764)
Total Rate Base Adjustments			**($35,379,764)**

OVERALL I&E POSITION

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT?

A. I&E's total recommended revenue requirement for the Company is $618,430,000. This recommended revenue requirement represents an increase of $28,650,000 to the claimed present rate revenues of $589,780,000. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses and rate base, and those recommended adjustments made in the testimonies of I&E witnesses Christopher Keller (I&E Statement No. 2), and Ethan Cline (I&E Statement No. 3).

A calculation of the I&E recommended revenue requirement is shown below:

PECO Energy Company - Gas Division		TABLE I			
R-2020-3018929		INCOME	SUMMARY		
(In Thousands)					
	6/30/22	INVESTIGATION & ENFORCEMENT			
	Proforma	[---			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	589,780	0	589,780	28,650	618,430
Deductions:					
O&M Expenses	371,101	-17,985	353,116	99	353,215
Depreciation	88,958	-804	88,154		88,154
Taxes, Other	7,545	0	7,545	88	7,633
Income Taxes:					
Current State	0	2,031	2,031	2,843	4,874
Current Federal	-10,805	3,841	-6,964	5,380	-1,584
Deferred Taxes	-7,915	0	-7,915		-7,915
ITC	-64	0	-64		-64
Total Deductions	448,820	-12,917	435,903	8,410	444,313
Income Available	140,960	12,917	153,877	20,239	174,116

RATE CASE EXPENSE

Q. BRIEFLY DESCRIBE THE NATURE AND TYPES OF EXPENDITURES TYPICALLY ALLOWED AS A PART OF A REGULATED UTILITY'S OVERALL RATE CASE EXPENSE.

A. The nature and types of individual expenditures that comprise a utility's allowable claim for rate case expense are those directly incurred to compile, present, and defend a utility's request for a base rate increase before the Commission. The actual expenditures and estimated costs typically found in an allowable rate case expense claim include legal fees for outside counsel, fees to outside consultants, and the cost of printing, document assembly, and postage.

Q. HOW HAS THE COMMISSION TRADITIONALLY TREATED RATE CASE EXPENSE FOR RATEMAKING PURPOSES?

A. The Commission has historically stated that it considers prudently incurred rate case expense as an ongoing expense, occurring at irregular intervals, related to the rendering of utility service. The Commission has also cited the importance of considering the involved utility's history regarding the frequency of rate case filings as an essential element to determine the normalized level of rate case expense for ratemaking purposes.

Q. HOW IS THE FREQUENCY OF RATE CASE FILINGS DETERMINED?

A. The frequency is determined by calculating the average number of months between the utility's previous rate case filings.

Q. WHAT IS THE COMPANY'S CLAIM FOR RATE CASE EXPENSE?

A. The Company's claim for rate case expense is $520,000 (PECO Exhibit MJT-1, Schedule D-7, p. 68).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company has estimated its total rate case expense amount to be $1,559,000 and is requesting an amortization period of three years (36 months). In response to I&E-RE-35-D(c), the Company states that the rate case expense is one-time expense associated with this filing, and therefore, amortized over a three-year period to reflect the Company's intention to file its next gas base rate case within a 36-month period of the current filing (I&E Exhibit No. 1, Schedule 1, pp. 1-3). This results in the rate case expense claim of $520,000 ($1,559,000 ÷ 3) in the FPFTY (PECO Exhibit MJT-1, Schedule D-7, p. 68).

Q. IN THE FILING, THE COMPANY REFERENCES ITS CLAIM AS AN AMORTIZATION OF EXPENSE. BRIEFLY DISCUSS THE CONCEPT OF AMORTIZATION.

A. Amortization is an accounting procedure that extinguishes atypical, nonrecurring expense over a predetermined number of years by charging to operations a pro-rata share based on the selected amortization period. Although a claim for an unrecovered normalized expense would be disallowed if requested in a subsequent rate case, an amortization expense could be claimed in succeeding rate cases as long as there is a remaining unamortized balance.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED AMORTIZATION OF RATE CASE EXPENSE?

A. No. Rate case expense should be normalized for ratemaking purposes.

Q. WHAT IS NORMALIZATION?

A. Normalization is a ratemaking concept that describes the transformation of an operating expense that recurs at irregular intervals into a "normal" annual test year allowance. Normalization specifically addresses the prospective recovery of an ongoing expense that recurs sporadically. Normalized expenses are no different than any other O&M expense in that the Company is given the opportunity to achieve full recovery.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR RATE CASE EXPENSE?

A. I recommend that the Company's rate case expense be normalized over a period of 60 months (five years) resulting in an annual expense of $311,800 (($1,559,000 ÷ 60 months) x 12 months), or a reduction of $208,200 ($520,000 - $311,800) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. First, as discussed above, I recommend normalization of rate case expense in contrast to the Company's claimed amortization of rate case expense.

Second, I disagree with the Company's claimed 36-month amortization period, because it is not supported by the Company's historic filing frequency. The proposed amortization period fails to properly rely upon the historic data and is speculative in nature. In contrast to the Company's claimed 36-month amortization period, I recommend a 60-month normalization period, which is reasonable and validated by the Company's recent filing history. In response to I&E-RE-36-D (I&E Exhibit No. 1, Schedule 1, p. 4), the Company provided information about its last three historic base rate case filings as shown in the table below:

Docket No.	Filing Date	Filing Interval-Months	Average of Three Intervals
R-2020-3018929	9/30/2020	126	134
R-2010-2161592	3/31/2010	24	
R-2008-2028394	3/31/2008	251	
R-870629	4/16/1987		

The average of historic filing frequency is 134 months ((126 + 24 + 251) = 401 ÷ 3), which supports a normalization period of 11 years. However, dropping off the oldest case in my analysis above results in support for a 75-month ((125 + 24) = 149 ÷ 2) or slightly over six-year normalization period as compared to my more moderated normalization recommendation of five years (or 60 months). My recommended 60-month normalization period moderates the impact of the exceptionally longer actual historic filing frequency. Additionally, there is no reasonable support to indicate that the Company will file another rate case in 36 months.

Q. HAVE OTHER UTILITIES BEEN GRANTED A NORMALIZATION PERIOD BASED ON SPECULATION OF FUTURE FILINGS, AND IF SO, WHAT WAS THE RESULT?

A. Yes. In 2012, the Commission granted PPL Electric Utilities Corporation (PPL) permission to normalize its rate case expense over a 24-month period based on the expected timing of future base rate case filings.[1] That particular base rate case was filed on March 30, 2012; however, PPL did not file its next rate case until March 31, 2015, which was 36 months after the 2012 rate case filing. It should be noted that I&E's recommended normalization period in the 2012 PPL proceeding was a 32-month interval based on the Company's historic filing frequency.[2] I&E's

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[1] PA PUC v. PPL Electric Utilities Corporation, Docket No. R-2012-2290597, pp. 47-48 (Order Entered December 28, 2012).

[2] I&E Statement No. 2, pp. 13-14 at Docket No. R-2012-2290597.

recommendation in that instance produced a much more accurate result than the Company's stated future intention to file a rate case.

Q. ARE THERE ANY RECENT COMMISSION DECISIONS THAT SUPPORT YOUR RECOMMENDATION FOR A RATE CASE FILING INTERVAL BASED ON HISTORIC FILING FREQUENCY?

A. Yes. In a recent base rate case filed by Emporium Water Company, the Commission adopted I&E's recommended historic filing frequency.[3] Additionally, in an even more recent decision, the City of DuBois base rate case, the Commission agreed with I&E's recommendation to use an historic filing frequency.[4]

In the Emporium Water Company base rate case, the Commission found in favor of I&E's recommendation of a five-year (60-month) normalization period based on an historic average filing frequency that was rounded down from 64 months. Additionally, in the City of DuBois case, the Commission found in favor of I&E's recommended 64-month normalization period, which matched the actual historic filing frequency.

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[3] PA PUC v. Emporium Water Company, Docket No. R-2014-2402324, p. 50 (Order Entered January 28, 2015).

[4] PA PUC v. City of DuBois - Bureau of Water, Docket No. R-2016-2554150, pp. 65-66 (Order Entered March 28, 2017) and PA PUC v. City of DuBois - Bureau of Water, Docket No. R-2016-2554150, p. 13 (Order Entered May 18, 2017).

Q. GIVEN THESE COMMISSION ORDERS AND THE COMPANY'S FILING HISTORY, IS THE CLAIMED THREE YEAR RECOVERY PERIOD REASONABLE?

A. No. Again, even removing the eleven-year outlier, the Company has not demonstrated that it files base rate cases on a three-year basis. My five-year normalization recommendation is in the public interest as it moderates the Company's long periods between rate cases filings while also being long enough to protect customers from paying unreasonable rate case expenses in their rates.

<u>PAYROLL EXPENSE</u>

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR PAYROLL EXPENSE?

A. The Company's payroll expense claim includes salaries and wages, overtime, paid time off, and other premium pay as shown in the breakdown provided in response to I&E-RE-34-D(b) (I&E Exhibit No. 1, Schedule 2, pp. 1-3). Payroll expense is distributed to various categories of O&M expense items by FERC account as shown in the filing (PECO Exhibit MJT-1, Schedule D-6. pp. 66-67).

Q. WHAT IS THE COMPANY'S CLAIM FOR PAYROLL EXPENSE?

A. The Company is claiming payroll expense of $42,209,000 in the FPFTY (PECO Exhibit MJT-1, Schedule D-6, p. 65).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company's claim for payroll expense is based on the HTY payroll cost of 602 full time employees charged to FERC accounts, which is adjusted to reflect 639 full time employees (including an anticipated increase in filled positions) at the end of the FPFTY, and a 2.5% annual normal increase in salaries and wages for union and non-union employees (PECO Statement No. 3, pp. 33-36 and Exhibit MJT-1, Schedule D-6. pp. 64-65).

Q. DO YOU AGREE WITH THE COMPANY'S PAYROLL EXPENSE CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND?

A. I recommend an allowance of $41,350,285 for payroll expense, or a reduction of $858,715 ($42,209,000 - $41,350,285) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A I am adjusting the payroll expense for the employees' unfilled (vacant) positions that are budgeted in the FPFTY claim.

Q. PLEASE EXPLAIN YOUR RECOMMENDED VACANCY ADJUSTMENT.

A. My recommended vacancy adjustment is based on an average normal vacancy rate experienced in the fiscal years ended June 30, 2018; June 30, 2019; and June 30, 2020. For determining an average annual vacancy rate, first I reviewed the Company's history of actual monthly filled positions and budgeted positions for those three fiscal years and calculated a monthly vacancy rate based on actual filled positions relative to the budgeted position information provided in the Company's response to I&E-RE-20-D(a) Attachment (I&E Exhibit No. 1, Schedule 2, pp. 4-6). I then determined an annual vacancy rate by averaging the monthly vacancy rate and then averaged three years' vacancy rates of the three fiscal years, as summarized in the table below:

Fiscal Year Ended	**Annual Vacancy Rate**
June 30, 2018	1.78%
June 30, 2019	1.17%
June 30, 2020	3.34%
Average Vacancy Rate	2.10%

The average of the annual employee vacancy rate of 2.10% ((1.78% + 1.17% + 3.34%) ÷ 3) produced an amount of 13 (rounded) (FPFTY budgeted employee count: 639 x vacancy rate: 0.021) employees unfilled/vacant positions for the FPFTY. Lastly, multiplying 13 unfilled/vacant positions by the average annual payroll cost of $66,055 ($42,209,000 ÷ 639) per employee yields the payroll adjustment of $858,715, which is summarized in the table below:

	CALCULATION	RESULT
EMPLOYEE VACANCY RATE:		
Average annual vacancy rate for fiscal years ended June 30, 2018, 2019, and 2020		2.10%
FPFTY budgeted employee count		639
Projected employee vacancies	639 x 0.021	13
EMPLOYEE PAYROLL EXPENSE:		
FPFTY payroll expense		$42,209,000
Average per employee annual payroll expense	$42,209,000 ÷ 639	$66,055
Total payroll expense reduction for vacancies	$66,055 x 13	$858,715
Payroll expense allowance		$41,350,285

Q. EXPLAIN YOUR RATIONALE FOR THE VACANCY ADJUSTMENT.

A. The Company budgeted its payroll expense based on the average employee count of 639 at the end of the FPFTY as compared with the HTY employee count of 602 employees, which includes 37 anticipated additional new employees in the FPFTY (PECO Exhibit MJT-1, Schedule D-6, pp. 64-65). It is unreasonable to assume that the Company will fill and maintain 100% full staffing of 639 budgeted positions in the FPFTY based on its own historic vacancy records of the fiscal years ended June 30, 2018, 2019, and 2020. As discussed above, the Company will have a normal vacancy rate of 2.10% in the FPFTY. Even at the end of the first quarter in the FTY, the Company experienced an average 4.18% vacancy rate. These historic vacancy records support my recommended 13 vacant positions based on an average vacancy rate of 2.10% for an adjustment to payroll expense.

With the current COVID-19 pandemic, the Company may continue to face challenges to fill all positions as budgeted in the FTY and FPFTY. Additionally, there will always be a certain level of normal vacancies due to retirements, resignations, transfers, layoffs, etc., on a day-to-day operating basis, which are unpredictable and there will always be search and placement time involved in filling employee normal vacancies as well as new employee positions. Such vacancies will yield an annual savings in payroll costs that needs to be reflected for ratemaking to eliminate an unreasonable impact in the rates.

<u>EMPLOYEE BENEFITS</u>

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR EMPLOYEE BENEFITS EXPENSE?

A. The employee benefits claim includes insurance premium costs for health (medical) and dental, and the costs for 401K plan, disability plan, workers' compensation, and other benefits.

Q. WHAT IS THE COMPANY'S CLAIM FOR EMPLOYEE BENEFITS EXPENSE?

A. The Company is claiming employee benefits expense of $5,918,000 in the FPFTY (PECO Exhibit MJT-1, Schedule D-8. p. 69).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company's FPFTY claim for employee benefits expense is based on the HTY expense and a budgeted employee count of 639 at the end of the FPFTY (I&E Exhibit No. 1, Schedule 3, pp. 1-3).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM FOR EMPLOYEE BENEFITS EXPENSE?

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR EMPLOYEE BENEFITS?

A. I recommend an allowance of $5,797,603 for benefits expense, or a reduction of $120,397 ($5,918,000 - $5,797,603) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on a reduction related to my recommended vacancy adjustment explained in the payroll section above.

Q. PLEASE EXPLAIN HOW YOU CALCULATED YOUR RECOMMENDED ALLOWANCE.

A. I calculated my FPFTY recommended allowance of $5,797,603 for employee benefits expense based on a vacancy rate of 13 positions discussed in the payroll section above. Accordingly, I am recommending an adjustment of $120,397 (($5,918,000 ÷ 639) x 13) to the FPFTY benefits expense claim of $5,918,000.

PAYROLL TAXES

Q. WHAT IS INCLUDED IN PAYROLL TAXES?

A. Payroll taxes generally fall into two categories: deductions from employees' salaries and wages, and taxes paid by the employer based on employees' salaries and wages. The Company has made a claim in this filing for its share of those payroll taxes (social security and Medicare taxes, federal unemployment tax, and state unemployment tax).

Q. WHAT IS THE COMPANY'S CLAIM FOR PAYROLL TAXES?

A. The Company is claiming payroll tax expense of $3,776,000 in the FPFTY (PECO Exhibit MJT-1, Schedule D-16, pp. 77-78).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR PAYROLL TAXES?

A. I recommend an allowance of $3,699,145 for payroll tax expense, or a reduction of $76,855 ($3,776,000 - $3,699,145) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend a payroll tax adjustment in line with my recommended payroll expense reduction of $858,715 based on vacancy adjustment for 13 positions as explained in the payroll section above.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDED ALLOWANCE?

A. I calculated my recommended allowance for payroll taxes by applying the Company's payroll tax rate of 8.95% (PECO Exhibit MJT-1, Schedule D-16, p. 78). I multiplied my recommended total payroll expense adjustment of $858,715 by this payroll tax rate to determine my recommended payroll tax adjustment of $76,855 ($858,715 x 0.0895). The following table summarizes my recommended payroll tax allowance and adjustment:

FPFTY Payroll tax claim	$3,776,000
Adjustment for payroll tax consequent to payroll reduction for employee vacancies	($76,855)
Recommended payroll tax allowance	$3,699,145

<u>OUTSIDE SERVICES</u>

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR OUTSIDE SERVICES (923.0)?

A. The Company's claim for outside services includes operations and maintenance related outside services broken down in three expense categories: Various Services (provided by Exelon Business Service Company (EBSC)), Contracting Professional, and Contracting Services (PECO filing, Section 53.53-III-A-28(a)).

Q. WHAT IS THE COMPANY'S CLAIM FOR OUTSIDE SERVICES?

A. The Company is claiming FPFTY outside services expense of $16,942,000 including an adjustment for the deferred merger "cost to achieve" of $370,000 (PECO Exhibit MJT-1, Schedule D-4, p. 56).

Q. ARE YOU ADDRESSING THE TOTAL OUTSIDE SERVICES CLAIM OF $16,942,000 IN THIS SECTION OF TESTIMONY?

A. No. In this section, I am addressing the outside services expense claim of $16,572,000 ($16,942,000 - $370,000) net of the "cost to achieve" adjustment. I will address the cost to achieve adjustment in a separate section of testimony below.

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. Per PECO's revised response to I&E-RE-33-D(b), the Company projected the

FTY and FPFTY claims for outside services based on the HTY actual expense with inflation adjustments. PECO does not budget each category of expense by FERC account for the anticipated increase in contract costs (I&E Exhibit No. 1, Schedule 4, pp. 1-7).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM OF $16,572,000?

A. No.

Q. WHAT DO YOU RECOMMEND FOR OUTSIDE SERVICES?

A. I recommend an allowance of $13,437,856 or a reduction of $3,134,144 ($16,572,000 - $13,437,856) for outside services.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. In response to I&E-RE-33-D(b), PECO gave a general explanation for the significant increases in expense claims from the HTY to the FTY, and the FTY to the FPFTY, and did not adequately explain and support the increases in the FTY and FPFTY claims as compared to the HTY actual expense. The Company states that the increases in the FTY and FPFTY claims are due to general inflation in the cost (I&E Exhibit No. 1, Schedule 4, p. 1). The following table shows the

Company's outside services expense trend:

	2017-18	**2018-19**	**2019-20**	**FTY**	**FPFTY**
Various (EBSC)	$14,332,000	$13,815,000	$11,555,000	$14,622,000	$15,290,000
Contracting Professional	$534,000	$784,000	$715,000	$905,000	$946,000
Contracting Services	$781,000	$552,000	$548,000	$694,000	$726,000
Total	**$15,647,000**	**$15,151,000**	**$12,818,000**	**$16,221,000**	**$16,962,000**
% Change		-3.17%	-15.40%	26.55%	4.57%

The above table shows that the total outside services expense declined 3.17% for 2018-19 and 15.40% for 2019-20 (HTY), however, the Company budgeted a significant increase of 26.55% in the FTY and an additional 4.57% increase in the FPFTY claim over the FTY claim. As stated above, the Company did not provide adequate support for the increases in the claim, and therefore, these increases are not reliable and reasonable projections considering the current and projected inflation level. Additionally, PECO's significant increases in claims are not predictable and certain beyond general inflation increases. Allowing PECO to recover expenses from customers that are not supported, justified, and reasonable is not in the interest of ratepayers.

Considering the above discussion and the historic declining trend in the total outside services expense, I recommend adjusting the HTY actual outside services for inflation based on the Consumer Price Index[5] (CPI) factors to determine an appropriate FPFTY expense allowance as shown in the table below:

HTY Outside Services expense	$12,818,000
Adj. for CPI at 2.75% increase for the FTY	$352,495
FTY expense allowance	$13,170,495
Adj. for CPI at 2.03% increase for the FPFTY	$267,361
FPFTY expense allowance	$13,437,856
FPFTY Claim	$16,572,000
FPFTY Adjustment	($3,134,144)

I applied an average of CPI inflation factors of 2.75% ((5.20% + 2.10% + 1.90% +1.80%) ÷ 4) of four quarters of 2020-21 and 2.03% ((2.10% + 2.00% + 2.00%) ÷ 3) of the forecasted three quarters of 2021-22. My recommendation based on an average of CPI (inflation) factors will smooth out the unsupported significant increases in the costs and will align with the general increase the costs based on current market conditions.

COST TO ACHIEVE

Q. WHAT IS "COST TO ACHIEVE?"

A. As explained by the Company witness Michael J. Trazaska (PECO Statement

5 CPI - Blue Chip Financial Forecasts - October 30, 2020 publication.

No. 3, pp. 40-41), the Company incurred costs to achieve savings after the merger of PECO's parent, Exelon Corporation with Pepco Holdings, Inc. in 2016. As a result, the costs for shared services that are allocated to PECO from EBSC are reduced. The Company is claiming the allocated portion of merger costs that were incurred during 2016 through 2018 in this rate proceeding (referred to by the Company as "Cost to Achieve").

Q. WHAT IS THE COMPANY'S CLAIM FOR COST TO ACHIEVE?

A. The Company's claim for cost to achieve is $370,000 (PECO Exhibit MJT-1, Schedule D-15, p. 76). The cost to achieve merger savings is claimed as an adjustment in the FPFTY total outside services expense claim of $16,942,000 ($16,572,000 discussed above plus $370,000).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company's claim is based on amortization of PECO's allocable share of costs to achieve merger savings over three years. Total amounts allocated to PECO by year are: 2016 - $601,000; 2017 - $430,000; and 2018 - $80,000, which adds to a total of $1,111,000. Dividing this amount over three years (based on PECO's intention to file next rate case in three years) produced the Company's FPFTY claim of $370,000 ($1,111,000 ÷ 3) (PECO Exhibit MJT-1, Schedule D-15, p. 76).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR COST TO ACHIEVE?

A. I recommend disallowance of the $370,000 claim in its entirety.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend disallowance of this claim for several reasons. First, per its response to I&R-RE-47(b), the Company did not request or receive permission to defer the merger related costs for ratemaking purposes and all of these costs were incurred from 2016 to 2018 prior to the HTY (I&E Exhibit No. 1, Schedule 5, pp. 1-2). Second, the Company has given no potentially valid reason for the requested three-year amortization period other than its stated future intention to file a base rate case in that time frame (I&E Exhibit No. 1, Schedule 5, p. 2), which I have disputed in the rate case expense section above. Third, the Company has demonstrated that it has already saved $0.5 million in 2016, $0.9 million in 2017, $0.9 million in 2018, $1.00 million in 2019, and $1.00 million in 2020, aggregating $4.30 million in the last five years (I&E Exhibit No. 1, Schedule 5, pp. 3-4); however, despite the Company's savings, it is proposing that ratepayers pay $1.11 million in merger costs over a three-year period (or $370,000 annually), which is inappropriate and would result in a retroactive recovery in rates.

Lastly, the merger related savings were already realized in prior years and the Company has not proposed retroactive sharing of those savings with ratepayers; however, as noted above, the Company still wishes to be awarded retroactive recovery of the merger costs, a merger that already yielded the

Company $4.30 million in savings. Without specific Commission authorization to defer and recover these merger costs, the Company is now seeking retroactive recovery of those costs with no corresponding pass back of the savings realized from the merger in the interim period.

<u>EMPLOYEE ACTIVITY COSTS</u>

Q. WHAT IS INCLUDED IN EMPLOYEE ACTIVITY COSTS?

A. Per the Company's response to I&E-RE-26-D(a), employee activity costs are incurred for employee recognition awards, employee service awards, employee picnic and celebrations, and employee network groups (I&E Exhibit No. 1, Schedule 6, pp. 1-2).

Q. WHAT IS THE COMPANY'S CLAIM FOR EMPLOYEE ACTIVITY COSTS?

A. The Company is claiming employee activity costs of $139,402 (PECO Filing, SDR-RR-30(e) and I&E Exhibit No. 1, Schedule 6, pp. 1-2).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company's claim is based on employee related costs that are included in O&M expenses for conducting its gas operations. A breakdown of the FPFTY claim is shown below:

Employee Recognition Awards	$36,146
Employee Service Awards - Pin, small gifts	$20,884
Employee Picnic, Celebrations, etc.	$80,933
Employee Network Groups	$1,439
Total	**$139,402**

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR EMPLOYEE ACTIVITY COSTS?

A. I recommend an allowance of $58,469, or a reduction of $80,933 ($139,402 - $58,469) for employee activity costs.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend disallowance of employee picnic and celebration expenses of $80,933 from the total claim of $139,402. The Company sponsored employee events (picnic, celebrations, gatherings, etc.) are not necessary for the provision of safe and reliable gas service to PECO ratepayers, and therefore, they should be disallowed for ratemaking. Ratepayers should not be required to fund the Company's choice to offer/sponsorship of special events to its employees and their families. Furthermore, it is very uncertain whether such picnics and similar group gatherings would even occur in the FPFTY based on the ongoing COVID-19 related pandemic.

INDUSTRY ORGANIZATION MEMBERSHIPS

Q. WHAT IS INCLUDED IN INDUSTRY ORGANIZATION MEMBERSHIPS?

A. Per the response to I&E-RE-28-D(a), the Company pays for membership in various industry organizations and incurs related annual membership fees (I&E Exhibit No. 1, Schedule 7, pp. 1-2).

Q. WHAT IS THE COMPANY'S CLAIM FOR INDUSTRY ORGANIZATION MEMBERSHIPS?

A. The Company is claiming industry organization membership expense of $655,897 in the FPFTY (PECO Filing, SDR-RR-32(a) and I&E Exhibit No. 1, Schedule 7, pp. 1-2).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. In response to I&E-RE-28-D, the Company states that the projected increase in FTY and FPFTY membership dues (over the HTY actual expense) is largely based on general inflationary increases in membership costs for industry organizations (I&E Exhibit No. 1, Schedule 7, pp. 1-2).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR INDUSTRY ORGANIZATION MEMBERSHIPS?

A. I recommend an allowance of $559,304, or a reduction of $96,593 ($655,897 - $559,304) for industry organization memberships.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. The Company provided a breakdown of industry organization memberships by year as shown in the table below (I&E Exhibit No. 1, Schedule 7, pp. 1-2):

2017-18	2018-19	2019-20	FTY	FPFTY
$586,041	$595,986	$533,505	$646,899	$655,897
Increase YTY		-$62,481	$113,394	$8,998
% Change YTY	1.70%	-10.48%	21.25%	1.39%

From the above table, it appears that the Company has significantly increased the FTY claim by 21.25% ($113,394) for unexplained and unsupported reasons, which is built into the FPFTY claim with an additional increase of 1.39% ($8,998). However, the Company claims that it applies general inflation rates in projecting the FTY and FPFTY membership expense. Considering this information, the Company's projected FTY and FPFTY claims are not supported, reliable, and reasonable for recovery from ratepayers.

My recommendation is based on applying the CPI inflation factors of 2.75% and 2.03 % (as discussed in the Outside Services section above) to determine the FTY and FPFTY allowances respectively as per the calculation in the table below:

HTY Industry Organizations Membership	$533,505
Adj. for CPI at 2.75% increase for the FTY	$14,671
FTY expense allowance	$548,176
Adj. for CPI at 2.03% increase for the FPFTY	$11,128
FPFTY expense allowance	$559,304
FPFTY Claim	$655,897
FPFTY Adjustment	($96,593)

REGULATORY INITIATIVE COST

Q. WHAT IS THE REGULATORY INITIATIVE COST?

A. As explained by the Company witness Michael J. Trazaska (PECO Statement No. 3, p. 40), the regulatory initiative cost includes recovery of unrecovered costs relating to implementation of (1) unbundling of the Gas Procurement Charge (GPC) and Merchant Function Charge (MFC) pursuant to the Commission's Order at Docket No. P-2012-2328614; and (2) the Neighborhood Gas Pilot approved by the Commission at Docket No. P-2014-2451772. In both these cases, the Commission permitted the Company to defer related implementation costs for recovery in the next base rate case.

Q. WHAT IS THE COMPANY'S CLAIM FOR REGULATORY INITIATIVE COST?

A. The Company is claiming total regulatory initiative cost of $753,000 in the FPFTY (PECO Exhibit MJT-1, Schedule D-14, p. 75).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company incurred O&M and depreciation expenses prior to the FPFTY associated with implementation of regulatory programs, which were approved by the Commission. The Company, therefore, proposes to recover the accumulated unrecovered cost of $141,000 and $2,117,000 concerning unbundling of the GPC/MFC Charge and the Neighborhood Gas Pilot project, respectively, amounting to $2,258,000. The Company is claiming $753,000 ($2,258,000 ÷ 3) in the FPFTY by amortizing the total cost over three years based on the Company's intention file its next base rate case within three years (PECO Exhibit MJT-1, Schedule-14).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR REGULATORY INITIATIVE COST?

A. I recommend an allowance of $451,600, or a reduction of $301,400 ($753,000 - $451,600) for regulatory initiative cost.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on a five-year amortization period in contrast to the Company's claimed three-year amortization for this unrecovered cost. A five-year amortization period is consistent with my recommendation to normalize rate case expense over five years, and this would reduce the burden of historic costs in rates. My recommended allowance of $451,600 ($2,258,000 ÷ 5) is calculated by dividing the FPFTY claim by a five-year amortization period. Furthermore, the Neighborhood Gas Pilot was established as a five-year pilot program, so aligning the amortization period with the same term as the pilot's original period is reasonable.

ENERGY EFFICIENCY AND CONSERVATION PROGRAM

Q. WHAT IS THE ENERGY EFFICIENCY AND CONSERVATION PROGRAM?

A. As explained by Company witness Doreen L. Masalta (PECO Statement No. 9, pp. 3-4), the Energy Efficiency and Conservation (EE&C) program is currently implemented pursuant to the settlement approved by the Commission in PECO's last base rate case at Docket No. R-2010-2161592. Under this program, the following programs are offered to the customers:

Current Rebate Offer	Rebate Amount
Residential Gas High-Efficiency Furnace Program	$300 per unit
Residential Gas High-Efficiency Boiler Program	$300 per unit
Residential Gas High-Efficiency Water Heater Program	$50 per unit
Commercial Gas High-Efficiency Furnace Program	$300 per unit

Under the current EE&C program, the Company recovers an annual program cost of $2,008,000 through gas distribution base rates and the unspent amount from $2,008,000 is credited back to the following year's Universal Service Fund Charge (PECO Statement No. 9, p. 4).

Q. BRIEFLY EXPLAIN THE COMPANY'S PROPOSED EXPANSION OR CHANGES IN THE EE&C PROGRAM.

A. The Company is proposing the following new/additional rebate offerings to residential customers (PECO Statement No. 9, pp. 6-7):

New Rebate Offer	Rebate Amount
ENERGY STAR®+ Furnace Rebate	$500 per unit
Faucet Aerators and Showerheads	Discounted pricing
Smart Thermostat Rebate	$50 per unit
Increased Storage Tank Water Heater Rebate	$100 per unit
Low-Income Customers Safe and Efficient Heating Program	
Residential Emerging Technology Pilot	

Q. SUMMARIZE THE EXPANDED EE&C PROGRAM COST.

A. The following table summarizes the Company's expanded EE&C program cost (PECO Statement No. 9, p. 9):

Rebate Offer	Estimated Cost
Residential Gas High-Efficiency Furnace Rebate	$1,507,500
Residential Gas High-Efficiency Boiler Rebate	$150,000
Residential Gas High-Efficiency Water Heater Rebate**	$25,000
Residential ENERGY STAR®+ Furnace Rebate*	$250,000
Residential Gas Heating Smart Thermostat Rebate*	$332,500
Residential Gas Water Heating (Aerators and Showerheads)*	$65,000
Low-Income Safe and Efficient Heating Program*	$1,000,000
Residential Emerging Technologies Pilot* (Smart Carbon Monoxide Detector)	$125,000
Education, PECO Admin., and CSP Admin. Cost	$1,045,000
Total EE&C Program Cost	**$4,500,000**

* New programs.
** Increase in rebate amount.

Q. WHAT IS THE COMPANY'S CLAIM FOR EE&C PROGRAM COST?

A. The Company is claiming an EE&C program cost of $4,500,000 in the FPFTY, an increase in program cost of $2,492,000 (PECO Exhibit MJT-1, Schedule D-11, p. 72).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company estimates that the expanded programs would provide rebates and appliance upgrade opportunities for up to three times more residential customers than the existing programs and provide up to ten times the existing level of natural gas savings based on a forecasted increase in customers' participation level (PECO Statement No. 9, p. 9).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR THE EE&C PROGRAM COST?

A. I recommend an allowance of $2,727,500, or a reduction of $1,772,500 ($4,500,000 - $2,727,500) to the expanded EE&C program cost.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. First, my recommendation is primarily based on disallowance of $1,772,500 sought for introduction of new program rebate costs for the reasons discussed below. I am not opposing introduction of new rebate programs as such, but I am recommending a reduction in the total program cost in this rate proceeding. I recommend that the Company should accommodate new program costs within my recommended allowance of $2,727,500 for the EE&C program cost because the Company has experienced unspent EE&C funding on average of 43.24% of annual customer funding for the EE&C program during last three completed years as shown in the table below (I&E Exhibit No. 1, Schedule 8, pp. 1-2):

Fiscal Year	Unspent Funding	Total program cost	Fund unspent
2017-18	$899,521	$2,124,179	42.35%
2018-19	$906,364	$2,110,036	42.95%
2019-20	$925,552	$2,084,348	44.40%
Average	**$910,479**	**$2,106,188**	**43.24%**

Second, the Company's current EE&C program, which has been in effect since 2010-11, appears to be unsuccessful in encouraging customer participation for the following reasons. First, customer participation in the program was quite low (less than 1%) as compared with the total residential customer count of approximately 488,000 as on June 30, 2020 (PECO Statement No. 1, p. 3). The following table shows meager customer participation levels (I&E Exhibit No. 1, Schedule 8, pp. 3-4 and PECO Exhibit DLM-2):

Fiscal Year	Participants Count	Rebate Total	Program Cost	Total Cost
2017-18	3,635	$1,015,700	$1,108,479	$2,124,179
2018-19	3,399	$1,008,400	$1,101,636	$2,110,036
2019-20	3,470	$1,001,900	$1,082,448	$2,084,348
3-Year Average	**3,501**	**$1,008,667**	**$1,097,521**	**$2,106,188**
FTY 2021*	3,746	$1,060,872	$1,146,429	$2,207,301
FPFTY 2022*	27,664	$2,333,000	$2,170,000	$4,500,000

* Forecasted

Third, as discussed above, the Company was not able to fully spend the annual EE&C funding in the last three years and was required to refund back approximately on an average 43.24% of customer funding collected in rates annually as shown in the table above.

Fourth, the Company's forecasted customer participation of 27,664 in the FPFTY is speculative, unreasonable, and not reliable because it is not supported with a valid basis, when the average customer participation count was just 3,501 in the last three years. Therefore, the forecasted increase in the FPFTY rebate/incentive cost, new rebate programs, and program administration cost are not reliable and appropriate.

Finally, the current low price of natural gas would not entice or encourage more customers to install new energy saving equipment that requires an additional capital expenditure, when the existing equipment provides service without any major replacement cost.

Q. WHY DO YOU BELIEVE THAT CURRENT NATURAL GAS COSTS MAY NOT ENCOURAGE MORE CUSTOMERS TO PARTICIPATE IN CONSERVATION MEASURES?

A. Natural gas prices are at historic lows, thus even significant usage reductions will not translate into significant annual savings to individuals implementing conservation measures. Due to these low prices, the increased cost of the higher efficiency options will have long payback periods and will not contribute substantially to the disposable income of ratepayers. For this reason, PECO may find it very challenging to convince ratepayers to make upgrades under the proposed expanded EE&C program.

Q. ARE THERE ANY OTHER REASONS THAT SUPPORT YOUR RECOMMENDED DISALLOWANCE OF THE NEW PROGRAM COST?

A. Yes. Considering the limited historic success rate of current rebate programs, it is inappropriate to increase EE&C program costs by introducing new rebate programs, which are not tested and likely to be acceptable or incentivize customers. Therefore, collecting additional funding from all residential customers for the benefits of a small number of participants will put an unreasonable burden on the rates of all residential customers.

Additionally, the COVID-19 pandemic's uncertainty would likely impact customers' willingness to upgrade to high efficiency and energy saving equipment or to undertake discretionary spending for non-emergency appliance replacement.

CONTRACTING/MATERIALS

Q. WHAT IS THE CONTRACTING/MATERIALS COST?

A. In responses to I&E's numerous data requests asking for the detailed basis, explanation, and support for increases in the specific line item O&M expense claims by FERC account from the HTY to FTY, and the FTY to FPFTY, the Company gave a generalized response directing me to the Company's response to I&E-RE-65-D. In response to I&E-RE-65-D, the Company presented a table showing a comparison of some of the major cost elements for the HTY, FTY, and FPFTY (I&E Exhibit No. 1, Schedule 9, pp. 1-2), which are distributed to various expense items by FERC account in the filing. One of the cost elements is Contracting/Materials cost, which is claimed by distribution to various expense items by FERC accounts (PECO Exhibit MJT-1, Schedule D-4, pp. 55-56).

Q. WHAT IS THE COMPANY'S CLAIM FOR CONTRACTING/MATERIALS COST?

A. The Company is claiming a contracting/materials cost of $42,955,000 in the FPFTY, which is distributed to various expense items by FERC account (PECO Exhibit MJT-1, Schedule D-4, pp. 55-56).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. Per the Company's response to I&E-RE-65-D, the budgeted expenses are prepared based on business activities and related cost elements such as payroll, employee benefits, and outside contracting costs, which were distributed to FERC accounts based upon the actual distribution of costs experienced by the Company during calendar year ended December 31, 2019, and the Company does not budget O&M expenses by FERC accounts (I&E Exhibit No. 1, Schedule 9, pp. 1-2).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR CONTRACTING/MATERIALS COST?

A. I recommend an allowance of $32,940,000, or a reduction of $10,015,000 ($42,955,000 - $32,940,000) for contracting/materials cost.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on review of the contracting/materials expense trend for the fiscal years 2017-18 through 2019-20 and the projected increase in the FTY and FPFTY claims as shown in the table below:

2017-18	**2018-19**	**2019-20**	**FTY**	**FPFTY**
$32,262,000	$37,005,000	$29,552,000	$44,651,000	$42,955,000
% Change	14.70%	(20.14%)	51.09%	(3.80%)

The Company in its response to I&E-RE-65-D states that the increased FTY expense claim was due to lower than expected spending in the HTY driven by the impact of COVID-19 pandemic-related restrictions and the FTY to FPFTY expense has no significant variance (I&E Exhibit No. 1, Schedule 9, pp. 1-2). In the absence of a detailed explanation and support for the significant increase of 51.09% in the FTY expense claim, the FPFTY expense claim is not reliable and reasonable because the FTY increase is reflected in the FPFTY claim. Additionally, based on the Company's historic budgeted and actual contracting/materials expense comparison as shown in the table (I&E Exhibit No.

1, Schedule 9, pp. 3-6), the actual expense was consistently lower than the budgeted expenses, which raises concern about the Company's budgeting process and the expense claim in this proceeding:

2017-18		2018-19		2019-20	
Budget	**Actual**	**Budget**	**Actual**	**Budget**	**Actual**
$36,421,000	$32,262,000	$38,056,000	$37,005,000	$39,119,000	$29,552,000
Under spent	(11.42%)		(2.76%)		(24.46%)

In order to smooth out fluctuation in this expense, I calculated my recommended allowance of $32,940,000 (($32,262,000 + $37,005,000 +$29,552,000) ÷ 3) based on an average of last three years' expense level.

<u>TRAVEL, MEALS, AND ENTERTAINMENT</u>

Q. HOW ARE TRAVEL, MEALS, AND ENTERTAINMENT EXPENSES REFLECTED?

A. As discussed in contracting/materials section above, travel, meals, and entertainment expense is one of the cost elements claimed in the FTY and FPFTY, which is distributed to various expense items by FERC account in the filing (I&E Exhibit No. 1, Schedule 9, pp. 1-2).

Q. WHAT IS THE COMPANY'S CLAIM FOR TRAVEL, MEALS, AND ENTERTAINMENT?

A. The Company is claiming travel, meals, and entertainment expense of $1,032,000 in the FPFTY, which is distributed to various expense items by FERC accounts (PECO Exhibit MJT-1, Schedule D-4, pp. 55-56).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. Per the Company's response to I&E-RE-65-D, the increase in FPFTY claim from the FTY is primarily due to the inflation in cost (I&E Exhibit No. 1, Schedule 9, p. 2).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR TRAVEL, MEALS, AND ENTERTAINMENT?

A. I recommend an allowance of $862,153, or a reduction of $169,847 ($1,032,000 - $862,153) for travel, meals, and entertainment expense.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. In response to I&E-RE-65-D, the Company claimed that the increase in the FPFTY claim of $1,032,000 from the FTY expense of $845,000 is due to inflation.

However, the Company's FPFTY claim is higher by 22.13% over the FTY expense, which is not consistent with the current inflation trend and the Company did not provide any additional information to support its claim.

Additionally, the travel restrictions due to COVID-19 pandemic would limit the employees travel-related expenses in the FTY and FPFTY. I, therefore, calculated my recommendation by applying a CPI inflation factor of 2.03% (as discussed in the outside services section above) to the FTY expense to determine the FPFTY allowance as per the calculation shown below:

FTY Travel Meals and Entertainment	$845,000
Adj. for CPI at 2.03% increase for the FPFTY	$17,153
FPFTY expense allowance	$862,153
FPFTY Claim	$1,032,000
FPFTY Adjustment	($169,847)

OTHER POST-EMPLOYMENT BENEFITS

Q. WHAT ARE OTHER POST-EMPLOYMENT BENEFITS (OPEBs)?

A. The Company provides medical-related benefits to its eligible retirees. PECO participates in the parent company's (Exelon's) OPEB plan that provides PECO's eligible retirees a defined contribution credit, which can be used by retirees to purchase coverage in the individual Medicare marketplace (PECO Statement No. 2, p. 7).

Q. WHAT IS THE COMPANY'S CLAIM FOR OPEBs?

A. Per the response to I&E-RE-30-D, the Company is claiming OPEB expense of $1,050,000 in the FPFTY (I&E Exhibit No. 1, Schedule 10, pp. 1-2).

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. The Company's FPFTY claim is based on the budgeted FTY expense claim of $1,050,000 (I&E Exhibit No. 1, Schedule 10, pp. 1-2).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR OPEBs?

A. I recommend an allowance of $270,000, or a reduction of $780,000 ($1,050,000 - $270,000) for OPEB expense.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION

A. Company witness Robert J. Stefani (PECO Statement No. 2, p. 7) states that PECO previously provided eligible retirees a company-sponsored medical plan with a traditional premium cost sharing arrangement. In 2015, PECO began to provide eligible retirees a defined contribution credit that can be used to purchase coverage in the individual Medicare marketplace. This change capped the Company's exposure to future medical inflation and leveraged Medicare subsidies available in the individual marketplace. As a result of PECO's change in the design of its OPEB plan, PECO's OPEB cost decreased from $3.6 million in 2010 to $1.3 million budgeted for 2021, while still providing eligible retirees with comparable benefits (PECO Statement No. 2, p. 7). This change is reflected as a reduction in OPEB expense in the historic fiscal years as shown in the table below (I&E Exhibit No. 1, Schedule 10, pp.1-2):

2017-18	**2018-19**	**2019-2020**	**FTY**	**FPFTY**
($59,000)	$27,000	($72,000)	$270,000	$1,050,000

In response to I&E-RE-88, the Company states that the decline/negative expense in the historic years was mainly due to existing prior service credits from plan amendments made in 2014, and the projected increase in the FTY and FPFTY OPEB expense is a result of expiring prior service credit amortization in the East plan (I&E Exhibit No. 2, Schedule 10, pp. 3-5). Additionally, per the Company's response, the FTY and FPFTY projected increases are based on assumptions on a calendar year basis, which are not supported, and therefore, the significant increase of 74.28% in the FPFTY expense claim over the FTY expense claim is not reasonable and reliable. I, therefore, recommend the FTY OPEB claim of $270,000 for the FPFTY allowance resulting in a downward adjustment of $780,000.

PENSION ASSET - RATE BASE

Q. WHAT IS THE PROPOSED PENSION ASSET INCLUDED AS A RATE BASE ADDITION?

A. The Company has included a pension asset in rate base that consists of the portion of PECO's cash pension contributions that it will have neither recovered as an operating expense nor capitalized to utility plant because the capitalized amounts are based on costs determined pursuant to Financial Accounting Standards Codification Topic 715 or (ASC 715), which was formerly Statement of Financial Accounting Standards 87 or (SFAS 87). The Company, therefore, used this account to increase its rate base (PECO Statement No. 3, pp. 5-6).

Q. WHAT IS THE COMPANY'S CLAIM FOR ITS PENSION ASSET?

A. The Company is claiming $35,059,000 (PECO Exhibit MJT-1, Schedules C-1 and C-5, pp. 14 and 32).

Q. WHAT IS THE BASIS OF THE COMPANY'S CLAIM?

A. The Company states that the pension asset represents the difference between the manner in which pension expense (a cash contribution) is calculated for ratemaking purposes and the manner in which pension costs are determined for the purpose of calculating the labor loading rate used to capitalize a portion of pension costs under applicable Generally Accepted Accounting Principles (GAAP) (PECO Statement No. 3, pp. 22-23). Therefore, the Company opines that it is necessary to reduce the expense claim for a capitalized amount and that amount should be added in applicable plant accounts. Further, the Company uses the information obtained from a Duquesne Light Company (Duquesne) settlement as support for its position (I&E Exhibit No. 1, Schedule 11, pp. 4-5).

Q. HOW DID THE COMPANY CALCULATE ITS CLAIM?

A. In response to OCA-II-22, the Company provided a summarized statement showing the pension contribution amount, O&M pension expense, capitalized pension cost, and cumulative pension asset balance by year from 2010 through 2020 (HTY) for the combined operations (Gas and Electric) (I&E Exhibit No. 1, Schedule 11, pp. 1-2). It should be noted here that since the plant accounts are balance sheet accounts, that amounts for years prior to 2010 are included in this claim. The Company used the HTY accumulated pension asset balance of $378,708,000 (combined Gas and Electric) as starting point and then added a projected accrual of the pension asset for the FTY ($8,544,000) and FPFTY ($9,160,000). Then, on the resulting balance, the 21.25% allocation factor is applied for the gas utility and further, a 41.62% allocation is applied to the resulting balance to determine the FPFTY gas distribution capital (pension asset) claim of $35,059,000 (PECO Exhibit MJT-1, Schedule C-5, p. 32).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR THE PENSION ASSET?

A. I recommend a complete disallowance of the Company's $35,059,000 claim or a reduction of $35,059,000 to the Company's rate base claim (PECO Exhibit MJT-1, Schedule C-1, p. 14).

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Q. WHAT IS THE BASIS OF YOUR RECOMMENDATION?

A. The plant accounts should not be inflated (or deflated, depending on which direction the pension asset/liability is going in a given year/rate filing) due to differences between GAAP entries and cash contributions because the GAAP entries reflect the true balances for the plant accounts, and the cash contribution amounts reflect the true expenditures that the Company makes each year to its pension fund. Therefore, while there may be a mismatch from an accounting perspective (use of an accrual method for plant accounts and a cash contribution method for the expense account), it makes the most sense for ratemaking purposes to disallow a switch in methods at this point. The Company is earning a return over time on these monies inside its pension fund after the cash contributions are made. Thus, requiring ratepayers to pay a return on an inflated rate base amount would be duplicative, and it also inflates depreciation (accumulated depreciation and depreciation expense) for ratemaking purposes (I&E Exhibit No. 1, Schedule 11, p. 3) if this switch is allowed.

Additionally, the accumulated balance of the pension asset cannot be categorized or described as a utility asset that is used and useful in providing utility services to ratepayers, and therefore, should not be included as an eligible asset in the rate base claim.

Q. PLEASE CONTINUE.

A. Furthermore, the Company in its response to OCA-II-33 avers that Duquesne Light received the Commission's permission to use this method in a settlement agreement approved at Docket No. R-2013-2372129 (I&E Exhibit No. 1, Schedule 11, pp. 4-5). Accordingly, PECO for its Electric Division (PECO Electric) base rate case attempted to utilize this method for pension asset recovery in 2015 at Docket No. R-2015-2468981, however, this case was settled without attribution to any claim about recovery by the Company or other party to the case. Again, in 2018 PECO Electric made a claim for pension asset recovery in its base rate case (at Docket No. R-2018-3000164), and this case was also settled without attribution to any claim about pension asset recovery by the Company or any other party to the case (I&E Exhibit No. 2, Schedule 11, pp.4-5). PECO Electric's prior rate cases were black-box settlements approved by the Commission, and therefore, the Company's reliance on pension asset claims made in prior rate cases (which are not approved specifically) does not serve as a valid basis for seeking pension asset recovery in this proceeding.

Q. WHAT ARE YOUR OVER-ARCHING CONCERNS ABOUT COMPANIES SWITCHING METHODS FOR PENSION CLAIM DEVELOPMENT OVER THE YEARS?

A. My understanding is that over the years, the sum of amounts recorded for accrual accounting purposes per GAAP and the sum amount of annual cash contributions should ultimately match. While there would be differences between GAAP expense and cash contributions in any given year, this should not be viewed as a valid reason to inflate the plant amounts in rate base in this proceeding. If the Commission allows companies to move back and forth between methods used to develop claims over the course of multiple rate filings or between individual rate filings, it will only serve to allow a company to wrongfully maximize its revenue requirement in a given base rate filing.

Q. IF THE COMMISSION DECIDES TO GRANT THE COMPANY PERMISSION TO USE A PENSION ASSET, DO YOU HAVE ANY CONCERNS?

A. Yes. I disagree with PECO's proposed use of a pension asset and recommend it be disallowed. However, if the Commission decides to allow this proposed rate base treatment, the Company should be required to continue this treatment on a consistent basis going forward indefinitely, even when the balance flips to a regulatory liability which results in a reduction to rate base (when GAAP pension expense exceeds the dollar amount of cash contributions). This potential flip illustrates the unreasonableness of PECO's claim.

CASH WORKING CAPITAL

Q. WHAT IS A CASH WORKING CAPITAL (CWC) ALLOWANCE FOR RATEMAKING PURPOSES?

A. CWC includes the amount of funds necessary to operate a utility during the interim period between the rendition of service, including the payment of related expenses, and the receipt of revenue in payment for services rendered by the utility.

Q. HOW DOES THE COMPANY CALCULATE ITS CWC CLAIM?

A. The Company calculates its CWC claim by using a lead/lag study. A lead/lag study measures the differences in time between: (1) the time services are rendered until payment of those services is received; and (2) the time between the point when a utility has incurred an expense and the actual payment of the expense. Stated a different way, the lead/lag study measures how many days exist on an average between the midpoint of the service period and the date the payment is made.

Q. DO YOU AGREE WITH THE COMPANY'S USE OF THE LEAD/LAG METHOD?

A. Yes. I agree with the Company's use of this method.

Q. WHAT IS THE COMPANY'S CLAIM FOR CWC?

A. The Company's claim for CWC is $3,223,000 (PECO Exhibit MJT-1, Schedule C-4, p. 23).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND?

A. I recommend an allowance of $2,902,236 or reduction of $320,764 ($3,223,000 - $2,902,236) to the Company's claim (I&E Exhibit No. 1, Schedule 12, p. 1).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation includes modification of the Company's claim based on all recommended adjustments to O&M expenses as discussed previously in this testimony. Each of these components is discussed in more detail below.

Q. HOW DO YOUR PROPOSED ADJUSTMENTS, DISCUSSED ABOVE, IMPACT YOUR RECOMMENDATION FOR CWC?

A. All O&M adjustments that are cash-based expense claims are included when determining the Company's overall CWC requirement. Therefore, CWC was adjusted to reflect these recommended adjustments. In order to reflect the I&E recommended adjustments, I modified the Company's electronic CWC file as shown on PECO Exhibit MJT-1, Schedule C-4, p. 23 for each recommended adjustment (I&E Exhibit No. 1, Schedule 12, p. 1).

Q. SUMMARIZE WHERE EACH OF THE I&E RECOMMENDED O&M EXPENSE ADJUSTMENTS ARE REFLECTED IN THE CWC COMPUTATION.

A. **Expense Lag Days - Payroll:**

I recommended a payroll expense adjustment of ($858,715) in the Expense Lag - Payroll, which is reflected as reduction to line 6 of the Company's Exhibit MJT-1, Schedule C-4, p. 23 as shown in I&E modified Schedule C-4 (I&E Exhibit No. 1, Schedule 12, p. 1).

Expense Lag Days – Other Expenses:

I recommended the following expense adjustments in the Expense Lag - Other Expenses as downward adjustments to line 10 of the Company's Exhibit MJT-1, Schedule C-4, p. 23 as shown in I&E modified Schedule C-4 (I&E Exhibit No. 1, Schedule 12, p. 1):

Other Expenses	Reduction
Rate Case Expense	$208,200
Employee Benefits Expense	$120,397
Payroll Taxes	$76,855
Outside Services	$3,134,144
Cost to Achieve	$370,000
Employee Activity Cost	$80,933
Industry Org. Memberships	$96,593
Regulatory Initiative Cost	$301,400
Energy Efficiency & Conservation	$1,772,500
Contracting/Materials	$10,015,000
Travel Meal and Entertainment	$169,847
Other Post-Retirement Employee Benefits	$780,000
Total	**$17,125,869**

Q. IS YOUR RECOMMENDED CWC ALLOWANCE A FINAL RECOMMENDATION?

A. No. All adjustments to the Company's claims for revenues, expenses, taxes, and rate base must be continually brought together in the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order. This process, known as iteration, effectively prevents the determination of a precise calculation until all adjustments have been made to the Company's claim.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

D. C. PATEL

PROFESSIONAL AND EDUCATIONAL BACKGROUND

EXPERIENCE:

- **Pennsylvania Public Utility Commission**, Harrisburg, Pennsylvania
  June 2015 to Present
  Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement
- **Pennsylvania Insurance Department**, Harrisburg, Pennsylvania
  March 2013 - June 2015
  Insurance Company Financial Analyst, Bureau of Company Licensing & Financial Analysis
- **Pennsylvania Department of Revenue**, Harrisburg, Pennsylvania
  November 2010 - March 2013
  Accounting Assistant, Bureau of Corporation Taxes (Accounting)
- **Hersha Hospitality Management**, Harrisburg, Pennsylvania
  June 2007 - November 2010
  Staff Accountant (Taxes), Accounting Department
- **Corporate Experience-India**
  February 1987 – April 2007
  Worked as Company Secretary for three different companies during this period, which were listed on the Stock Exchanges.

EDUCATION/CERTIFICATION:

- Gujarat State University, Ahmedabad, India:
  -Bachelor of Commerce (Major concentration: Accounting)
  June 1980 - April 1983
  -Bachelor of Law
  June 1983 - December 1988

- The Institute of Company Secretaries of India, New Delhi, India:
  Post Graduate Professional Degree: Company Secretary
  June 1983 - December 1985

RATE CASE TRAINING:

- Attended 37th Western NARUC Utility Rate School in May 2016

<u>WORKED ON THE FOLLOWING CASES (Testimony not required)</u>:

- U-2020-3015258 - Pittsburgh Water and Sewer Authority
- R-2020-3019661 - PECO Energy Co. - Gas Operations (1307(f))
- R-2019-3008255 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2018-3001568 - PECO Energy Co. - Gas Operations (1307(f))
- R-2018-3000253 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- A-2017-2629534 - PPL Electric Utilities (Restructuring Plan)
- R-2017-2631441 - Reynolds Water Co.
- R-2017-2602611 - PECO Energy Co. - Gas Operations (1307(f))
- R-2016-2567893 - Andreassi Gas Co.
- R-2016-2525128 - Columbia Water Co. - Marietta Division
- R-2015-2479962 - Corner Water Supply and Service Corporation
- R-2015-2479955 - Allied Utility Services, Inc.
- R-2015-2493905 - Sands, Inc.

<u>SUBMITTED TESTIMONY IN THE FOLLOWING CASES</u>:

- R-2020-3017951 et al. - Pittsburgh Water and Sewer Authority
- R-2020-3018993 - Columbia Gas Pennsylvania, Inc. (1307(f))
- R-2019-3008208 - Wellsboro Electric Company
- R-2019-3008212 - Citizens Electric Company of Lewisburg, PA
- A-2019-3008491 - Aqua Pennsylvania Wastewater, Inc.
- R-2018-3006814 - UGI Utilities, Inc. (Gas Division)
- M-2018-2640802 and 2640803 - Pittsburgh Water and Sewer Authority
- R-2018-3002645 and 3002647 - Pittsburgh Water and Sewer Authority
- R-2018-3000834 - Suez Water Pennsylvania, Inc.
- R-2018-2647577 - Columbia Gas of Pennsylvania, Inc.
- R-2017-2595853 - Pennsylvania American Water Co.
- P-2016-2526627 - PPL Electric Utilities Corp. (DSP IV)
- R-2016-2529660 - Columbia Gas of Pennsylvania, Inc.
- R-2016-2554150 - City of DuBois - Bureau of Water
- R-2016-2580030 - UGI Penn Natural Gas, Inc.

I&E Statement No. 1-SR
Witness: D. C. Patel

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY - GAS DIVISION

Docket No. R-2020-3018929

Surrebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES
RATE BASE
CASH WORKING CAPITAL

TABLE OF CONTENTS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel, and my business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. ARE YOU THE SAME D. C. PATEL WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. I submitted I&E Statement No. 1 and I&E Exhibit No. 1.

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN ACCOMPANYING EXHIBIT?

A. Yes. I&E Exhibit No. 1-SR accompanies this surrebuttal testimony. Additionally, I refer to my direct testimony and its accompanying exhibit in this surrebuttal testimony (I&E Statement No. 1 and I&E Exhibit No. 1).

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of the PECO Energy Company - Gas Division (PECO or Company) witnesses listed below:

- Michael J. Trzaska (PECO Statement No. 3-R) regarding PECO's revenue requirement and operating and maintenance (O&M) expenses;
- Robert J. Stefani (PECO Statement No. 2-R) regarding O&M expenses; and
- Doreen L. Masalta (PECO Statement No. 9-R) regarding the Energy Efficiency and Conservation Program.

Q. DID THE COMPANY UPDATE ITS OVERALL REVENUE REQUIREMENT CLAIM IN REBUTTAL TESTIMONY?

A. Yes. The Company revised its revenue increase request from $68,812,000 to $66,279,000 by revising its rate base claim from $2,461,939,000 to $2,463,555,000, total O&M expense claim from $467,605,000 to $466,639,000, and long-term debt cost claim from 3.97% to 3.84% for the fully projected future test year (FPFTY) ending June 30, 2022 (PECO Exhibit MJT-1 Revised, Schedule A-1). PECO witness Michael J. Trzaska provided an updated Exhibit MJT-1 Revised (pp. 1-94) for the FPFTY showing the revised calculations for the updated revenue requirement (PECO Statement No. 3-R and PECO Exhibit MJT-1 Revised).

SUMMARY OF RECOMMENDED ADJUSTMENTS

Q. SUMMARIZE YOUR RECOMMENDED ADJUSTMENTS AS UPDATED IN THIS SURREBUTTAL TESTIMONY.

A. As illustrated in the following table and in the discussion that follows, I continue to recommend adjustments as updated to O&M expenses and rate base:

	Company Updated Claim	I&E Updated Recommended Allowance	I&E Updated Adjustment
O&M Expenses:			
Rate Case Expense	$520,000	$311,800	($208,200)
Payroll Expense	$42,209,000	$41,350,285	($858,715)
Employee Benefits	$5,918,000	$5,797,603	($120,397)
Payroll Taxes	$3,776,000	$3,699,145	($76,855)
Outside Services (net of cost to achieve)	$16,572,000	$13,437,856	($3,134,144)
Cost to Achieve	$370,000	$0	($370,000)
Employee Activity Cost	$139,402	$58,469	($80,933)
Industry Org. Memberships	$655,897	$588,135	($67,762)
Regulatory Initiative Cost	$47,000	$28,200	($18,800)
Energy Efficiency & Conservation	$4,500,000	$2,727,500	($1,772,500)
Contracting/Materials	$42,955,000	$32,940,000	($10,015,000)
Travel, Meals, and Entertainment	$1,032,000	$862,153	($169,847)
Other Post-Employment Benefits	$1,050,000	$270,000	($780,000)
Total O&M Adjustments			**($17,673,153)**
Rate Base Adjustments:			
Pension Asset	$35,059,000	$0	($35,059,000)
Cash Working Capital	$3,437,000	$3,135,234	($301,766)
Total Rate Base Adjustments			**($35,360,766)**

SUMMARY OF I&E OVERALL UPDATED POSITION

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT AS UPDATED IN THIS SURREBUTTAL TESTIMONY?

A. I&E's updated total recommended revenue requirement for the Company is $616,358,000. This recommended revenue requirement represents an increase of $26,344,000 to the claimed present rate revenues of $590,014,000. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses and rate base, and those recommended adjustments made in the testimonies of I&E witnesses Christopher Keller (I&E Statement No. 2-SR), and Ethan Cline (I&E Statement No. 3-SR). The following table summarizes the I&E surrebuttal position:

PECO Energy Company - Gas Division		TABLE I			
R-2020-3018929		INCOME	SUMMARY		
(In Thousands)					
	6/30/22	INVESTIGATION & ENFORCEMENT			
	Proforma	--]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	590,014	0	590,014	26,344	616,358
Deductions:					
O&M Expenses	370,135	-17,673	352,462	91	352,553
Depreciation	88,958	-804	88,154		88,154
Taxes, Other	7,545	0	7,545	81	7,626
Income Taxes:					
Current State	0	1,997	1,997	2,615	4,612
Current Federal	-10,249	3,779	-6,470	4,947	-1,523
Deferred Taxes	-7,706	0	-7,706		-7,706
ITC	-64	0	-64		-64
Total Deductions	448,619	-12,701	435,918	7,734	443,652
Income Available	141,395	12,701	154,096	18,610	172,706
Rate Base	2,463,555	-84,682	2,378,873	0	2,378,873
Rate of Return	5.74%		6.48%		7.26%

RATE CASE EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR RATE CASE EXPENSE.

A. I recommended an allowance of $311,800 (($1,559,000 ÷ 60 months) x 12 months), or a reduction of $208,200 ($520,000 - $311,800) to the Company's FPFTY claim (I&E Statement No. 1, p. 8). My recommendation to normalize rate case expense over a period of 60 months (five years) was based on PECO's historic rate case filing frequency (I&E Statement No. 1, pp. 8-11) in contrast to PECO's claimed 36-month amortization period.

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Michael J. Trzaska disagrees with my recommendation to normalize rate case expense over a 60-month period (PECO Statement No. 3-R, pp. 22-23).

Q. PLEASE SUMMARIZE MR. TRZASKA'S RESPONSE.

A. First, Mr. Trzaska asserts that PECO will need to file another rate case in three years (a 36-month period) because the Company will need to invest approximately $1.2 billion in new and replacement gas utility plant between July 1, 2020 and June 30, 2024. Therefore, the Company used the normalization period of three years for rate case expense (PECO Statement No. 3-R, p. 22). Second, he cites the 2012 PPL Electric Utilities Corporation (PPL Electric) rate case and states that the

Commission noted that rate case normalization periods should not be backward looking but should reflect the future expectations. Additionally, he cites the 2017 UGI Utilities, Inc. - Electric Division (UGI Electric) rate case and states that the Commission affirmed that practice for determining the normalization period for rate case expense (PECO Statement No. 3-R, p. 23).

Q. WHAT IS YOUR RESPONSE TO MR. TRZASKA'S ASSERTION?

A. I disagree with PECO's claimed 36-month normalization period and reiterate that it is not supported by the Company's historic filing frequency, the proposed normalization period fails to properly rely upon the historic data, and the claimed period is speculative in nature as discussed in direct testimony (I&E Statement No. 1, pp. 8-9). Regarding the 2012 PPL Electric rate case, [1] the Commission granted permission to normalize its rate case expense over a 24-month period based on the expected timing of future base rate case filings. However, PPL Electric did not file its next rate case until March 31, 2015, which was 36 months after the 2012 rate case filing. It should be noted that I&E's recommended normalization period in the 2012 PPL Electric proceeding was a 32-month interval based on the Company's historic filing frequency.[2] I&E's recommendation in that instance produced a much more accurate result than the Company's stated future intention to file a rate case (I&E Statement No. 1, pp. 8-9). Additionally, Mr.

[1] PA PUC v. PPL Electric Utilities Corporation, Docket No. R-2012-2290597, pp. 47-48 (Order Entered December 28, 2012).

[2] I&E Statement No. 2, pp. 13-14 at Docket No. R-2012-2290597.

Trzaska ignored the Commission's orders in Emporium Water Company base rate case[3] and the City of DuBois base rate case[4], where the Commission found in favor of I&E's recommendation for a normalization period based on the actual historic filing frequency, which is more reliable than the future speculation or intention to file a rate case (I&E Statement No. 1, p. 10).

I reiterate that the normalization of rate case expense based on the future need or expectation to file rate case is speculative and is subject to various unpredictable future economic and financial conditions; therefore, determination of a rate case expense normalization period based on future expectations or the intention to file a rate case is not reliable.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR RATE CASE EXPENSE?

A. No. I continue to recommend a 60-month normalization period for rate case expense, and accordingly, a reduction of $208,200 to PECO's claim of $520,000 as discussed above and in direct testimony (I&E Statement No. 1, pp. 8-11).

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[3] PA PUC v. Emporium Water Company, Docket No. R-2014-2402324, p. 50 (Order Entered January 28, 2015).

[4] PA PUC v. City of DuBois - Bureau of Water, Docket No. R-2016-2554150, pp. 65-66 (Order Entered March 28, 2017) and PA PUC v. City of DuBois - Bureau of Water, Docket No. R-2016-2554150, p. 13 (Order Entered May 18, 2017).

PAYROLL EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PAYROLL EXPENSE.

A. I recommended an allowance of $41,350,285 for payroll expense, or a reduction of $858,715 ($42,209,000 - $41,350,285) to the Company's claim (I&E Statement No. 1, p. 12).

My recommendation was based on employees' unfilled (vacant) positions (that are budgeted in the FPFTY claim), calculated based on PECO's historic average annual vacancy rate of 2.10% as experienced in the fiscal years ended June 30, 2018; June 30, 2019; and June 30, 2020. The Company's claim is based on the assumption that it will maintain a 100% full staffing level as budgeted in the FPFTY throughout the whole year, which is unrealistic since there will always be a certain number of normal vacancies due to retirements, resignations, transfers, layoffs, etc. on a day-to-day operational basis. These vacancies are unpredictable and there will always be search and placement time involved in filling vacancies (I&E Statement No. 1, pp. 12-15).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended vacancy adjustment for payroll expense (PECO Statement No. 2-R, pp. 9-11).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. Mr. Stefani states that the FPFTY claim for payroll expense of 639 budgeted employee positions did not include any positions that were vacant at the end of the historic test year (HTY) as of June 30, 2020. In short, the Company's FPFTY payroll expense claim reflects 602 filled positions as of June 30, 2020 and 37 new positions to be filled by end of the FPFTY totaling 639 positions (PECO Statement No. 3-R, p. 10). Additionally, Mr. Stefani put forward an irrelevant and unsupported argument that if I&E's recommended employee vacancy rate of 2.10% is applied to the proposed 37 additional/new positions (to be filled by end of the FPFTY), payroll expense will merely be reduced by $46,200 instead of $858,715 (PECO Statement No. 3-R, pp. 10-11).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. First, as discussed in direct testimony, PECO did experience normal employee vacancies when the *monthly* actual filled positions are compared to the budgeted *monthly* positions during the last three fiscal years, which is summarized in the table below (I&E Statement No. 1, pp. 12-13):

Fiscal Year Ended	**Monthly Average Vacancy Rate**
June 30, 2018	1.78%
June 30, 2019	1.17%
June 30, 2020	3.34%
Average Annual Vacancy Rate	**2.10%**

PECO witness Stefani does not dispute or disagree with I&E's computation of the above monthly average and the average annual vacancy rates.

Secondly, Mr. Stefani's assertion that the FPFTY 639 budgeted positions do not include vacant positions is not reliable and acceptable because PECO's FPFTY payroll expense claim is calculated based on the total *budgeted 639* positions to be maintained/filled throughout the FPFTY. Additionally, PECO's FPFTY budgeted positions were calculated based on 602 filled positions as of June 30, 2020, which is subject to change every month due to unpredictable normal vacancies; therefore, the average monthly vacancies should be reflected in payroll expense. As discussed in direct testimony, I reiterate that it is unreasonable to assume that the Company will fill and maintain 100% full staffing of its 639 budgeted positions throughout the FPFTY based on its own historic vacancy records of the fiscal years ended June 30, 2018; June 30, 2019; and June 30, 2020. PECO witness Stefani ignored the fact that there will always be a certain level of *normal vacancies* due to retirements, resignations, transfers, layoffs, etc., on a day-to-day operating basis, which are unpredictable, and there will always be search and placement time involved in filling normal vacancies as well as new positions (I&E Statement No. 1, p. 15). Therefore, adjusting payroll expense by applying PECO's average annual normal vacancy rate of 2.10% to the 639 budgeted positions to determine the FPFTY payroll expense allowance represents a fair and reasonable adjustment to PECO's payroll expense claim.

Lastly, I disagree with Mr. Stefani's irrelevant and unsupported statement that applying a vacancy rate of 2.10% to 37 new positions would produce a reduction of $46,200 to payroll expense in contrast to I&E applying the vacancy rate to the total 639 budgeted positions because normal vacancies will occur across the board in the total budgeted positions and not merely with respect to the proposed new positions.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PAYROLL EXPENSE?

A. No. I continue to recommend an allowance of $41,350,285, and accordingly, a reduction of $858,715 to PECO's claim of $42,209,000 as discussed above and in direct testimony (I&E Statement No. 1, pp. 12-15).

<u>EMPLOYEE BENEFITS</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR EMPLOYEE BENEFITS.

A. I recommended an allowance of $5,797,603 for employee benefits expense, or a reduction of $120,397 ($5,918,000 - $5,797,603) to the Company's claim (I&E Statement No. 1, p. 16). My recommendation was based on a reduction to payroll expense for the vacancy adjustment explained in the payroll section of my direct testimony (I&E Statement No. 1, pp. 12-15).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended adjustment to employee benefits (PECO Statement No. 2-R, pp. 9-11).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. Mr. Stefani rejects my recommended adjustment to PECO's employee benefits claim based on the employee vacancy rate of 2.10% (PECO Statement No. 2-R, pp. 10-11).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S POSITION?

A. I disagree with Mr. Stefani's response to my application of the vacancy rate and his rejection of my recommended adjustment to employee benefits for the reasons discussed in the payroll section above.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR EMPLOYEE BENEFITS?

A. No. I continue to recommend an allowance of $5,797,603 for employee benefits, and accordingly, a reduction of $120,397 to PECO's claim of $5,918,000 as discussed above and in direct testimony (I&E Statement No. 1, pp. 16-17).

PAYROLL TAXES

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PAYROLL TAXES.

A. I recommended an allowance of $3,699,145 for payroll tax expense, or a reduction of $76,855 ($3,776,000 - $3,699,145) to the Company's claim (I&E Statement No. 1, p. 18). My recommendation for payroll tax expense was based on my recommended reduction to payroll expense as discussed in direct testimony (I&E Statement No. 1, p. 18).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended adjustment to payroll taxes, which is based on my recommended reduction to payroll expense. Therefore, he rejects my adjustment to PECO's payroll taxes based on his denial of the payroll expense adjustment (PECO Statement No. 2-R, pp. 9-11).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. I disagree with Mr. Stefani's response to my recommended adjustments to payroll expense and payroll taxes for the reasons discussed in payroll section above.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PAYROLL TAXES?

A. No. I continue to recommend an allowance of $3,699,145 for payroll tax expense, and accordingly, a reduction of $76,855 to PECO's claim of $3,776,000 as discussed above and in my direct testimony (I&E Statement No. 1, p. 18).

OUTSIDE SERVICES

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR OUTSIDE SERVICES (ACCOUNT 923).

A. I recommended an allowance of $13,437,856 or a reduction of $3,134,144 ($16,572,000 - $13,437,856) to the Company's claim for outside services net of the "cost to achieve" adjustment of $370,000 (I&E Statement No. 1, p. 20). My recommendation for outside services was based on forecasted CPI inflation factors for the FTY and FPFTY in contrast to the Company's speculative and unsupported significant increase of 26.55% to the FTY claim over the HTY amount and an additional 4.57% increase to the FPFTY claim over the FTY claim as discussed in my direct testimony (I&E Statement No. 1, pp. 20-22).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended adjustment to outside services (PECO Statement No. 2-R, pp. 15-19).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. First, Mr. Stefani states that the FPFTY claim for total Exelon Business Services Co. (EBSC) charges is $22,000,000 and the FTY claim of $21,000,000 is lower than the historic three-year average; therefore, the FPFTY claim for EBSC is consistent with the historic three-year average (PECO Statement No. 2-R, pp. 16-17). Then, he clarifies that the FPFTY outside services expense claim of $16,572,000 (FERC Account 923) represents a combination of: (a) EBSC contracting charges (a subset of total EBSC charges); and (b) PECO contracting charges, allocated to FERC Account 923 (PECO Statement No. 2-R, p. 16). Second, he states that per advice of counsel the Commission has repeatedly accepted the use of inflation factors as a reasonable method to derive the pro forma levels of operating expense items that were not otherwise separately adjusted for specifically known changes in costs or activity levels (PECO Statement No. 2-R, p. 17).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. First, Mr. Stefani attempts to justify the unsupported significant increase of 26.55% in the FTY over the HTY (2019-20) actual expense and an additional 4.57% increase in the FPFTY claim for outsides services expense by comparing the FPFTY total EBSC cost with the historic three-year average of EBSC cost, a component of the outside services claim. In this context for the sake of clarity, a table showing the breakdown of outside services (Account 923) and each expense item's trend is reproduced below in summarized form, based on data provided by the Company in response to I&E-RE-33-D (I&E Statement No. 1, pp. 20-21 and

I&E Exhibit No. 1, Schedule 4, pp. 1-7):

	2017-18	**2018-19**	**2019-20**	**FTY**	**FPFTY**
Various (EBSC)	$14,332,000	$13,815,000	$11,555,000	$14,622,000	$15,290,000
Contracting Professional	$534,000	$784,000	$715,000	$905,000	$946,000
Contracting Services	$781,000	$552,000	$548,000	$694,000	$726,000
Total	**$15,647,000**	**$15,151,000**	**$12,818,000**	**$16,221,000**	**$16,962,000**
% Change		-3.17%	-15.40%	26.55%	4.57%

The above table shows that PECO has experienced a declining trend in the EBSC cost and contracting services expense. The FPFTY EBSC claim of $15,290,000 is higher by 15.53% over the historic three-year average of $13,234,000. Similarly, the FPFTY contracting service claim of $726,000 is higher by 15.79% over the historic three-year average of $627,000. Additionally, PECO's FPFTY outside services (Account 923) claim of $16,572,000 ($16,942,000 - $370,000 (cost to achieve)) is unchanged and is a part of the total O&M expense claim of $466,639,000 shown in the computation of the revised revenue requirement (PECO Exhibit MJT-1 Revised, Schedule A-1, p. 1 and Schedule D-4, p. 56). Therefore, Mr. Stefani's assertion of reasonableness is not convincing when the significant increase in the FTY and FPFTY outside service claims are not properly justified and supported.

Second, Mr. Stefani asserts that the use of inflation factors is a reasonable method to derive the pro-forma levels of operating expense items when they were not adjusted for specifically known changes in costs or activity levels. In this instance, I am not disputing the use of inflation factors to determine a proforma expense allowance, but the Company's witness neither specified what inflation factors were used nor provide calculations to match the 26.55% increase in the FTY and the additional 4.57% increase in the FPFTY claims for outside services.

Considering the above and my discussion in direct testimony, my recommendation for adjusting the HTY actual outside services for inflation based on the Consumer Price Index[5] (CPI) factors of 2.75% and 2.03% to determine the FTY and FPFTY allowance is fair and reasonable despite the decline in actual outside services expense by 3.17% in 2018-19 and 15.40% in 2019-20 (I&E Statement No. 1, pp. 20-22).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR OUTSIDE SERVICES?

A. No. I continue to recommend an allowance of $13,437,856, and accordingly, a reduction of $3,134,144 to PECO's claim of $16,572,000 as discussed above and in my direct testimony (I&E Statement No. 1, pp. 20-22).

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[5] Blue Chip Financial Forecasts, Vol. 39, No. 11, October 30, 2020, p. 2.

COST TO ACHIEVE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR THE COST TO ACHIEVE.

A. I recommended disallowance of the $370,000 cost to achieve expense adjustment in its entirety, which was included in the FPFTY outside services expense claim (I&E Statement No. 1, p. 24). The Company's claim for recovery of historic merger cost results in a retroactive recovery in rates in the absence of the Commission's prior permission to defer the merger related costs for ratemaking purposes. Additionally, the merger costs were incurred during 2016 through 2018, prior to the HTY and the offsetting merger related savings were also realized in prior years. Furthermore, the Company has not proposed retroactive sharing of those savings with ratepayers (I&E Statement No. 1, pp. 24-25).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended disallowance of the entire cost to achieve claim (PECO Statement No. 2-R, pp. 12-14).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. First, Mr. Stefani states that my contention regarding prohibition for claiming an amortization of prior period merger costs (cost to achieve) unless PECO first obtained permission to "defer" such costs is a legal issue that will be addressed in the parties' briefs. Second, he states that there are exceptions to the rule against retroactive and single-issue ratemaking that could permit PECO to make its claim without having to rely upon a pre-approved "deferral" of historic period costs. Lastly, he asserts that the cost to achieve represents an investment that will produce significant merger-related savings in PECO's distribution costs, which would continue to benefit its customers (PECO Statement No. 2-R, pp. 13-14).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ARGUMENTS?

A. First, I reiterate that the Company did not request or receive permission to defer the prior period merger related costs for ratemaking purposes and all those costs were incurred during 2016 through 2018 prior to the HTY; therefore, the recovery of these costs in this proceeding is inappropriate and would result in a retroactive ratemaking (I&E Statement No. 1, p. 24 and I&E Exhibit No. 1, Schedule 5, pp. 1-2). Second, regarding PECO's alleged exceptions to retroactive ratemaking, I&E's counsel will address this issue in its brief. Lastly, I reiterate that the merger related savings of approximately $4.30 million were already realized in prior years and the Company has not proposed retroactive sharing of those savings with the ratepayers. Most importantly, the Company has already saved, at a minimum, enough money to cover the entire cost to achieve merger savings. However, the Company is seeking recovery of prior period total merger cost of $1,111,000 over a three-year amortization period, which is inappropriate and unreasonable (I&E Statement No. 1, pp. 24-25).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR COST TO ACHIEVE?

A. No. I continue to recommend disallowance of $370,000 ($1,111,000 ÷ 3) claim in its entirety as discussed above and in my direct testimony (I&E Statement No. 1, pp. 24-25).

<u>**EMPLOYEE ACTIVITY COSTS**</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR EMPLOYEE ACTIVITY COSTS.

A. I recommended an allowance of $58,469, or a reduction of $80,933 ($139,402 - $58,469) to the Company's claim for employee activity costs (I&E Statement No. 1, p. 26). I recommended disallowance of the Company's sponsored employee picnic and celebration expenses of $80,933 from the total claim of $139,402 because these expenses are not necessary for the provision of safe and reliable gas service to ratepayers (I&E Statement No. 1, p. 26).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended reduction to employee activity costs (PECO Statement No. 2-R, p. 21).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. Mr. Stefani states that PECO's annual picnic claim is based on a range of activities that are relatively modest cost expenditures, which have significant benefits in terms of employee morale and productivity. He states that at the annual gathering of employees and other events, they celebrate workforce accomplishments, strategic goals, and initiatives for the upcoming year. Therefore, he believes these expenses help PECO make an attractive workplace to recruit and retain talented professionals. For these reasons, Mr. Stefani disagrees with my recommended adjustment to employee activity costs (PECO Statement No. 2-R, p. 21).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. I disagree with Mr. Stefani's assertion that the employee picnic and celebrations expense claim of $80,933 is necessary to boost employee morale and productivity, and that such events would help PECO to attract, recruit, and retain a talented workforce. In fact, the Company is claiming other employee activities related expenses: Employee Recognition Awards of $36,146, Employee Service Awards - Pin and small gifts of $20,884, and Employee Network Groups of $1,439 amounting in total $58,469 (out of the total claimed expense of $139,402), which I recognized as morale and productivity boosters, and therefore, accepted them in the ratemaking calculation (I&E Statement No. 1, p. 26). I believe employee picnics and celebrations are not convincing factors or tools to attract and retain talented employees.

I reiterate that ratepayers should not be required to fund the Company's choice to offer special events to its employees and their families. Most importantly, it is not likely that such picnics and similar group gatherings will even occur in the FPFTY due to ongoing COVID-19 pandemic related restrictions and the need for continued social distancing (I&E Statement No. 1, p. 26).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR EMPLOYEE ACTIVITY COSTS?

A. No. I continue to recommend an allowance of $58,469, and accordingly, a reduction of $80,933 to PECO's claim of $139,402 as discussed above and in my direct testimony (I&E Statement No. 1, p. 26).

<u>INDUSTRY ORGANIZATION MEMBERSHIPS</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR INDUSTRY ORGANIZATION MEMBERSHIPS.

A. I recommended an allowance $559,304, or a reduction of $96,593 ($655,897 - $559,304) for industry organization memberships expense (I&E Statement No. 1, p. 28). My recommendation was based on applying the CPI inflation factor of 2.75% to the HTY actual expense of $533,505 to determine the FTY allowance of $548,176 and an additional 2.03% to the FTY allowance to determine the recommended FPFTY allowance of $559,304 (I&E Statement No. 1, pp. 28-29).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended reduction to PECO's claim for industry organization memberships expense (PECO Statement No. 2-R, p. 23).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. First, Mr. Stefani states that a significant increase in this expense from the HTY to the FTY was due to an inadvertent omission of certain membership expenses in the HTY number that was provided in PECO's original response to I&E-RE-28-D. Therefore, PECO included these previously omitted HTY membership expenses in its revised response to I&E-RE-28-D(a) Attachment (PECO Statement No. 2-R, p. 23). He then references PECO's revised Attachment to I&E-RE-28-D(a), and states that the Company's industry organization memberships expense of $647,000 in the FTY and $656,000 in the FPFTY are slightly higher than the Company's historic three-year average of $612,000 for memberships. However, Mr. Stefani did not categorically deny or reject my application of CPI inflation factors to determine the FTY and FPFTY expense allowance.

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. The Company, in its revised response to I&E-RE-28-D (received on January 15, 2021), provided the corrected industry organization memberships expense of $689,986 (in lieu of $595,986) and $561,005 (in lieu of $533,505) incurred in the fiscal years 2018-19 and 2019-20 respectively (I&E Exhibit No. 1-SR, Schedule 1, pp. 1-2). In its response, PECO states that its budgeted claims for the FTY and

FPFTY are largely based on general *inflationary increases* to industry organization memberships cost, which is not acceptable in the absence of specific information about inflation factors applied in the budgeting process to determine the FTY and FPFTY claims (I&E Statement No. 1, p. 28). The following table shows the membership expense trend based on corrected actual expenses for the fiscal years 2018-19 and 2019-20:

2017-18	**2018-19**	**2019-20**	**FTY**	**FPFTY**
$586,041	$689,986	$561,005	$646,899	$655,897
Increase YTY	$103,945	-$128,981	$85,894	$8,998
% Change YTY	17.74%	-18.69%	15.31%	1.39%

PECO claimed a 15.31% increase in the FTY over the HTY expense and a 1.39% increase in the FPFTY over the FTY expense. These increases are speculative and unreliable because they are not consistent with general inflation in costs.

Based on PECO's revised HTY expense, I calculated my updated recommendations for the FTY and FPFTY membership expense as shown in the table below:

HTY Industry Organizations Membership (revised)	$561,005
Adj. for CPI at 2.75% increase for the FTY	<u>$15,428</u>
FTY expense allowance	$576,433
Adj. for CPI at 2.03% increase for the FPFTY	<u>$11,702</u>
FPFTY expense allowance	$588,135
FPFTY claim	<u>$655,897</u>
FPFTY adjustment	<u>($67,762)</u>

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR INDUSTRY ORGANIZATION MEMBERSHIPS?

A. Yes. I recommend an updated allowance of $588,135, and accordingly, a reduction of $67,762 ($655,897 - $588,135) to PECO's claim of $655,897 for the reasons discussed above and in direct testimony (I&E Statement No. 1, pp. 28-29).

<u>REGULATORY INITIATIVE COST</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR THE REGULATORY INITIATIVE COST.

A. I recommended an allowance of $451,600, or a reduction of $301,400 ($753,000 - $451,600) to the regulatory initiative cost claim (I&E Statement No. 1, p. 31). My recommendation was based on a five-year amortization period in contrast to the Company's claimed three-year amortization for this unrecovered cost (I&E Statement No. 1, p. 31).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Michael J. Trzaska disagrees with my recommended reduction to the regulatory initiative cost claim (PECO Statement No. 3-R, pp. 23-24).

Q. DID PECO REVISE ITS CLAIMED REGULATORY INITIATIVE COST IN REBUTTAL TESTIMONY?

A. Yes. PECO revised the FPFTY claim for its regulatory initiative cost from $753,000 to $47,000 due to the elimination of gas neighborhood pilot program cost recovery of $706,000 (PECO Statement No. 3-R, p. 4 and PECO Exhibit MJT-1 Revised, Schedule D-14, p. 75). However, the Company is continuing to claim $47,000 ($141,000 ÷ 3 years) based on the amortization of gas unbundling of GPC/MFC charges deferred in prior years for future recovery (PECO Exhibit MJT-1 Revised, Schedule D-14, p. 75).

Q. SUMMARIZE MR. TRZASKA'S RESPONSE TO YOUR RECOMMENDATION.

A. Mr. Trzaska states that a five-year amortization of this expense is unreasonable and should be rejected because the Company's proposed three-year amortization is consistent with three-year normalization period claimed for rate case expense, which is reasonable and should be adopted. Therefore, Mr. Trzaska rejects my recommendation to require a five-year amortization of regulatory initiative expense (PECO Statement No. 3-R, p. 24).

Q. WHAT IS YOUR RESPONSE TO MR. TRZASKA'S ASSERTION?

A. As discussed in my direct testimony, my recommendation is based on a five-year amortization period in contrast to the Company's claimed three-year amortization for this unrecovered cost. A five-year amortization period is consistent with my recommended normalization period of five years for rate case expense, and this would reduce the impact of historic costs in rates (I&E Statement No. 1, p. 31).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR REGULATORY INITIATIVE COST?

A. Yes. I recommend an updated allowance of $28,200 ($141,000 ÷ 5-year amortization), or a reduction of $18,800 ($47,000 - $28,200) to PECO's revised claim of $47,000 as discussed above and in my direct testimony (I&E Statement No. 1, p. 31).

<u>ENERGY EFFICIENCY AND CONSERVATION PROGRAM</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR THE ENERGY EFFICIENCY AND CONSERVATION (EE&C) PROGRAM.

A. I recommended an allowance of $2,727,500, or a reduction of $1,772,500 ($4,500,000 - $2,727,500) to the expanded EE&C program cost (I&E Statement No. 1, p. 34). My recommendation was primarily based on the limited historic success rate of PECO's current rebate programs and other reasons as discussed in my direct testimony (I&E Statement No. 1, pp. 34-37).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Doreen L. Masalta disagrees with my recommended reduction to the expanded EE&C program cost (PECO Statement No. 9-R, pp. 4-7).

Q. SUMMARIZE MS. MASALTA'S RESPONSE.

A. First, Ms. Masalta acknowledges that past customer participation levels have not met projections and that program expenditures have been less than the budgeted amounts (PECO Statement No. 9-R, p. 4). Ms. Masalta then states that the Company's proposed budget will support both the expanded program offerings as well as the development and execution of campaigns to promote natural gas efficiency rebates. The campaigns will focus on the economic benefits of purchasing more-efficient equipment and will be directed to the targeted customer markets and engage trade allies (PECO Statement No. 9-R, pp. 4-5). Thus, she opines that the proposed additional funding is necessary to support the expanded EE&C rebate programs. Additionally, she asserts that the past participation rates represent a strong base from which to build on, and the expanded outreach and education programs will increase both customer participation and energy savings (PECO Statement No. 9-R, p. 5).

Second, Ms. Masalta states that customers will still see significant savings by opting for more efficient natural gas heating equipment even with the current, historically low natural gas prices. According to PECO's online calculator, customers could save on average 16% annually by installing a 96% Annual Fuel Utilization Efficiency (AFUE) furnace compared to the cost of operating an 80% AFUE system. She also asserts that even higher savings can be achieved by customers with older systems where the efficiency is far less due to outdated technology and/or poorly maintained equipment. She opines that PECO's rebate programs for the equipment meeting certain Energy Star™ requirements would incentivize customers to choose higher efficiency equipment when making this long-term investment (PECO Statement No. 9-R, pp. 5-6).

Lastly, Ms. Masalta states that there has been a 9% increase in Energy Star™ rebates from 2019 to 2020 and comparing the fourth quarter of 2019 with the fourth quarter of 2020, the Company has seen a 16% increase in Energy Star™ rebates. For this reason, PECO asserts that its customer participation forecasts are reasonable and support the Company's annual claim of $4,500,000 for the expanded EE&C programs.

Q. WHAT IS YOUR RESPONSE TO MS. MASALTA'S ARGUMENTS?

A. First, as discussed in my direct testimony, I continue to recommend that the Company should accommodate new program costs within my recommended allowance of $2,727,500 for the expanded EE&C program cost because the PECO has experienced significant unspent EE&C funding at an average 43.24% of annual customer funding for the EE&C program during the last three fiscal years, which was required to be refunded back to the customers (I&E Statement No. 1, pp. 34-35). Additionally, despite the fact that the Company's EE&C program has operated since 2010-11 and with continuous customer outreach and education spending, the Company achieved merely 3,501 customers' participation (an average of the last three fiscal years) out of approximately 534,000 retail customers (PECO Statement No. 1, p. 2). Though, the Company has projected significantly higher number of 27,739 customers' participation in the FPFTY EE&C program (PECO Exhibits DLM-1 Revised and DLM-2 Revised). The Company's projected customers participation is speculative, unreasonable, and not supported by historic participation levels and therefore, the budgeted/expanded EE&C program cost is flawed and not reliable.

Second, I reiterate that natural gas prices are at historic lows; thus usage reductions will not translate into significant annual savings to individuals implementing energy conservation measures and the increased cost of the higher efficiency equipment options will have long payback periods. Ms. Masalta ignores the cost differential between an 80% AFUE furnace and a 94% or 96% AFUE system that customers consider before replacing an old furnace. Due to the high cost of highly efficient equipment, customers with older systems (working fine) are generally not interested in replacing them for the sake of a rebate until the equipment is no longer usable. Additionally, HVAC installers generally recommend replacing air conditioning systems as a package with the heating system which adds more cost to the heating system replacement. This confirms my position that investing in energy efficient equipment even after rebates would not incentivize additional customers to participate in the expanded EE&C program, and the Company may find it very challenging to convince ratepayers to make upgrades under the proposed expanded EE&C program.

Lastly, I disagree with Ms. Masalta's speculative statement that a 16% increase in Energy Star™ rebates in the fourth quarter of 2020 as compared with the fourth quarter of 2019 supports PECO's customer participation forecasts and the Company's significantly increased FPFTY claim of $4,500,000 (a 65% increase) for the expanded EE&C programs in contrast to the current program cost of $2,727,500. The following table shows PECO's historic customer participation and total program cost incurred in 2017-18 through 2019-20 (I&E Exhibit No. 1, Schedule 8, pp. 3-4 and PECO Exhibit DLM-2):

Fiscal Year	**Participant Count**	**Rebate Total**	**Program Cost**	**Total Cost**
2017-18	3,635	$1,015,700	$1,108,479	$2,124,179
2018-19	3,399	$1,008,400	$1,101,636	$2,110,036
2019-20	3,470	$1,001,900	$1,082,448	$2,084,348
3-Year Average	**3,501**	**$1,008,667**	**$1,097,521**	**$2,106,188**
FTY 2021*	3,746	$1,060,872	$1,146,429	$2,207,301
FPFTY 2022*	27,664	$2,333,000	$2,170,000	$4,500,000

* Forecasted

Briefly, the Company's low level of customer participation and significant unspent funding for the EE&C program in the last three years as discussed above and in my direct testimony fail to justify or support the Company's FPFTY claim (I&E Statement No. 1, pp. 34-37). Alternatively, the Company should have claimed or started with a low to moderate increase in the FPFTY EE&C program cost based on an increase in customer participation or in response to the program's year to year participation.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR EE&C PROGRAM COST?

A. No. I continue to recommend an allowance of $2,727,500, and accordingly, a reduction of $1,772,500 to PECO's claim of $4,500,000 as discussed above and in my direct testimony (I&E Statement No. 1, pp. 34-37).

<u>CONTRACTING/MATERIALS</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR CONTRACTING/MATERIALS COST.

A. I recommended an allowance $32,940,000, or a reduction of $10,015,000 ($42,955,000 - $32,940,000) for contracting/materials cost (I&E Statement No. 1, p. 39). My recommendation was based on an average of the last three years' expense because PECO's significant increase in the FTY and FPFTY claims are unsupported and speculative, and the Company has experienced budgeted underspent expense levels in the prior three fiscal years as discussed in my direct testimony (I&E Statement No. 1, pp. 39-40).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended reduction to contracting/materials cost (PECO Statement No. 2-R, pp. 17-19).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. First, Mr. Stefani attributes the increase in the FTY and FPFTY budgeted claims to three factors: (1) PECO is enhancing its mapping system to improve the Company's ability to locate and track gas distribution facilities and PECO will increase its investment in the gas mapping project in the FTY; (2) PECO's FTY forecast includes additional contracting and materials expense related to PECO's planned activity to reduce the Company's non-emergent leak backlog; and (3) PECO expects to incur additional expenses related to increased security services for crews working in high crime areas during the FTY (PECO Statement No. 2-R, p. 18). Second, the substantial decrease in the Company's contracting and materials expenses during the second quarter of 2020 can be considered an anomaly related to the COVID-19 emergency and is not reflective of anticipated future levels of those expenses (PECO Statement No. 2-R, p. 18).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ARGUMENTS?

A. In the first place, the Company in its response to I&E-RE-65-D stated that the increase in its FTY expense claim was due to lower than expected spending in the HTY driven by the impact of COVID-19 pandemic-related restrictions and the

FTY to FPFTY expense has no significant variance (I&E Exhibit No. 1, Schedule 9, p. 2). In rebuttal testimony, Mr. Stefani describes additional planned activities for the FTY that increase the FTY claim. However, he did not provide the projected FTY and FPFTY spending for each of the planned additional activities, such as, a breakdown of contracting and materials expenses by category, and the basis of projection for these expenses to be incurred in the FTY and FPFTY. In the absence of a detailed explanation and support for the significant increase of 51.09% in the FTY expense claim, the FPFTY expense claim is not appropriate and reliable because the FTY increase is reflected in the FPFTY claim. It is also not certain that all the projected expense increases in the FTY for new planned activities will continue to be incurred in the FPFTY.

Second, as discussed in my direct testimony, the Company's actual contracting and materials expenses were underspent by 11.42% in 2017-18, 2.76% in 2018-19, and 24.46% in 2019-20 as compared to the budgeted expense in the respective fiscal years (I&E Statement No. 1, p. 39). Mr. Stefani claims that the actual expenses for 2019-20 have been impacted by COVID-19 pandemic restrictions. At this time, it is speculative to assume that the impact of COVID-19 related restrictions will diminish completely in the FTY and FPFTY and the Company will be able to spend entire budgeted amount in those periods. Therefore, in the absence of information about COVID-19 related impacts on contracting and material expenses in 2019-20 and the potential impact of COVID-19 on the FTY and FPFTY expenses, my recommendation based on an average of the last three years' expense is reasonable and an appropriate basis for determining the FPFTY allowance for this expense (I&E Statement No. 1, p. 40).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR CONTRACTING/MATERIALS COST?

A. No. I continue to recommend an allowance of $32,940,000, and accordingly, a reduction of $10,015,000 to PECO's claim of $42,955,000 as discussed above and in my direct testimony (I&E Statement No. 1, pp. 39-40).

<u>TRAVEL, MEALS, AND ENTERTAINMENT</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR TRAVEL, MEALS, AND ENTERTAINMENT.

A. I recommended an allowance of $862,153, or a reduction of $169,847 ($1,032,000 - $862,153) for travel, meals, and entertainment expense (I&E Statement No. 1, p. 41). My recommendation was based on applying the CPI inflation factor of 2.03% to the FTY claim to determine a FPFTY allowance because PECO's significant increase of 22.13% in the FPFTY claim was unsupported, speculative, and inconsistent with the Company's assertion for an increased claim due to general inflation as discussed in my direct testimony (I&E Statement No. 1, pp. 41-42).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended reduction to travel, meals, and entertainment expense (PECO Statement No. 2-R, pp. 22-23).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. Mr. Stefani states that PECO's budgeted data for the FTY and FPFTY is more representative of the current and future conditions than the HTY (2019-20) data. The HTY data reflects COVID-19 travel restrictions that were put in place, which will be alleviated by the availability of a COVID-19 vaccine and other measures to mitigate the impact of COVID-19 (PECO Statement No. 2-R, pp. 22-23).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. In the first place, the Company in its response to I&E-RE-65-D stated that the increase in the FTY expense claim from the HTY is due to lower than expected spending driven by the impact of COVID-19 pandemic-related restrictions and the increase from the FTY to the FPFTY claim is primarily due to the inflation rate (I&E Exhibit No. 1, Schedule 9, p. 2). However, the Company's FPFTY claim is 22.13% higher than the FTY expense, which is not consistent with the current inflation trend, and the Company did not provide any additional information to support its claim. Additionally, it is speculative to assert that with a COVID-19 vaccine, travel restrictions due to the COVID-19 pandemic will be eliminated and normal travel condition would be established. The FTY claim of $845,000 is already projected to be higher by 24.26% over the HTY actual expense of $680,000. Therefore, my recommendation based on the FTY claim of $845,000 plus an inflation adjustment of 2.03% for the FPFTY expense allowance is fair and reasonable during the uncertain pandemic environment (I&E Statement No. 1, p. 42).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR TRAVEL, MEALS, AND ENTERTAINMENT?

A. No. I continue to recommend an allowance of $862,153, and accordingly, a reduction of $169,847 to PECO's claim of $1,032,000 as discussed above and in my direct testimony (I&E Statement No. 1, pp. 41-42).

<u>OTHER POST-EMPLOYMENT BENEFITS</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR OTHER POST-EMPLOYMENT BENEFITS (OPEB).

A. I recommended an allowance of $270,000, or a reduction of $780,000 ($1,050,000 - $270,000) for OPEB expense (I&E Statement No. 1, p. 43). My recommendation was based on the FTY claim as the FPFTY allowance because the projected increases in the FTY and FPFTY claims are based on assumptions, which are not supported, and therefore, the significant increase of 74.28% in the FPFTY expense claim over the FTY expense claim is not reasonable and reliable (I&E Statement No. 1, pp. 43-44).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Robert J. Stefani disagrees with my recommended reduction to OPEB expense (PECO Statement No. 2-R, pp. 25-28).

Q. SUMMARIZE MR. STEFANI'S RESPONSE.

A. Mr. Stefani states that the OPEB plan design change resulted in a re-measurement of the Company's OPEB obligation, which resulted in a prior service credit recorded to other comprehensive income. The prior service credit was then amortized over the remaining service life of the active plan participants (approximately seven years). The increase in OPEB costs from the HTY to FTY is due to the expiration of the prior service credit in 2021, along with the attendant amortization (PECO Statement No. 2-R, p. 27). Therefore, I&E's use of an FTY expense level for the FPFTY is unreasonable as the FTY expense reflects a prior service credit (PECO Statement No. 2-R, p. 28).

Q. WHAT IS YOUR RESPONSE TO MR. STEFANI'S ASSERTION?

A. Mr. Stefani asserts that the prior service credit amortization reduced OPEB expense in the historic fiscal years 2017-18, 2018-19, 2019-20, and partially in the FTY. However, the Company in its responses to I&E-RE-30-D(a) and I&E-RE-88-D(a) did not provide a calculation showing the amount of the prior year service credit adjusted in the historic years and in the FTY projection. Additionally, the projected OPEB expense claims of $270,000 in the FTY and $1,050,000 (a

74.28% increase over the FTY claim) in the FPFTY were derived from the calendar year OPEB cost assumption and the Company's responses did not include the basis of the cost assumption, its calculation, and the service credit adjustment in the historic fiscal years and in the FTY and FPFTY for gas operations (I&E Exhibit No. 1, Schedule 10, pp. 1-5). The actuarial report of Willis Towers Watson, provided to support the OPEB claim, does not specify a service credit adjustment (PECO Exhibit RJS-4-R Confidential, p. 16). In the absence of detailed information about the service credit adjustments reflected in the OPEB costs of the last three fiscal years and the adjustments made in the FTY and FPFTY OPEB claims, my recommendation based on the FTY claim amount is appropriate and reasonable.

Q. DO YOU HAVE ANY CHANGES TO YOUR OPEB RECOMMENDATION?

A. No. I continue to recommend an allowance of $270,000 and accordingly, a reduction of $780,000 to PECO's claim of $1,050,000 for OPEB expense as discussed above and in direct testimony (I&E Statement No. 1, pp. 43-44).

<u>PENSION ASSET - RATE BASE</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR THE PENSION ASSET CLAIM.

A. I recommended disallowance of the Company's $35,059,000 claim or a reduction of $35,059,000 to the Company's rate base claim (I&E Statement No. 1, p. 47). The pension asset represents a mismatch from a GAAP accounting perspective (use of an accrual method for plant accounts) and a cash contribution method for the expense account in ratemaking, and these differences between GAAP expense and cash contributions in any given year should not be viewed as a valid reason to inflate the plant amounts in rate base. Therefore, for ratemaking purposes the Commission should disallow this claim (I&E Statement No. 1, pp. 47-50).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Michael J. Trzaska disagrees with my recommended disallowance of the claimed pension asset (PECO Statement No. 3-R, pp. 10-15).

Q. SUMMARIZE MR. TRZASKA'S RESPONSE.

A. Mr. Trzaska made the following comments in his response to I&E's recommendation:

(1) He states that the pension asset of $35.1 million is investor-supplied capital that was actually contributed to PECO's pension fund and assumed for ratemaking purposes to be included in PECO's plant accounts to recover the previously unrecovered associated carrying cost and PECO is not seeking their recovery in this case (PECO Statement No. 3-R, pp. 11-12).

(2) Mr. Trzaska opines that the Commission's method to reflect pension costs in operating expenses for ratemaking purposes causes a real and material difference

between the amounts the Commission assumes will be capitalized (based on cash pension contributions) and the amounts that are actually capitalized (based on GAAP rules that public companies follow) (PECO Statement No. 3-R, p. 12).

(3) He asserts that the conceptual basis for including a pension asset in rate base was adopted and affirmed in the black-box settlements of three consecutive rate cases of Duquesne Light Company (Duquesne) filed in 2010, 2013, and 2018 and I&E did not appear to oppose this (PECO Statement No. 3-R, pp. 12-15).

(4) Finally, Mr. Trzaska states that the calculation of the pension asset is not a one-way street. The pension fund contributions used to calculate pension expense for ratemaking have thus far been more than the pension accruals under SFAS 87, used to calculate the amount of pension costs included in plant accounts. However, that relationship could change over time, and if that occurs, PECO will reflect the net cumulative pension liability as a reduction to rate base for ratemaking purposes (PECO Statement No. 3-R, pp. 19-20).

Q. WHAT IS YOUR RESPONSE TO MR. TRZASKA'S ARGUMENTS?

A. (1) I disagree with Mr. Trzsaka's statement that pension asset of $35.1 million is investor-supplied capital and therefore should be included in PECO's plant accounts to recover the previously unrecovered associated carrying cost. Fundamentally, the pension asset is created due to mismatch in GAAP accounting and ratemaking treatment of pension cost (an accounting journal entry), and there is no real infusion of capital or funds by the investors/stockholders that is eligible for return on investment.

Additionally, the accumulated balance of the pension asset should not be categorized or described as a utility asset that is used and useful in providing utility services to ratepayers, and therefore, should not be included as an eligible asset in the rate base claim to recover the associated carrying cost (earning return on it) (I&E Statement No. 1, pp. 47-48).

(2) Mr. Trzaska acknowledges the fact that the pension asset represents a mismatch in GAAP accounting and ratemaking treatment of the pension cost (I&E Statement No. 1, p. 47).

(3) Mr. Trzaska cites Duquesne Light's prior rate case settlements that were approved by the Commission, where a pension asset was claimed in rate base and he asserts that the Commission's approval of Duquesne Light's black-box settlements provides a blanket authority to PECO Gas or other utilities to include a pension asset in a rate base claim. However, he conveniently ignored the fact that PECO Electric Division (PECO Electric) had attempted to utilize this method for pension asset recovery in 2015 (at Docket No. R-2015-2468981), and this case was settled without attribution to any claim about pension asset recovery by the Company or other parties to the case. Again, in 2018 PECO Electric made a claim for pension asset recovery in its base rate case (at Docket No. R-2018-3000164), and this case was also settled without attribution to any claim about pension asset recovery by the Company or any other parties to the case (I&E Statement No.1,

p. 48 and I&E Exhibit No. 2, Schedule 11, pp. 4-5). The Company should not be assured approval of a method agreed to by the parties in a settlement, which is by definition a negotiated compromise on the part of all parties and do not necessarily represent the positions of the parties would have adopted during litigation.

(4) I reiterate my understanding that over time, differential amounts (positive/negative) between the sum amount recorded for accrual accounting purposes per GAAP and the sum amount of annual cash contributions shall match or change to a liability account. Therefore, these differences between GAAP expense and cash contributions in any given year should not be viewed as a valid reason to inflate the plant amounts in rate base (I&E Statement No. 1, p. 49).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR THE PENSION ASSET?

A. No. I continue to recommend disallowance of the $35,059,000 claim in its entirety, and accordingly, a reduction of $35,059,000 to PECO's rate base claim discussed above and in my direct testimony (I&E Statement No. 1, pp. 47-50).

<u>CASH WORKING CAPITAL</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR CASH WORKING CAPITAL (CWC).

A. I recommended an allowance of $2,902,236 or reduction of $320,764 ($3,223,000 - $2,902,236) to the Company's claim (I&E Statement No. 1, p. 51). My recommendation included modification of the Company's claim based on all recommended adjustments to O&M expenses discussed in I&E's direct testimony.

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. No. However, PECO witness Michael J. Trzaska explains changes made in components of the CWC calculation and consequently an updated CWC claim (PECO Statement No. 3-R, pp. 2-3).

Q. WHAT IS THE COMPANY'S UPDATED CLAIM?

A. PECO updated its FPFTY CWC claim from $3,223,000 to $3,437,000 (PECO Exhibit MJT-1 Revised, Schedule C-4, p. 23).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No. However, I have an update to my recommendation for CWC. As stated in direct testimony, all O&M expense adjustments that are cash-based expense claims are included when determining the Company's overall CWC requirement. Therefore, CWC is being modified to reflect my updated O&M expense adjustments as discussed above. I updated PECO's CWC Summary as shown on PECO Exhibit MJT-1 Revised, Schedule C-4, p. 23 for the recommended O&M expense adjustments discussed above (I&E Exhibit No. 1-SR, Schedule 2, p. 1).

Q. SUMMARIZE WHERE EACH OF THE I&E RECOMMENDED O&M EXPENSE ADJUSTMENTS ARE REFLECTED IN THE CWC COMPUTATION.

A. **<u>Expense Lag Days - Payroll</u>:**

I recommended a payroll expense adjustment of ($858,715) in the Expense Lag - Payroll, which is reflected as reduction to line 6 of the Company's Exhibit MJT-1 Revised, Schedule C-4, p. 23 as shown in I&E-modified Schedule C-4 (I&E Exhibit No. 1-SR, Schedule 2, p. 1, ln. 6).

<u>Expense Lag Days – Other Expenses</u>:

I recommended the following expense adjustments in the Expense Lag - Other Expenses as downward adjustments to line 10 of the Company's Exhibit MJT-1 Revised, Schedule C-4, p. 23 as shown in I&E-modified Schedule C-4 (I&E Exhibit No. 1-SR, Schedule 2, p. 1, ln. 10):

Other Expenses	Reduction
Rate Case Expense	$208,200
Employee Benefits Expense	$120,397
Payroll Taxes	$76,855
Outside Services	$3,134,144
Cost to Achieve	$370,000
Employee Activity Cost	$80,933
Industry Org. Memberships	$67,762
Regulatory Initiative Cost	$18,800
Energy Efficiency & Conservation	$1,772,500
Contracting/Materials	$10,015,000
Travel, Meal, and Entertainment	$169,847
Other Post-Retirement Employee Benefits	$780,000
Total	**$16,814,438**

Q. BASED ON THE ABOVE TESTIMONY, WHAT IS YOUR UPDATED RECOMMENDED ALLOWANCE FOR CWC?

A. Based on reflecting all of I&E's recommended adjustments as discussed above, my updated recommendation for CWC is $3,135,234 or a reduction of $301,766 ($3,437,000 - $3,135,234) to the Company's updated claim (I&E Exhibit No. 1-SR, Schedule 2, p. 1, ln. 27).

Q. IS YOUR UPDATED RECOMMENDATION FOR CWC A FINAL RECOMMENDED ALLOWANCE?

A. No. As stated in my direct testimony, all adjustments to the Company's claims must be continually brought together in the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order. This process, known as iteration, effectively prevents the determination of a precise calculation until all adjustments have been made to the Company's claims.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 2
Witness: Christopher Keller
NON-PROPRIETARY

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3018929

Direct Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

Rate of Return
Neighborhood Gas Pilot Rider

TABLE OF CONTENTS

INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christopher Keller. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. WHAT IS YOUR EDUCATION AND EMPLOYMENT BACKGROUND?

A. An outline of my education and employment background is attached as Appendix A.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for protecting the public interest in proceedings before the Commission. I&E's analysis in this proceeding is based on its responsibility to represent the public interest. This responsibility requires balancing the interests of ratepayers, the regulated utility, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to review the base rate filing of PECO Energy Company – Gas Division (PECO Energy or Company), and make recommendations regarding the Company's rate of return, including capital structure, cost of long-term debt, the cost of equity, and the overall fair rate of return for the fully projected future test year (FPFTY) ending June 30, 2022. I will also address PECO Energy's proposed changes to the Neighborhood Gas Pilot Rider.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 2 contains schedules that support my testimony.

BACKGROUND

Q. WHAT IS THE GENERAL DEFINITION OF RATE OF RETURN IN THE CONTEXT OF A RATE CASE?

A. Rate of return is one of the components of the revenue requirement formula. Rate of return is the amount of revenue an investment generates in the form of net income and is usually expressed as a percentage of the amount of capital invested over a given period of time.

Q. WHAT IS THE REVENUE REQUIREMENT FORMULA?

A. The revenue requirement formula used in base rate cases is as follows:

$$RR = E + D + T + (RB \times ROR)$$

Where:

RR	=	Revenue Requirement
E	=	Operating Expenses
D	=	Depreciation Expense
T	=	Taxes
RB	=	Rate Base
ROR	=	Overall Rate of Return

In the above formula, the rate of return is expressed as a percentage. The calculation of that percentage is independent of the determination of the appropriate rate base value for ratemaking purposes. As such, the appropriate total dollar return is dependent upon the proper computation of the rate of return and the proper valuation of the Company's rate base.

Q. WHAT CONSTITUTES A FAIR AND REASONABLE OVERALL RATE OF RETURN?

A. A fair and reasonable overall rate of return is one that will allow the utility an opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect.

The *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia,* 262 U.S. 679, 692-93 (1923), and the *FPC v. Hope Natural Gas Co.,* 320 U.S. 591, 603 (1944) cases set forth the principles that are generally accepted by regulators throughout the country as the appropriate criteria for measuring a fair rate of return:

1. A utility is entitled to a return similar to that being earned by other enterprises with corresponding risks and uncertainties, but not as high as those earned by highly profitable or speculative ventures.
2. A utility is entitled to a return level reasonably sufficient to assure financial soundness.
3. A utility is entitled to a return sufficient to maintain and support its credit and raise necessary capital.
4. A fair return can change (increase or decrease) along with economic conditions and capital markets.

Q. EXPLAIN HOW THE OVERALL RATE OF RETURN IS TRADITIONALLY CALCULATED IN BASE RATE PROCEEDINGS.

A. In base rate proceedings, the overall rate of return is traditionally calculated using the weighted average cost of capital method. To calculate the weighted average cost of capital, a company's capital structure must first be determined by comparing the percentage of each capitalization component, which has financed rate base, to total capital. Next, the effective cost rate of each capital structure component must be determined. The historical component of the cost rate of debt can be computed accurately, and any future debt issuances are based on estimates. The cost rate of common equity is not fixed and is more difficult to measure. Because of this difficulty, a proxy group is used as discussed later in this testimony. Next, each capital structure component percentage is multiplied by its corresponding effective cost rate to determine the weighted capital component cost rate. The I&E table in the *"I&E Position"* section below demonstrates the interaction of each capital structure component and its corresponding effective cost rate. Finally, the sum of the weighted cost rates produces the overall rate of return. This overall rate of return is multiplied by the rate base to determine the return portion of a company's revenue requirement.

COMPANY'S RATE OF RETURN CLAIM

Q. WHO IS THE COMPANY'S RATE OF RETURN WITNESS?

A. PECO Energy witness Paul R. Moul is the primary witness addressing rate of return (PECO Energy Statement No. 5). Mr. Moul provides analysis for the claimed capital structures, long-term debt, and cost of common equity for PECO Energy.

Q. PLEASE SUMMARIZE THE COMPANY'S RATE OF RETURN CLAIM.

A. Mr. Moul recommends the following rate of return for the Company based on its FPFTY ending June 30, 2022 (PECO Energy Exhibit PRM-1, Schedule 1, p. 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	46.62%	3.97%	1.85%
Common Equity	53.38%	10.95%	5.85%
Total	100.00%		7.70%

<u>**I&E POSITION**</u>

Q. PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATION.

A. I recommend the following rate of return for the Company (I&E Exhibit No. 2, Schedule 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	46.62%	3.97%	1.85%
Common Equity	53.38%	10.24%	5.47%
Total	100.00%		7.32%

<u>**PROXY GROUP**</u>

Q. WHAT IS A PROXY GROUP AS USED IN BASE RATE CASES?

A. A proxy group is a set of companies that have similar traits of risk in comparison to the subject utility. This group of companies acts as a benchmark for determining the subject utility's rate of return in a base rate case.

Q. WHAT ARE THE REASONS FOR USING A PROXY GROUP?

A. A proxy group's cost of equity is used as a benchmark to satisfy the long-established guideline of utility regulation that seeks to provide the subject utility with the opportunity to earn a return similar to that of enterprises with corresponding risks and uncertainties.

A proxy group is typically utilized since the use of data exclusively from one company may be less reliable. The lower reliability occurs because the data for one company may be subject to events that can cause short-term anomalies in the marketplace. The rate of return on common equity for a single company could become distorted in these circumstances and would therefore not be representative of similarly situated companies. Therefore, a proxy group has the effect of smoothing out potential anomalies associated with a single company.

Q. WHAT CRITERIA DID YOU USE IN SELECTING YOUR GAS INDUSTRY PROXY GROUP?

A. The criteria for my proxy group was designed to select companies that are most like the natural gas distribution company subject in this proceeding. I applied the following criteria to Value Line's Natural Gas Utility company group:

1. Fifty percent or more of the company's revenues must be generated from the regulated gas utility industry;
2. The company's stock must be publicly traded;

3. Investment information for the company must be available from more than one source, which includes Value Line;

4. The company must not be currently involved/targeted in an announced merger or acquisition;

5. The company must have four consecutive years of historic earnings data; and

6. The company must be operating in a state that has a deregulated gas utility market.

Q. WHAT CRITERIA DID MR. MOUL USE IN SELECTING HIS GAS PROXY GROUP COMPANIES?

A. Mr. Moul began with the ten gas utility companies in Value Line's Investment Survey. From there, he eliminated one company, UGI Corp., due to its diversified businesses, which includes six reportable segments. These various business segments include propane, international liquefied petroleum gas segments, natural gas utility, energy services, and electric generation. Beyond his rationale for excluding UGI Corp., Mr. Moul has not provided a list of criteria used to determine the remainder of his "Gas Group" other than that the Gas Group is made up of the companies the Commission's Bureau of Technical Utility Services uses to calculate the cost of equity in its Quarterly Earnings Reports (PECO Energy Statement No. 5, p. 5, line 15 through p. 6, line 10).

Q. **WHAT PROXY GROUP DID YOU USE IN YOUR ANALYSIS?**

A. I included the following seven companies in my proxy group (I&E Exhibit No. 2, Schedule 2):

Atmos Energy Corp.	ATO
Chesapeake Utilities Corp.	CPK
NiSource Inc.	NI
Northwest Natural Holding Co.	NWN
ONE Gas, Inc.	OGS
South Jersey Industries	SJI
Spire Inc.	SR

Q. **WHAT PROXY GROUP DID MR. MOUL USE IN HIS ANALYSIS?**

A. Mr. Moul utilized the following nine companies in his Gas Group (PECO Energy Exhibit PRM-1, Schedule 3, p. 2):

Atmos Energy Corp.	ATO
Chesapeake Utilities Corp.	CPK
New Jersey Resources Corp.	NJR
NiSource Inc.	NI
Northwest Natural Holding Co.	NWN
ONE Gas, Inc.	OGS
South Jersey Industries, Inc.	SJI
Southwest Gas Holdings, Inc.	SWX
Spire, Inc.	SR

Q. DO YOU AGREE WITH MR. MOUL'S GAS PROXY GROUP?

A. Not entirely. While Mr. Moul's Gas Group includes all seven of the companies in my proxy group, I have excluded two of the companies he uses.

Q. PLEASE LIST THE TWO COMPANIES MR. MOUL INCLUDES THAT YOU DO NOT AND EXPLAIN WHY YOU HAVE EXCLUDED THEM FROM YOUR PROXY GROUP.

A. The two companies Mr. Moul includes in his Gas Group that I have excluded from my proxy group are New Jersey Resources Corp. and Southwest Gas Holdings, Inc. as these companies did not meet my first criterion that fifty percent or more of the company's revenues must be generated from the regulated gas utility industry. This is important because revenues represent the percentage of cash flow a company receives from each business line related to providing a good or service. If less than fifty percent of revenues come from the regulated gas sector, the companies are not comparable to the subject utility as they do not provide a similar level of regulated business. Therefore, these companies should be removed from the proxy group.

CAPITAL STRUCTURE

Q. WHAT IS A CAPITAL STRUCTURE?

A. A capital structure represents how a firm has financed its rate base with different sources of funds. The primary funding sources are long-term debt and common equity. A capital structure may also include preferred stock and/or short-term debt.

Q. WHAT IS THE COMPANY'S CLAIMED CAPITAL STRUCTURE?

A. The Company's claimed capital structure is summarized in the table below (PECO Energy Statement No. 5, p. 21, lines 9-14 and PECO Energy Exhibit PRM-1, Schedule 1, p. 1):

Type of Capital	Ratio
Long-Term Debt	46.62%
Common Equity	53.38%
Total	100.00%

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIMED CAPITAL STRUCTURE?

A. Mr. Moul states that these capital structure ratios reflect known and reasonable foreseeable changes that will occur in the FPFTY (PECO Energy Statement No. 5, p. 21, lines 9-14).

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S CAPITAL STRUCTURE?

A. I recommend using the Company's claimed capital structure as presented in the table above.

Q. WHAT IS THE BASIS FOR YOUR CAPITAL STRUCTURE RECOMMENDATION?

A. I recommend using the Company's claimed capital structure as it falls within the range of my proxy group's 2019 capital structures, which is the most recent information available at the time of my analysis. The 2019 range consists of long-term debt ratios ranging from 33.18% to 53.48% and equity ratios ranging from 32.78% to 59.01%, with a five-year average of 40.29% for long-term debt and 47.60% for common equity (I&E Exhibit No. 2, Schedule 2).

<u>COST OF LONG-TERM DEBT</u>

Q. WHAT IS THE COMPANY'S CLAIMED COST RATE OF LONG-TERM DEBT?

A. The Company's claimed long-term debt cost rate is 3.97% for the FPFTY (PECO Energy Statement No. 5, p. 22, lines 14-15 and PECO Energy Exhibit PRM-1, Schedule 1, p. 1)).

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S COST RATE OF LONG-TERM DEBT?

A. I recommend using the Company's claimed long-term debt cost rate of 3.97%.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO USE THE COMPANY'S CLAIMED COST RATE OF LONG-TERM DEBT?

A. The Company's claimed cost rate of long-term debt is reasonable, as it is representative of the industry. It falls within my proxy group's implied long-term debt cost range of 3.14% to 5.82%, with an average implied long-term debt cost of 4.91% (I&E Exhibit No. 2, Schedule 3). Therefore, I recommend the Company's claimed cost rate of long-term debt be used.

COST OF COMMON EQUITY

COMMON METHODS

Q. WHAT METHODS ARE COMMONLY PRESENTED BY UTILITIES IN DETERMINING THE COST OF COMMON EQUITY?

A. Four methods commonly presented to estimate the cost of common equity are the Discounted Cash Flow (DCF), the Capital Asset Pricing Model (CAPM), the Risk Premium (RP) Method, and the Comparable Earnings (CE) Method.

Q. WHAT IS THE THEORETICAL BASIS FOR THE DCF METHOD?

A. The DCF method is the "dividend discount model" of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. The DCF method assumes that investors evaluate stocks in the classical economic framework, which maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows.

Q. WHAT IS THE THEORETICAL BASIS FOR THE CAPM?

A. The CAPM describes the relationship of a stock's investment risk and its market rate of return. It identifies the rate of return investors expect so that it is comparable with returns of other stocks of similar risk. This method hypothesizes that the investor-required return on a company's stock is equal to the return on a "risk free" asset plus an equity premium reflecting the company's investment risk. In the CAPM, two types of risk are associated with a stock: (1) firm-specific risk (unsystematic risk); and (2) market risk (systematic risk), which is measured by a firm's beta. The CAPM allows for investors to receive a return only for bearing systematic risk. Unsystematic risk is assumed to be diversified away, and therefore, does not earn a return.

Q. WHAT IS THE THEORETICAL BASIS FOR THE RP METHOD?

A. The theoretical basis for the RP method is a simplified version of the CAPM. The RP method's theory is that common stock is riskier than debt and, thus, investors require a higher expected return on stocks than bonds. In the RP approach, the cost of equity is made up of the cost of debt and a risk premium. While the CAPM uses the market risk premium, it also directly measures the systematic risk of a company group through the use of beta. The RP method does not measure the specific risk of a company.

Q. WHAT IS THE THEORETICAL BASIS FOR THE CE METHOD?

A. The CE method utilizes the concept of "opportunity cost." This means that investors will likely dedicate their capital to the investment offering the highest return with similar risk to alternative investments. Unlike the DCF, CAPM, and the RP methods, the CE method is not market-based and relies upon historic accounting data. The most problematic issue with the CE method is determining what constitutes comparable companies.

Q. WHAT METHOD DO YOU RECOMMEND USING TO DETERMINE AN APPROPRIATE COST OF COMMON EQUITY FOR PECO ENERGY?

A. I recommend using the DCF method as the primary method to determine the cost of common equity. I also recommend using the results of the CAPM as a comparison to the DCF results. My recommendation is consistent with the methodology historically used by the Commission in base rate proceedings, even as recently as 2017, 2018, and 2020.[1]

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[1] *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company;* Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA;* Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92.

Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE DCF AND CAPM IN YOUR ANALYSIS.

A. I have used the DCF as the primary method for a several reasons. First, the DCF is appealing to investors as it is based upon the concept that the receipt of dividends in addition to expected appreciation is the total return requirement determined by the market. Second, the use of a growth rate and expected dividend yield are also strengths of the DCF, as this recognizes the time value of money and is forward-looking. Third, the use of the utilities' own, or in this case, the proxy group's stock prices and growth rates directly in the calculation also causes the DCF to be industry and company-specific. Finally, the DCF method is the superior method for determining the rate of return for the current economic market because it measures the cost of equity directly.

I have included a CAPM analysis as a comparison because the CAPM and the DCF include inputs that allow the results to be specific to the utility industry, although the CAPM is far less responsive to changes in the industry than the DCF. The CAPM is based on the performance of U.S. Treasury bonds and the performance of the market as measured through the S&P 500 and is company-specific only through the use of beta. Beta reflects a stock's volatility relative to the overall market, thereby incorporating an industry-specific aspect to the CAPM, but only as a measure of how reactive the industry is compared to the market as a whole. Although changes in the utility industry are more likely to be accurately reflected in the DCF, which uses the companies' actual prices, dividends, and growth rates, I have included the results of my CAPM analysis because changes in the market, whether as a whole or specific to the utility industry, affect the outcome of each method in different ways. Although I have chosen to use the CAPM as a secondary method, it does have several disadvantages and should not be used as a primary method.

Q. EXPLAIN THE DISADVANTAGES OF THE CAPM.

A. The CAPM, and the RP method by virtue of its similarities to the CAPM, give results that indicate to an investor what the equity cost rate should be if current economic and regulatory conditions are the same as those present during the historical period in which the risk premiums were determined. Although the CAPM and RP results can be useful to investors in making rational buy and sell decisions within their portfolios, the DCF method is superior for determining the rate of return for the current economic market and measuring the cost of equity directly. The CAPM and the RP methods are less reliable indicators because they measure the cost of equity indirectly and risk premiums vary depending on the debt and equity being compared.

Q. IS THERE ANY ACADEMIC EVIDENCE THAT QUESTIONS THE CREDIBILITY OF THE CAPM MODEL?

A. Yes. An article, "Market Place; A Study Shakes Confidence in the Volatile-Stock Theory," which appeared in the *New York Times* on February 18, 1992, summarized a CAPM study conducted by professors Eugene F. Fama and Kenneth R. French.[2] Their study examined the importance of beta, CAPM's risk factor, in explaining returns on common stock. In CAPM theory a stock with a higher beta should have a higher expected return. However, they found that the model did not do well in predicting actual returns and suggested the use of more elaborate multi-factor models.

A more recent article, "The Capital Asset Pricing Model: Theory and Evidence," which appeared in the *Journal of Economic Perspectives,* states that "the attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor - poor enough to invalidate the way it is used in applications."[3] As a result, I conclude that the CAPM's relevance to the investment decision making process does not carry over into the regulatory rate setting process.

Q. PLEASE EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE RP METHOD FROM YOUR ANALYSIS.

A. The RP method is excluded because it is a simplified version of the CAPM and is subject to the same faults listed above. Additionally, unlike the CAPM, the RP

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2 Berg, Eric N. "Market Place; A Study Shakes Confidence in the Volatile-Stock Theory" *The New York Times*, 18 Feb 1992: *nytimes.com* Web. 23 Mar 2016.

3 Fama, Eugene F. and French, Kenneth R., "The Capital Asset Pricing Model: Theory and Evidence." *Journal of Economic Perspectives* (2004): Volume 18, Number 3, pp. 25-46.

method does not recognize company-specific risk through beta.

Q. EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE CE METHOD IN YOUR ANALYSIS.

A. The CE method is excluded because the choice of which companies are comparable is highly subjective, and it is debatable whether historic accounting values are representative of the future. Moreover, its historical usage in this regulatory forum has been minimal.

<u>SUMMARY OF THE COMPANY'S RESULTS</u>

Q. WHAT ARE THE RESULTS OF THE COMPANY'S COST OF EQUITY ANALYSES?

A. Mr. Moul uses the DCF, CAPM, RP, and CE methods in analyzing the Company's cost of equity. He makes several adjustments to his results, which include consideration for size, various claimed risk factors, leverage, and management performance. Ultimately, Mr. Moul opines that a cost of equity of 10.95% is warranted (PECO Energy Statement No. 5, p. 6, line 19 through p. 7, line 9 and PECO Energy Exhibit PRM-1, Schedule 1, p. 2).

I&E RECOMMENDATION

Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR PECO ENERGY?

A. Based upon my analysis, I recommend a cost of common equity of 10.24% (I&E Exhibit No. 2, Schedule 1).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the use of the DCF method. As explained below, I used my CAPM result only to present to the Commission a comparison to my DCF results. My DCF analysis uses a spot dividend yield, a 52-week dividend yield, and earnings growth forecasts.

DISCOUNTED CASH FLOW

Q. PLEASE EXPLAIN YOUR DCF ANALYSIS.

A. My analysis employs the constant growth DCF model as portrayed in the following formula:

$K = D_1/P_0 + g$

Where:

K	=	Cost of equity
D_1	=	Dividend expected during the year
P_0	=	Current price of the stock
g	=	Expected growth rate

When a forecast of D_1 is not available, D_0 (the current dividend) must be adjusted by one half of the expected growth rate to account for changes in the dividend paid in period one. As forecasts for each company in my proxy group were available from Value Line, no dividends were adjusted for the purpose of my analysis.

Q. PLEASE EXPLAIN HOW YOU DEVELOPED THE DIVIDEND YIELDS USED IN YOUR DCF ANALYSIS.

A. A representative dividend yield must be calculated over a time frame that avoids the problems of both short-term anomalies and stale data series. For my DCF analysis, the dividend yield calculation places equal emphasis on the most recent spot and the 52-week average dividend yields. The following table summarizes my dividend yield computations for the proxy group (I&E Exhibit No. 2, Schedule 4):

Seven-Company Proxy Group	Dividend Yield
Spot	3.50%
52-week average	3.27%
Average	3.38%

Q. WHAT INFORMATION DID YOU RELY UPON TO DETERMINE YOUR EXPECTED GROWTH RATE?

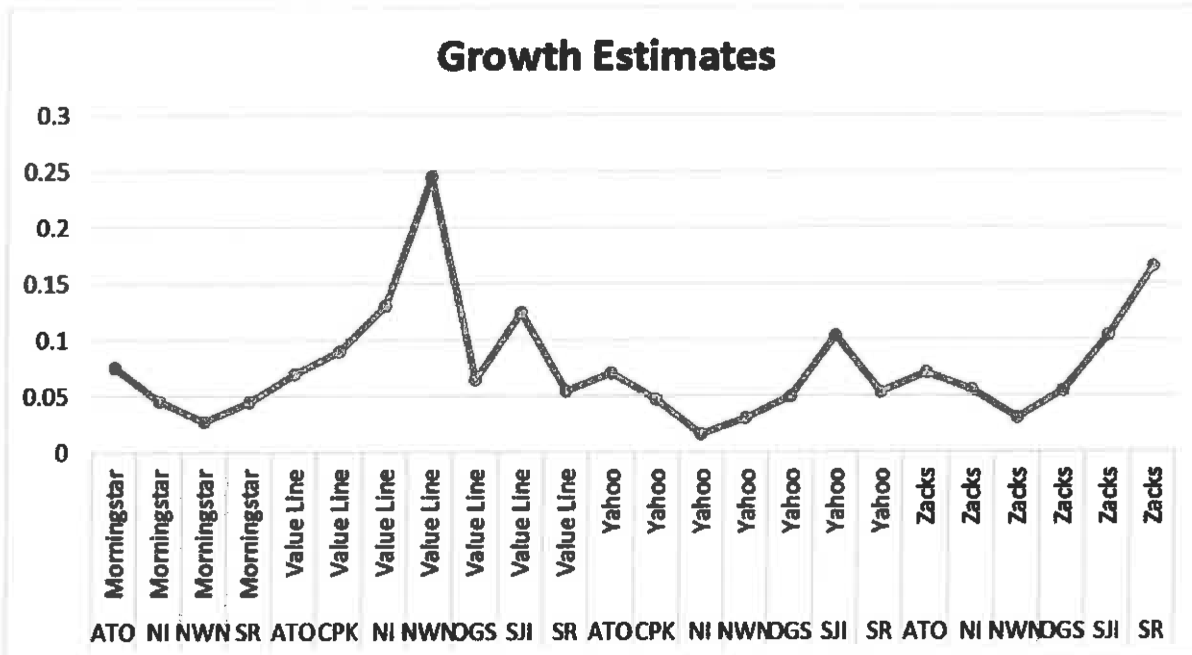
A. I have used five-year projected growth rate estimates from Value Line, Yahoo! Finance, Zacks, and Morningstar.

Q. WHAT WERE THE RESULTS OF YOUR FORECASTED EARNINGS GROWTH RATES?

A. The expected average growth rates for the seven-company proxy group ranged from 1.65% to 24.50% with an overall average of 7.63%. For the purpose of determining the growth estimate, I subsequently eliminated Northwest Natural Gas Co.'s (Northwest) Value Line growth estimate of 24.50% to determine a new adjusted average of 6.86% (I&E Exhibit No. 2, Schedule 5).

Q. WHY DID YOU ELIMINATE NORTHWEST'S VALUE LINE PROJECTED GROWTH RATE?

A. While the use of a proxy group largely smooths out various anomalies, Value Line's growth projection for Northwest is extremely inconsistent and would have an unreasonable and unwarranted impact on my DCF analysis. This would adversely affect my recommendation for the Company's cost of common equity because it is harmful to ratepayers by creating an unjustified increase in return on equity and consequently pressures rates upward, which is not in the public interest. Value Line's estimate of 24.50% is more than three times higher and greater than three standard deviations over the originally calculated 7.63% overall average. Furthermore, the estimate is more than 3.5 times higher than the average of the remaining estimates. Additionally, I was unable to find any explanation or justification of why this estimate was so high. The following chart illustrates just how much of an outlier this result is:



Q. WHAT IS THE RESULT OF YOUR DCF ANALYSIS BASED ON YOUR RECOMMENDED DIVIDEND YIELD AND GROWTH RATE?

A. The results of my DCF analysis are calculated as follows (I&E Exhibit No. 2, Schedule 6):

K	=	D_1/P_0	+	G
10.24%	=	3.38%	+	6.86%

CAPITAL ASSET PRICING MODEL

Q. PLEASE EXPLAIN YOUR CAPM ANALYSIS.

A. My analysis employs the traditional CAPM as portrayed in the following formula:

$$K = R_f + \beta(R_m - R_f)$$

Where:

K	=	Cost of equity
R_f	=	Risk-free rate of return
R_m	=	Expected rate of return on the overall stock market
β	=	Beta measures the systematic risk of an asset

Q. WHAT IS BETA AS EMPLOYED IN YOUR CAPM ANALYSIS?

A. Beta is a measure of the systematic risk of a stock in relation to the rest of the stock market. A stock's beta is estimated by calculating the linear regression of a stock's return against the return on the overall stock market. The beta of a stock with a price pattern identical to that of the overall stock market will equal one. A stock with a price movement that is greater than the overall stock market will have a beta that is greater than one and would be described as having more investment risk than the market. Conversely, a stock with a price movement that is less than the overall stock market will have a beta of less than one and would be described as having less investment risk than the market.

Q. HOW DID YOU DETERMINE YOUR BETA FOR YOUR CAPM ANALYSIS?

A. In estimating an equity cost rate for my proxy group of seven gas companies, I used the average of the betas for the companies as provided in the Value Line Investment Survey. The average beta for my proxy group is 0.85 (I&E Exhibit No. 2, Schedule 7).

Q. WHAT RISK-FREE RATE OF RETURN HAVE YOU USED FOR YOUR FORECASTED CAPM ANALYSIS?

A. I used the risk-free rate of return (R_f) from the projected yield on 10-year Treasury Notes. While the yield on the short-term T-Bill is a more theoretically correct parameter to represent a risk-free rate of return, it can be extremely volatile. The volatility of short-term T-Bills is directly influenced by Federal Reserve policy. At the other extreme, the 30-year Treasury Bond exhibits more stability but is not risk-free. Long-term Treasury Bonds have substantial maturity risk associated with market risk and the risk of unexpected inflation. Long-term treasuries normally offer higher yields to compensate investors for these risks. As a result, I used the yield on the 10-year Treasury Note because it mitigates the shortcomings of the other two alternatives. Additionally, the Commission has recently recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[4] The forecasted yield on the 10-year Treasury Note, as can be seen in Blue Chip Financial Forecasts, is expected to be between 0.90% and 1.20% from the first quarter of 2021 through the first quarter of 2022, and it is forecasted to be 2.30% from 2022-2026. For my forecasted CAPM analysis, I used 1.23%, which is the average of all the yield forecasts I observed (I&E Exhibit No. 2, Schedule 8).

Q. HOW DID YOU DETERMINE THE RETURN ON THE OVERALL STOCK MARKET IN YOUR FORECASTED CAPM ANALYSIS?

A. To arrive at a representative expected return on the overall stock market, I observed Value Line's 1700 stocks and the S&P 500. Value Line expects its universe of 1700 stocks to have an average yearly return of 9.79% over the next three to five years based on a forecasted dividend yield of 2.00% and a yearly index appreciation of 35%. The S&P 500 Index is expected to have an average yearly return of 11.13% over the next five years based upon Barron's forecasted dividend yield of 1.73% and Morningstar's expected increase in the S&P 500 index of 9.40% (I&E Exhibit No. 2, Schedule 9).

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4 *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 99.

Q. WHAT IS THE EXPECTED RETURN ON THE OVERALL STOCK MARKET BASED ON YOUR FORECASTED ANALYSIS?

A. The expected return on the overall market is 10.46% for my forecasted analysis (I&E Exhibit No. 2, Schedule 9).

Q. WHAT IS THE COST OF EQUITY RESULT FROM YOUR CAPM ANALYSIS?

A. The result of my analysis is as follows (I&E Exhibit No. 2, Schedule 10):

$$K = R_f + \beta(R_m - R_f)$$

$$9.08\% = 1.23\% + 0.85\,(10.46\% - 1.23\%)$$

<u>**CRITIQUE OF MR. MOUL'S PROPOSED COST OF EQUITY**</u>

Q. DO YOU AGREE WITH MR. MOUL'S PROPOSED COST OF EQUITY?

A. No. I disagree with Mr. Moul's proposed cost of equity analysis for several reasons. First, I disagree with the weights given to the results of Mr. Moul's CAPM, RP, and CE analyses in his recommendation. Second, I disagree with certain aspects of Mr. Moul's discussion of PECO Energy's risk. Third, I disagree with his application of the DCF including the forecasted growth rate and leverage adjustment he uses. Fourth, I disagree with his inclusion of a size adjustment, his reliance on the 30-year Treasury Bond for his risk-free rate, and the use of a double-adjusted beta in his CAPM analysis. Finally, Mr. Moul's request for an additional 25 basis points for "strong management performance" is unjustified.

<u>WEIGHTS GIVEN TO THE CAPM, RP, AND CE METHODS</u>

Q. DO YOU AGREE WITH MR. MOUL'S RELIANCE ON THE CAPM AND RP MODELS?

A. No. While I am not opposed to providing the Commission the results of the CAPM for a point of comparison to the results of the DCF calculation, I am opposed to giving the CAPM and RP considerable weight. For the reasons discussed above, including my reference to recent Commission orders, it is not appropriate to give the CAPM and RP models similar weight to the DCF as Mr. Moul has done in creating his recommended cost of equity range (PECO Energy Statement No. 5, p. 7, line 5). As discussed above, the CAPM measures the cost of equity indirectly and can be manipulated by the time period chosen. Since the RP is a simplified version of the CAPM, it suffers these same flaws.

Q. DO YOU AGREE WITH MR. MOUL'S USE OF THE CE METHOD?

A. No. The companies in Mr. Moul's analysis are not utilities, and therefore, they are too dissimilar to be used in a CE analysis. The companies in Mr. Moul's CE proxy group are simply not comparable to gas utilities in terms of their business risk or financial risk profile. Natural gas distribution companies are monopolies, which are subject to very little competition, if any. Due to this minimal competition, utilities in general have very low business risk and are able to maintain higher financial risk profiles by employing more leverage. Conversely, since the companies in Mr. Moul's CE proxy group operate in an unregulated competitive environment with a higher level of business risk, they must maintain lower financial risk profiles by employing a smaller amount of leverage. Furthermore, in his CE analysis, Mr. Moul states, "I used 20% as the point where those returns could be viewed as highly profitable and should be excluded from the Comparable Earnings approach" (PECO Energy Statement No. 5, p. 51, lines 15-17). It is my opinion the arbitrary use of 20% is unjustified as I am unaware of any gas utility company that has been awarded or regularly earns a 20% return.

RISK ANALYSIS

Q. SUMMARIZE MR. MOUL'S CLAIMS REGARDING RISK FACTORS THE COMPANY FACES.

A. Mr. Moul describes the Company's claimed risk factors in two different sub-sections. In the first section, labeled "Natural Gas Risk Factors," he describes the *qualitative* risk factors. In this section, Mr. Moul discusses the potential for bypass, the Company's construction program, and the Company's lack of a weather normalization adjustment (WNA) tariff design (PECO Energy Statement No. 5, p. 8, line 20 through p. 11, line 13). In the second section of his risk analysis, labeled "Fundamental Risk Analysis," he describes the *quantitative* risk factors. In this section, Mr. Moul discusses the Company's credit quality, as well as many different financial metrics including size, market ratios, common equity ratio, return on book equity, operating ratios, pre-tax interest coverage, quality of earnings, internally generated funds, and betas (PECO Energy Statement No. 5, p. 11, line 14 through p. 18, line 8).

Q. WHAT ARE MR. MOUL'S CLAIMS REGARDING THE POTENTIAL RISK OF BYPASS?

A. Mr. Moul opines that large volume users have the potential to bypass the Company's system as they may be located close enough to interstate pipelines. Mr. Moul claims approximately 7.1 MCF have the potential to bypass the Company's distribution system which would cause a significant amount of uncompensated fixed costs that the Company would not be able to recover until another base rate case would be completed (PECO Energy Statement No. 5, p. 10, lines 2-12).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S CLAIMED RISK OF BYPASS FOR PECO ENERGY?

A. Since deregulation that occurred in the 1980s and 1990s, most companies in the natural gas utility sector face similar risks of competition with other suppliers. In this regard, the companies within my proxy group provide a good measurement of the risk associated with competition from alternate suppliers. Additionally, the

Company states that the risk of bypass is a risk that local distribution companies (LDCs) face when there are a number of interstate pipelines near large volume customers and that most LDCs, including the Company's in Mr. Moul's Gas Group, encounter the same risk (I&E Exhibit No. 2, Schedule 11). Additionally, the Company states that no large customers were lost in the years ended December 31, 2017 through December 31, 2019 and in fact, the Company has added five major customers over that same timeframe (I&E Exhibit No. 2, Schedule 12).

Q. WHAT CLAIM DOES MR. MOUL MAKE REGARDING THE COMPANY'S RISK EXPOSURE IN REPLACING AGING INFRASTRUCTURE?

A. Mr. Moul claims that the Company incurs additional risk because required capital expenditures to replace aging infrastructure do not increase the Company's customer base or increase sales to existing customers (PECO Energy Statement No. 5, p. 10, lines 16-18). The Company anticipates total capital expenditures over the next five years will equal 66% of the net utility plant in service at June 30, 2020 (PECO Energy Statement No. 5, p. 11, lines 3-6).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S CLAIM REGARDING THE COMPANY'S RISK CAUSED BY THE REPLACEMENT OF AGING INFRASTRUCTURE?

A. Every gas utility faces the same issues of upgrading or replacing its infrastructure. As costs for replacing infrastructure increase, PECO Energy, like any other regulated gas utility, has the option to file a base rate case at any time to address revenue inadequacy due to increasing costs, infrastructure replacement, or any other associated issues. Base rate cases allow a utility to recover its prudently incurred costs and provide it with the *opportunity* to earn a reasonable return on capital investments. Additionally, the Commission offers risk reducing mechanisms such as the Distribution System Improvement Charge and the FPFTY to help reduce any regulatory lag in recovery of infrastructure investment or other unforeseen expenditures. It should be noted that these mechanisms were not designed to eliminate the need for periodic base rate case filings.

Q. WHAT RISK HAS MR. MOUL CLAIMED WITH RESPECT TO THE COMPANY NOT HAVING A WEATHER NORMALIZATION ADJUSTMENT MECHANISM?

A. Mr. Moul states that, "It is noteworthy that all of the companies that comprise the Gas Group have some form of weather normalization feature in their tariffs. As PECO Energy has no such provision in its gas tariff, the Company is exposed to more risk than the Gas Group" (PECO Energy Statement No. 5, p. 9, lines 12-16).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S CLAIM REGARDING THE COMPANY'S INCREASED RISK DUE TO THE COMPANY NOT HAVING A WNA MECHANISM?

A. The Commission allows utilities the opportunity to propose alternative ratemaking mechanisms such as a WNA. The Company currently does not have a WNA; however, other Pennsylvania gas utilities do have Commission-approved WNA mechanisms in place. That PECO has not filed a petition or proposed a WNA mechanism in this proceeding is the Company's choice, and the Company's choice not to pursue implementation of a WNA should not afford it a higher return due to presumed increased risk. Furthermore, Mr. Moul has not produced evidence demonstrating that the Gas Group companies employ a WNA mechanism.

Q. WHAT ARE MR. MOUL'S CLAIMS REGARDING QUANTITATIVE RISK FACTORS IN THE SECTION LABELED "FUNDAMENTAL RISK ANALYSIS?"

A. Mr. Moul states that it is necessary to establish a company's relative risk position within its industry through an analysis of quantitative and qualitative factors. Mr. Moul uses various financial metrics to compare PECO Energy to the S&P Public Utilities Index and his Gas Group (PECO Energy Statement No. 5, p. 11, lines 17-22).

Q. WHAT IS YOUR RESPONSE REGARDING MR. MOUL'S "FUNDAMENTAL RISK ANALYSIS?"

A. One of the points he discusses, size risk, is discussed and disputed elsewhere in my direct testimony. Throughout the remainder of his "fundamental risk analysis," Mr. Moul makes several statements to indicate that the Company has no more of a risk than any other company in his Gas Group. First, while discussing the common equity ratio, Mr. Moul states, "The five-year average common equity ratios, based on permanent capital, were 54.1% for PECO Energy, 52.6% for the Gas Group, and 42.2% for the S&P Public Utilities. The Company's common equity ratio was fairly similar to the Gas Group, thereby indicating similar financial risk." (PECO Energy Statement No. 5, p. 15, lines 8-12). Second, regarding return on book equity, Mr. Moul states, "For the five-year period, the coefficients of variation were 0.048 for the Company, 0.089 for the Gas Group, and 0.049 for the S&P Public Utilities. The variability of the Company's rates of return was lower than the Gas Group and close to the of the S&P Public Utilities." (PECO Energy Statement No. 5, p. 15, lines 17-21). Third, regarding operating ratios, Mr. Moul states, "The five-year average operating ratios were 78.0% for the Company, 84.1% for the Gas Group, and 78.8% for the S&P Public Utilities. The Company's operating ratios were somewhat lower than the Gas Group and close to the S&P Public Utilities, thereby making the Company's operating risk similar to the S&P Public Utilities and lower than the Gas Group." (PECO Energy Statement No. 5, p. 16, lines 2-5). Finally, concerning coverage, he states, "Excluding

Allowance for Funds Used During Construction ("AFUDC"), the five-year average pre-tax interest coverage was 5.14 times for the Company, 4.23 times for the Gas Group, and 3.22 times for the S&P Public Utilities. The interest coverages for the Company were higher than for the Gas Group and S&P Public Utilities, thereby indicating lower credit risk for lenders" (PECO Energy Statement No. 5, p. 16, lines 10-15).

While some measures Mr. Moul discusses may imply a higher risk profile for the Company, he provides other more convincing measures that illustrate the Company has lower risk. Overall, through his own analysis and testimony, Mr. Moul substantiates that the Company has very similar risk as compared to that of his Gas Group.

<u>COST OF EQUITY ADJUSTMENTS</u>

<u>INFLATED GROWTH RATES USED IN DCF ANALYSIS</u>

Q. WHAT GROWTH RATE HAS MR. MOUL USED IN HIS DCF ANALYSIS?

A. Mr. Moul has chosen a growth rate of 7.50% (PECO Energy Statement No. 5, p. 37, line 11).

Q. WHAT IS THE BASIS FOR MR. MOUL'S GROWTH RATE?

A. Mr. Moul states, "Schedule 9 shows the prospective five-year earnings per share growth projected for the Gas Group by IBES/First Call (5.99%), Zacks (6.00%), and Value Line (10.06%)." (PECO Energy Statement No. 5, p. 30, lines 17-19). Mr. Moul used 7.50% growth rate claiming that continued infrastructure spending argues for a DCF growth rate that is below the midpoint of his data set (PECO Energy Statement No. 5, p. 32, lines 3-6).

Q. DO YOU AGREE WITH MR. MOUL'S GROWTH RATE ANALYSIS?

A. No. As explained above, I disagree with Mr. Moul's inclusion of Value Line's 26.50% growth estimate for Northwest Natural Gas Co.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING THE RESULTS OF MR. MOUL'S PROJECTED GROWTH RATES?

A. Yes. While the five-year projected growth rates can be used in analyses, one must be aware that analysts' estimates may be biased. This bias has been observed in literature. An article written by Professors Ciciretti, Dwyer, and Hasan in 2009 observed strong support of earnings forecasts being higher than actual earnings.[5] In spring of 2010, McKinsey On Finance presented an article reporting that after a decade of stricter regulation analysts' forecasts are still overly optimistic.[6]

Analysts' estimates are an attempt to forecast future cash flows and thus expected earnings growth. However, it should be kept in mind that prudent

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[5] Ciciretti, Rocco; Dwyer, Gerald R; and Iftekhan Hasan. "Investment Analysts' Forecasts of Earnings" Federal Reserve Bank of St. Louis *Review*, September/October 2009, 91 (5, part 2) pp. 545-67.

[6] Goedhart, Marc J; Raj, Rishi; and Abhishek Saxena. "Equity analyst: Still too bullish" McKinsey On Finance Number 35 Spring 2010, pp. 14-17.

judgment must be exercised as to the sustainability of forecasted growth rates with respect to the base earnings. If the base year earnings are abnormally high, the growth rates from which they are calculated will be biased downward. Similarly, if the base year earnings are abnormally low, the growth rates from which they are calculated will be biased upward. As a result, it is typically necessary to employ a methodology to smooth out the abnormally high or low base year earnings.

<u>LEVERAGE ADJUSTMENT APPLIED TO DCF ANALYSIS</u>

Q. HAS MR. MOUL MADE ANY ADDITIONAL ADJUSTMENTS TO THE RESULT OF HIS DCF ANALYSIS?

A. Yes. Mr. Moul proposes to make a 196-basis point "leverage" adjustment to the results of his DCF analysis to account for applying a market-determined cost of equity to a book value capital structure (PECO Energy Statement No. 5, p. 36, lines 21-23).

Q. WHAT IS FINANCIAL LEVERAGE?

A. Financial leverage is the use of debt capital to supplement equity capital. A firm with significantly more debt than equity is considered to be highly leveraged.

Q. WHAT IS A MARKET-TO-BOOK (M/B) RATIO?

A. A market-to-book ratio is used to evaluate a public firm's equity value by comparing the market value and book value of a company's equity. One way of doing this is to divide the current price per share of stock by the book value per share. A M/B result of above one (1) is desired.

Q. DOES MR. MOUL PROPOSE TO ADJUST THE RESULT OF HIS DCF ANALYSIS TO RECOGNIZE HOW THE COMPANY IS LEVERAGED?

A. No. Mr. Moul does not propose to change the capital structure of the utility (a leverage adjustment), nor does he propose to apply the market-to-book ratio to the DCF model (a market-to-book adjustment). Instead, Mr. Moul proposes to make an adjustment to account for applying the market value cost rate of equity to the book value of the utility's equity. I am not aware of any term in academic journals, textbooks, or other literature that describes this type of adjustment.

Q. WHAT IS THE BASIS FOR MR. MOUL'S PROPOSED LEVERAGE ADJUSTMENT?

A. Mr. Moul states that in order to make the DCF results relevant to a book value capital structure, the market-derived cost of equity needs to be adjusted to take into consideration the difference in financial risk (PECO Energy Statement No. 5, p. 33, lines 4-6). Mr. Moul opines this is because market valuations of equity are based on market value capital structures, which in general have more equity, less debt, and therefore, less risk than book value capital structures (PECO Energy Statement No. 5, p. 32, line 16 through p. 33, line 2).

Q. HOW DOES MR. MOUL ATTEMPT TO JUSTIFY THE LEVERAGE ADJUSTMENT USED IN HIS ANALYSIS?

A. Mr. Moul simply states:

> I know of no means to mathematically solve for the 1.96% leverage adjustment by expressing it in the terms of any particular relationship of market price to book value. The 1.96% adjustment is merely a convenient way to compare the 12.74% return computed directly with the Modigliani & Miller formulas to the 10.78% return generated by the DCF model based on a market value capital structure.[7]

Q. BASED ON THE COMPANY'S FILED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 196 BASIS POINTS TO THE COST OF EQUITY?

A. The example below illustrates the impact of 196 additional basis points to the Company's cost of equity:

PECO Energy Company – Gas Division	
Claimed Equity Percentage of Capital Structure	53.38%
Additional Basis Points to Calculated Cost of Equity	196
Claimed Rate Base*	$2,461,939,000
Total Impact	**$25,757,988**

(0.5338 x 0.0196 x $2,461,939,000)

*PECO Energy Exhibit MJT-1, Schedule A-1, p. 1.

[7] PECO Energy Statement No. 5, p. 36, lines 13-19.

In this example, an addition of 196 basis points to the cost of equity would force ratepayers to fund an unwarranted additional amount of $25,757,988.

Q. DO YOU AGREE WITH MR. MOUL'S "LEVERAGE ADJUSTMENT" JUSTIFICATION?

A. No. Mr. Moul's adjustment is inappropriate for a couple of reasons, including the characterization of financial risk and Commission precedent.

Q. EXPLAIN HOW RATING AGENCIES ASSESS FINANCIAL RISK.

A. Rating agencies assess financial risk based upon a company's booked debt obligations and the ability of its cash flow to cover the interest payments on those obligations. The agencies use a company's financial statements for their analysis, not market capital structure. The income statement reflects the financial risk of a company because it represents the performance of the company over a certain period of time. A change in the market value of the stock is not reflected in the income statement nor is a change in market value capital structure reflected in the book value capital structure unless treasury stock is purchased. It is a company's financial statements that affect the market value of the stock, and therefore, the financial statements and the book value capital structure that is relied upon in an analysis such as that done by rating agencies.

Q. HAS THE COMMISSION RECENTLY REJECTED THE USE OF A LEVERAGE ADJUSTMENT?

A. Yes. The following three cases are the most recent instances where the Commission has rejected the use of a "leverage adjustment."

First, in *Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc.*, at Docket No. R-00072711 (Order Entered July 31, 2008), p. 38, the Commission rejected the ALJ's recommendation for a leverage adjustment stating, "[t]he fact that we have granted leverage adjustments in the past does not mean that such adjustments are indicated in all cases."

Second, in *Pennsylvania Public Utility Commission, et al v. City of Lancaster – Bureau of Water*, at Docket No. R-2010-2179103 (Order Entered July 14, 2011), p. 79, the Commission agreed with the I&E position and stated, "any adjustment to the results of the market based DCF are unnecessary and will harm ratepayers. Consistent with our determination in *Aqua 2008* there is no need to add a leverage adjustment."

Third, in the most recent case of *Pennsylvania Public Utility Commission, et al v. UGI Utilities, Inc. – Electric Division*, at Docket No. R-2017-2640058 (Order Entered October 25, 2018), pp. 93-94, the Commission agreed with the I&E position and stated, "we conclude that an artificial adjustment in this proceeding is unnecessary and contrary to the public interest. Accordingly, we decline to include a leverage adjustment in our calculation of the DCF cost of equity."

Q. SUMMARIZE YOUR RECOMMENDATION REGARDING THE PROPOSED LEVERAGE ADJUSTMENT.

A. I recommend that Mr. Moul's proposed 196-basis point leverage adjustment be rejected because true financial risk is a function of the amount of interest expense, and capital structure information provided to investors through Value Line is that of book values, not market values. This demonstrates that investors base their decisions on book value debt and equity ratios for the regulated utilities, and therefore, no adjustment is needed. Mr. Moul's proposed adjustments serve only to manipulate the DCF's market-based methodology.

Q. WHAT WOULD MR. MOUL'S DCF BE WITHOUT ANY ADJUSTMENTS?

A. Without Mr. Moul's use of inflated growth rates and a leverage adjustment, his DCF would consist of his calculated dividend yield of 3.28%, which is lower than what I have calculated, and my average growth rate of 6.86% as shown above, which results in a 10.14% cost of equity.

<u>INFLATED BETAS USED IN CAPM ANALYSIS</u>

Q. HOW HAS MR. MOUL INFLATED THE BETAS EMPLOYED IN HIS CAPM ANALYSIS?

A. Mr. Moul has used the same logic for inflating his CAPM betas from 0.84 to 1.05 that he used to enhance his DCF returns, through a financial risk or "leverage" adjustment (PECO Energy Statement No. 5, p. 43, line 4 through p. 44, line 4). Such enhancements are unwarranted for beta in a CAPM analysis for the same reasons that enhancements are unwarranted for DCF results.

Also, if the unadjusted *Value Line* betas do not reflect an accurate investment risk as Mr. Moul contends, the question naturally arises as to why *Value Line* does not publish betas that are adjusted for leverage. Until this type of adjustment is demonstrated in the academic literature to be valid, such leverage adjusted betas in a CAPM model should be rejected. Furthermore, the Commission found no basis to add leverage adjusted betas in the recently litigated UGI Electric base rate case.[8]

<u>SIZE ADJUSTMENT APPLIED TO CAPM ANALYSIS</u>

Q. WHAT IS MR. MOUL'S SIZE ADJUSTMENT?

A. Mr. Moul adds 102 basis points to his CAPM indicated cost of common equity because he opines that as the size of a firm decreases, its risk and required return increases (PECO Energy Statement No. 5, p. 47, lines 15-16). Mr. Moul relies upon technical literature including Morningstar's Stocks, Bonds, Bills, and Inflation Yearbook, a Fama and French study entitled "The Cross-Section of Expected Stock Returns," and an article published in Public Utilities Fortnightly

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[8] *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 100.

entitled "Equity and the Small-Stock Effect" (PECO Energy Statement No. 5, p. 47, line 16 through p. 48, line 2).

Q. DO YOU AGREE WITH MR. MOUL'S SIZE ADJUSTMENT?

A. No. Mr. Moul's size adjustment is unnecessary because the technical literature he cites supporting investment adjustments related to the size of a company is not specific to the utility industry; therefore, it has no relevance in this proceeding.

Q. IS THERE ACADEMIC EVIDENCE THAT SUPPORTS YOUR CONCLUSION THAT THE SIZE ADJUSTMENT FOR RISK IS NOT APPLICABLE TO UTILITY COMPANIES?

A. Yes. In the article "Utility Stocks and the Size Effect: An Empirical Analysis," Dr. Annie Wong concludes:

> The objective of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for utility stocks. This implies that although the size phenomenon has been strongly documented for the industriales, the findings suggest that there is no need to adjust for the firm size in utility rate regulation.[9]

PECO Energy presents no evidence to support application of a non-utility study regarding a size adjustment for risk to a utility setting. Absent any credible article to refute Dr. Wong's findings, Mr. Moul's size adjustment to his CAPM results

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[9] Dr. Annie Wong, "Utility Stocks and the Size Effect: An Empirical Analysis," *Journal of Midwest Finance Association* 1993, pp. 95-101.

should be rejected. Additionally, and more importantly, the Commission has recently rejected the application of a size adjustment to the CAPM cost of equity calculation.[10]

Q. WHAT WOULD MR. MOUL'S CAPM RESULT BE WITHOUT THE SIZE ADJUSTMENT AND INFLATED BETAS?

A. Mr. Moul's CAPM result would be 9.39% without his size adjustment and inflated betas. The calculation is repeated below without Mr. Moul's adjustments:

Rf	+	ß	*	(Rm-Rf)	+	size	=	K
1.75%	+	0.84	*	9.10%	+	0.00%	=	9.39%

MANAGEMENT PERFORMANCE

Q. WHAT IS THE COMPANY'S CLAIM REGARDING MANAGEMENT PERFORMANCE.

A. Mr. Moul explains that his 10.95% cost of equity recommendation includes 25 basis points in consideration of the Company's superior management performance (PECO Energy Statement No. 5, p. 7, lines 6-9). The Company's rationale to support its management performance claim includes various programs that promote high quality and reliability of service, commitment to energy efficiency, support for community and economic development in the Company's service

[10] *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 100.

territory, measures taken to protect the safety of workers, its significant efforts to manage and control its operating expenses, and the high quality of customer service that was recognized by J.D. Power (PECO Energy Statement No. 1, p. 14, line 13 through p. 25, line 14).

Q. BASED ON THE COMPANY'S FILED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 25 BASIS POINTS TO THE COST OF EQUITY?

A. The example below illustrates the impact of 25 additional basis points to the Company's cost of equity:

PECO Energy Company – Gas Division	
Claimed Equity Percentage of Capital Structure	53.38%
Additional Basis Points to Calculated Cost of Equity	25
Claimed Rate Base*	$2,461,939,000
Total Impact	**$3,285,458**

(0.5338 x 0.0025 x $2,461,939,000)

*PECO Energy Exhibit MJT-1, Schedule A-1, p. 1.

In this example, an addition of 25 basis points to the cost of equity would force ratepayers to fund an unwarranted additional amount of $3,285,458.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIMS REGARDING MANAGEMENT EFFECTIVENESS?

A. No. By awarding the Company management effectiveness points, it will cost the customer money for the Company to provide the adequate, efficient, safe, and reasonable service that they are required to do. Any savings from effective operating and maintenance cost measures should flow through to ratepayers and/or investors. These claimed savings would likely be offset by the addition of basis points for management effectiveness as ratepayers would have to fund the additional costs. This defeats the purpose of cutting expenses to benefit ratepayers. Ensuring that these cost saving measures flow to ratepayers is especially important now as many have recently experienced reduced household income as a result of job loss or reduction in hours due to the global pandemic.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE CONSIDERATION OF 25 ADDITIONAL BASIS POINTS FOR THE COMPANY'S MANAGEMENT PERFORMANCE?

A. Ultimately, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from cost savings and true efficiency in management and operations is available to be passed on to shareholders. PECO Energy, or any utility should not be awarded additional basis points for doing what they are required to do in order to provide adequate, efficient, safe, and reasonable service under 66 Pa C.S.A. §1501. For these reasons, I recommend that there be no addition of basis points to the cost of equity for management effectiveness.

OVERALL RATE OF RETURN RECOMMENDATION

Q. WHAT IS THE COMPANY'S PROPOSED OVERALL RATE OF RETURN?

A. The Company's proposed overall rate of return is 7.70% (PECO Energy Statement No. 5, p. 2, lines 10-11).

Q. WHAT IS I&E'S RECOMMENDED OVERALL RATE OF RETURN?

A. I recommend an overall rate of return for the Company of 7.32% (I&E Exhibit No. 2, Schedule 1).

NEIGHBORHOOD GAS PILOT RIDER

Q. SUMMARIZE THE COMPANY'S PROPOSAL TO CHANGE ITS NEIGHBORHOOD GAS PILOT RIDER.

A. PECO Energy proposes a change to its Neighborhood Gas Pilot Rider (NGPR), which it began in 2016, to allow up to 40 feet of main line per residential customer at no cost to each residential customer with certain limitations such as abnormal underground conditions or unusual permit requirements. Additionally, PECO Energy's proposal would allow customers to "stack" the free 40 feet of main line. PECO Energy provides an example where a single project with ten residential customers would allow the Company to install up to 400 feet (40 feet x 10 residential customers) at no cost (PECO Energy Statement No. 9, p. 12-13).

Q. WHY IS THE COMPANY PROPOSING TO CHANGE ITS NEIGHBORHOOD GAS PILOT RIDER?

A. PECO Energy claims the purpose of the proposal is that it would extend and enhance the NGPR to facilitate access to gas service to more communities (PECO Energy Statement No. 9, p. 12, lines 12-13).

Q. IS PECO ENERGY MAKING A CLAIM FOR COSTS ASSOCIATED WITH THE PROPOSAL IN THIS PROCEEDING?

A. Yes. PECO Energy's claim for the total capital costs associated with the proposal is $37,500,000 and is requesting to spread the costs over five years resulting in an annual capital cost of $7,500,000 ($37,500,000 ÷ 5 years) with half-year amounts of $3,750,000 for 2021 and 2026 (PECO Energy Statement No. 9, p. 14, lines 1-5).

Q. WHAT IS YOUR RECOMMENDATION FOR THE PROPOSED CHANGE TO PECO ENERGY'S NEIGHBORHOOD GAS PILOT?

A. I recommend allowing up to 40 feet of main line per contracted residential customer at no cost with certain limitations such as abnormal underground conditions or unusual permit requirements as stated by the Company, but that the calculation for the contribution in aid of construction (CIAC) above the free allowance remains the same as the current program. I also recommend an annual allowance of $5,000,000 ($25,000,000 ÷ 5 years) for the capital costs associated with the proposed change to the NGPR or a reduction of $2,500,000 ($7,500,000 - $5,000,000) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on several factors. First, the Company has only spent $15,500,000 since the beginning of the NGPR (PECO Energy Statement No. 9, p. 12, lines 4-6) despite having a spending limit of $25,000,000 (PECO Energy Statement No. 9, p. 11, lines 18-20), which demonstrates the Company hasn't spent the amount currently allocated to the NGPR. With the cost of the free main removed from the main cost subject to the CIAC calculation, the Company may be able expand its program sufficiently to achieve its originally projected targets, but there is no data to support increasing the funding for this program at this time based on its historic performance. Second, the Company's current CIAC calculation assumes 66% of customers would take service over a 20-year period (PECO Energy Statement No. 9, p. 11, lines 4-6); however, **{BEGIN PROPRIETARY}** [redacted] **{END PROPRIETARY}**. Finally, with the current difficult financial times due to COVID-19, I would not anticipate the voluntary commitment of personal funds from residential customers for both the CIAC and the conversion costs needed for at least the next one to two years. Therefore, planning a large investment increase at this time is inappropriate from both the expectation of likely program success and due to the burden that would be placed on all customers through subsidizing these program costs. Therefore, I recommend that the calculation for the CIAC remain the same as the current program as well as the total spending limit of $25,000,000 for an annual allowance of $5,000,000 ($25,000,000 ÷ 5 years) for the capital costs associated with the proposed change to the NGPR

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

CHRISTOPHER KELLER

PROFESSIONAL AND EDUCATIONAL EXPERIENCE

PROFESSIONAL EXPERIENCE

January 2014 to Present
Fixed Utility Financial Analyst
Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania
Bureau of Investigation & Enforcement

September 2008 to January 2014
Insurance Company Financial Analyst
Pennsylvania Insurance Department, Harrisburg, Pennsylvania
Bureau of Licensing & Financial Analysis

EDUCATION AND TRAINING

FAI Utility Finance and Accounting for Financial Professionals, Boston, MA
May 21-23, 2014

York College of Pennsylvania, York, Pennsylvania
Master of Business Administration, Finance Concentration, 2008
Bachelor of Science, Accounting, 2006

TESTIMONY SUBMITTED

I have testified and/or submitted testimony in the following proceedings:

- Docket No. P-2020-3020914 – Twin Lakes Utilities, Inc. (529 Proceeding) (proceeding ongoing)
- Docket No. R-2020-3018835 – Columbia Gas of Pennsylvania, Inc. (ROR) (proceeding ongoing)
- Docket No. R-2020-3019680 – UGI Utilities, Inc. (1307(f))
- Docket No. P-2020-3019356 – PPL Electric Utilities Corporation (DSP)
- Docket No. R-2019-3015162 – UGI Utilities, Inc. – Gas Division (ROR)
- Docket No. R-2019-3010955 – City of Lancaster – Sewer Fund (O&M)
- Docket No. R-2019-3009647 – UGI Utilities, Inc. – Gas Division (1307(f))
- Docket No. R-2018-3006818 – Peoples Natural Gas Company LLC (O&M)
- Docket No. R-2018-3000124 – Duquesne Light Company (O&M)
- Docket No. R-2018-3001631 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2018-3001632 – UGI Penn Natural Gas, Inc. (1307(f))
- Docket No. R-2018-3001633 – UGI Utilities, Inc. (1307(f))
- Docket No. R-2018-2645938 – Philadelphia Gas Works (1307(f))
- Docket No. P-2017-2637855 – Metropolitan Edison Company (DSP)

- Docket No. P-2017-2637857 – Pennsylvania Electric Company (DSP)
- Docket No. P-2017-2637858 – Pennsylvania Power Company (DSP)
- Docket No. P-2017-2637866 – West Penn Power Company (DSP)
- Docket No. R-2017-2602627 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2017-2602638 – UGI Utilities, Inc. (1307(f))
- Docket No. R-2017-2586783 – Philadelphia Gas Works (O&M)
- Docket No. R-2017-2587526 – Philadelphia Gas Works (1307(f))
- Docket No. I-2016-2526085 – Delaware Sewer Company (529 Proceeding)
- Docket No. R-2016-2531550 – Citizens' Electric Company (O&M)
- Docket No. R-2016-2531551 – Wellsboro Electric Company (O&M)
- Docket No. R-2016-2537349 – Metropolitan Edison Company (CWC and CAP)
- Docket No. R-2016-2537352 – Pennsylvania Electric Company (CWC and CAP)
- Docket No. R-2016-2537355 – Pennsylvania Power Company (CWC and CAP)
- Docket No. R-2016-2537359 – West Penn Power Company (CWC and CAP)
- Docket No. R-2016-2543311 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2015-2518438 – UGI Utilities, Inc. – Gas Division (CWC and USP)
- Docket No. P-2015-2511333 – Metropolitan Edison Company (DSP)
- Docket No. P-2015-2511351 – Pennsylvania Electric Company (DSP)
- Docket No. P-2015-2511355 – Pennsylvania Power Company (DSP)
- Docket No. P-2015-2511356 – West Penn Power Company (DSP)
- Docket No. R-2015-2468056 – Columbia Gas of Pennsylvania, Inc. (O&M)
- Docket No. P-2014-2404341 – Delaware Sewer Company (529 Investigation)
- Docket No. R-2014-2452705 – Delaware Sewer Company (O&M)
- Docket No. R-2014-2428304 – Borough of Hanover – Water (O&M)
- Docket No. R-2014-2419774 – Wellsboro Electric Company (Customer Choice Support Charge)
- Docket No. R-2014-2420279 – UGI Central Penn Gas, Inc. (1307(f))

ASSISTED WITH THE FOLLOWING CASES

- Docket No. R-2017-2631441 – Reynolds Water Company (ROR)
- Docket No. R-2016-2580030 – UGI Penn Natural Gas, Inc. (ROR)
- Docket No. R-2014-2462723 – United Water Pennsylvania (CWC)
- Docket No. R-2014-2428742 – West Penn Power Company (CWC)
- Docket No. R-2014-2428743 – Pennsylvania Electric Company (CWC)
- Docket No. R-2014-2428744 – Pennsylvania Power Company (CWC)
- Docket No. R-2014-2428745 – Metropolitan Edison Company (CWC)
- Docket No. R-2013-2397353 – Pike County Light & Power Company (Gas) (O&M)
- Docket No. R-2013-2397237 – Pike County Light & Power Company (Electric) (O&M)

I&E Statement No. 2-SR
Witness: Christopher Keller

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3018929

Surrebuttal Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

RATE OF RETURN
NEIGHBORHOOD GAS PILOT RIDER

TABLE OF CONTENTS

INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christopher Keller. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission (Commission) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial Analyst.

Q. ARE YOU THE SAME CHRISTOPHER KELLER WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2 AND THE SCHEDULES IN I&E EXHIBIT NO. 2?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address statements made by PECO Energy Company – Gas Division (PECO Energy or Company) witness Paul R. Moul (PECO Energy Statement No. 5-R) and the Office of Consumer Advocate (OCA) witness Kevin W. O’Donnell (OCA Statement No. 3R) in their rebuttal testimony regarding rate of return topics including the cost of common equity and the overall fair rate of return, which will be applied to the Company’s rate base. I will also address the Company's management performance claim discussed by Mr. Moul and Company witness Robert A. Bradley (PECO Energy Statement No. 1-R). Finally, I will address the Company's proposed changes to the Neighborhood Gas Pilot Rider discussed by Company witness Doreen L. Masalta (PECO Energy Statement No. 9-R).

Q. DID THE COMPANY PROVIDE AN UPDATE TO ITS RATE OF RETURN?

A. Yes. The Company provided an update to its cost of long-term debt. The Company is now requesting a cost of long-term debt of 3.80% to reflect the cost of new issues of debt in the future test year (FTY) and the fully projected future test year (FPFTY) (PECO Energy Statement No. 5-R, p. 9, line 21 through p. 10, line 1). The Company's update to its cost of long-term debt is a decrease of 0.17% (3.97% - 3.80%) to its initial claim of 3.97%. It should be noted that although Mr. Moul provided an update to his cost of equity due to events around the COVID-19 pandemic which would have resulted in a decrease in the Company's cost of equity by 0.02%, he does not change his recommendation and continues to recommend a cost of equity of 10.95% (PECO Energy Statement No. 5-R, pp. 10-12). Below is the Company's updated rate of return claim (PECO Exhibit PRM-1 (Updated), Schedule 1, p. 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	46.62%	3.84%	1.79%
Common Equity	53.38%	10.95%	5.85%
Total	100.00%		7.64%

<u>SUMMARY OF MR. MOUL'S REBUTTAL TESTIMONY</u>

Q. SUMMARIZE MR. MOUL'S RESPONSE TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. Mr. Moul disputes my recommendations regarding an appropriate proxy group, the use of methods other than the Discounted Cash Flow (DCF), the DCF growth rate, disallowance of his leverage adjustment, the Capital Asset Pricing Model (CAPM) risk-free rate, rejection of his leverage adjusted betas, disallowance of his size adjustment, and my disagreement with his use of the Risk Premium (RP) and Comparable Earnings (CE) methods. Additionally, Mr. Moul opines that the Commission-determined Distribution System Improvement Charge (DSIC) rates should serve as the bare minimum cost of equity in this proceeding.

<u>SUMMARY OF MR. O'DONNELL'S REBUTTAL TESTIMONY</u>

Q. SUMMARIZE MR. O'DONNELL'S RESPONSE TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. Mr. O'Donnell disputes my recommendations regarding an appropriate proxy group, capital structure, cost of debt, the DCF growth rate, and the CAPM expected return on the overall stock market.

<u>DSIC RATES</u>

Q. PLEASE SUMMARIZE MR. MOUL'S THEORY THAT DSIC RATES SHOULD SERVE AS THE MINIMUM AUTHORIZED COST OF EQUITY IN THIS PROCEEDING.

A. Mr. Moul claims that the cost of equity in a rate case should not be lower than the Company's DSIC rate. He makes this assertion on the basis that: (1) investments carrying the DSIC return should not be penalized with a lower return when they are included in rate base when setting base rates; and (2) DSIC investments receive a 'true-up' such that the achieved returns on DSIC investments equal the intended returns in those proceedings and that there is no true-up of the achieved return in a rate case. Mr. Moul suggests there is additional risk associated with achieving a particular return in base rates because there is no true up (PECO Energy Statement No. 5-R, pp. 13-14).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ASSERTION THAT THE COMPANY'S DSIC RATE SHOULD SERVE AS THE MINIMUM AUTHORIZED COST OF EQUITY IN THIS PROCEEDING?

A. Mr. Moul's comparison between the return on equity in this proceeding and the Company's DSIC rate is misguided. The DSIC return for utilities is calculated differently than the equity return in a base rate case and does not represent the full scope of risk for a given utility company. The DSIC rate is designed to encourage its use and to incentivize accelerated pipeline replacement and infrastructure upgrades to bring the existing aging infrastructure closer to meeting safety and reliability requirements in between base rate filings. To suggest the cost of equity must be at or above the DSIC rate in this base rate proceeding is inappropriate and not in the public interest. Additionally, the DSIC rate establishes a benchmark above which a utility company is considered "overearning." As such, the DSIC rate does not serve as a proper measurement of a subject utility's cost of equity in a rate case proceeding and should not represent the minimum cost of equity. In fact, 66 Pa. C.S. § 1358(b)(3) states the following:

> The distribution system improvement charge shall be reset at zero if, in any quarter, data filed with the commission in the utility's most recent annual or quarterly earnings report show that the utility will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the distribution system improvement charge.

Finally, the DSIC mechanism serves to lower a utility's risk because it reduces the lag time in the recovery of its capital outlays.

PROXY GROUP

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR PROXY GROUP.

A. Mr. Moul opines that using the percentage of revenue as a criterion for a proxy group is incorrect and that the percentage of gas assets to total assets is a more appropriate criterion because the margins of utility-based activities are not comparable to that of non-utility business segments (PECO Energy Statement No. 5-R, pp. 18-20).

Q. DO YOU AGREE WITH MR. MOUL'S ASSERTION THAT THE PERCENTAGE OF GAS UTILITY ASSETS TO TOTAL ASSETS IS A MORE APPROPRIATE CRITERION?

A. No. Calculating the percentage of utility assets that make up the total assets of a company is not always a reliable way of determining if a business is primarily a regulated utility. Assets are accounted for at the original cost minus depreciation, which means that the value of an asset depends on its age. Therefore, it is possible for the regulated utility segment of a company to predominately have assets that are depreciated. Although a utility may have assets that are significantly depreciated, it does not always indicate the level of business a company does. A parent company can have most of its utility assets depreciated but still do more business as a utility than it does in another business segment.

Another reason that the percentage of utility business is not always accurately represented by using the percentage of utility assets to total assets is that there are differences between businesses in the amount of capital needed. A utility with all new equipment may need a large amount of assets to produce a small level of cash flow while another business may need only a small amount of assets to produce a large level of cash flow. Therefore, comparing the assets of a gas utility segment to the total assets of a company is not an appropriate criterion.

Q. MR. MOUL ARGUES THAT YOUR CRITERION THAT 50% OR MORE OF REVENUE MUST BE GENERATED FROM THE GAS UTILITY INDUSTRY FOR INCLUSION IN THE PROXY GROUP IS NOT APPROPRIATE. DO YOU AGREE?

A. No. Revenues represent the percentage of cash flow a company receives from each business line related to providing a good or service. If fewer than 50% of revenues come from the regulated gas business sector, a company is not comparable to the subject utility as it does not provide a similar level of regulated business (I&E Statement No. 2, p. 10).

Q. OF THE TWO COMPANIES THAT MR. MOUL USES IN HIS PROXY GROUP THAT YOU DO NOT USE IN YOURS, WHICH OF THE TWO WERE EXCLUDED FOR FAILING TO MEET THE CRITERION THAT 50% OR MORE REVENUES MUST BE GENERATED FROM THE GAS UTILITY INDUSTRY?

A. As explained in my direct testimony, New Jersey Resources Corp. and Southwest Gas Holdings, Inc. were excluded for not meeting my criterion that 50% or more of revenues must be generated from regulated gas utility operations (I&E Statement No. 2, p. 10). There were other companies that did not meet this criterion as well, however, they were previously eliminated for not meeting one of the other criteria required to be included in my proxy group.

Q. SUMMARIZE MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR PROXY GROUP.

A. Mr. O'Donnell opines that due to the limited number of available gas utilities as a result of mergers and acquisitions, he chose not to eliminate the entire proxy group provided by Value Line and that the removal of companies from a proxy group is subjective and can result in data integrity issues (OCA Statement No. 3R, pp. 7-8).

Q. WHAT IS YOUR RESPONSE TO MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR PROXY GROUP?

A. As stated in my direct testimony, the criterion for my proxy group was designed to select companies that are most like the gas distribution company subject in this proceeding (I&E Statement No. 2, p. 7). Additionally, as I stated in response to Mr. Moul above, revenues represent the percentage of cash flow a company receives from each business line related to providing a good or service. If fewer than 50% of revenues come from the regulated gas business sector, a company is not comparable to the subject utility as it does not provide a similar level of regulated business (I&E Statement No. 2, p. 10).

Q. DO YOU HAVE ANY FURTHER COMMENTS REGARDING WHICH COMPANIES SHOULD BE INCLUDED TO PRODUCE A PROPER PROXY GROUP?

A. Yes. Mr. O'Donnell utilizes the same nine company proxy group as Mr. Moul;

however, he also performs a stand-alone analysis directly on Exelon Corporation (Exelon) (OCA Statement No. 3, p. 67). For the same reasons discussed by Mr. Moul, I believe such a stand-alone analysis is inappropriate and unnecessary (PECO Energy Statement No. 5-R, p. 18).

Q. DO YOU HAVE ANY CHANGES TO YOUR PROXY GROUP?

A. No. For the reasons discussed above, the percentage of revenue is an appropriate criterion. As New Jersey Resources Corp. and Southwest Gas Holdings, Inc. include an insufficient percentage of regulated gas revenues, they should not be included in the proxy group and compared to PECO Energy.

<u>CAPITAL STRUCTURE</u>

Q. SUMMARIZE MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR CAPITAL STRUCTURE RECOMMENDATION.

A. Mr. O'Donnell disagrees with my acceptance of the Company's capital structure. In contrast, he asserts that his capital structure recommendation of 50% common equity and 50% debt should be used since the average of his common equity ratios for 2019 was 50.70% for his proxy group and 50.40% for Exelon, which is comparable to the companies in his proxy group as well as the average common equity ratios granted to utilities across the country (OCA Statement No. 3R, p. 17).

Q. WHAT IS YOUR RESPONSE TO MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING CAPITAL STRUCTURE?

A. My position remains unchanged from the arguments made in my direct testimony. The Company's claimed capital structure falls within the range of my proxy group's 2019 capital structures, which differs from Mr. O'Donnell's proxy group for the reasons mentioned above. The 2019 range consists of long-term debt ratios ranging from 33.18% to 53.48% and equity ratios ranging from 32.78% to 59.01%, with a five-year average of 40.29% for long-term debt and 47.60% for common equity (I&E Statement No. 2, p. 12).

<u>LONG-TERM DEBT</u>

Q. SUMMARIZE MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR LONG-TERM DEBT RECOMMENDATION.

A. Mr. O'Donnell disagrees with my acceptance of the Company's cost of long-term debt. In contrast, he asserts that his long-term debt recommendation of 3.84% should be used because PECO Energy updated its cost of debt for PECO Energy's March 2021, September 2021, and March 2022 anticipated "First and Refunding Mortgage Bonds" debt issuances decreased from the estimates provided by PECO Energy in its direct testimony (OCA Statement No. 3R, pp. 15-16).

Q. WHAT IS YOUR RESPONSE TO MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING THE COST OF LONG-TERM DEBT?

A. As I discussed above, the Company provided an update to its cost of long-term debt of 3.84% to reflect the cost of new issues of debt in the FTY and the FPFTY (PECO Energy Statement No. 5-R, p. 9, line 21 through p. 10, line 1). I have incorporated the updated cost of long-term debt in my updated overall rate of return recommendation discussed below.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR LONG-TERM DEBT?

A. Yes. I am updating my recommendation to reflect the Company's update to its cost of long-term debt from 3.97% to 3.84% (PECO Energy Statement No. 5-R, p. 9, line 21 through p. 10, line 1), which results in a weighted cost of debt of 1.79% or a decrease of 0.06% (1.85% - 1.79%) to the Company's original claim.

<u>DISCOUNTED CASH FLOW</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR DCF ANALYSIS.

A. Mr. Moul agrees that the results of a DCF analysis should be given weight but disagrees with my approach. Mr. Moul disagrees with my results based on the outcomes of certain individual companies and disputes the growth rate I used. He further disagrees with my recommendation to reject his leverage adjustment (PECO Energy Statement No. 5-R, pp. 20-31).

EXCLUSIVE USE OF THE DCF

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR USE OF THE DCF.

A. Mr. Moul explains that the use of more than one method provides a superior foundation for the cost of equity determination. Mr. Moul asserts that the use of more than one method will capture the multiplicity of factors that motivate investors (PECO Energy Statement No. 5-R, pp. 20-21).

Q. WERE ANY METHODS OTHER THAN THE DCF EMPLOYED IN YOUR ANALYSIS?

A. Yes. Although my recommendation was based primarily on the results of my DCF analysis, I also employed the CAPM as a comparison. The result of my DCF analysis is 10.24% while the result of my CAPM analysis is 9.08%, both of which are significantly lower than the Company's claim of 10.95%. For the reasons discussed in my direct testimony, the DCF method is the most reliable (I&E Statement No. 2, pp. 16-17). I have considered the fact that no method can perfectly predict the return on equity, which is why I also use the CAPM as a comparison to the DCF. Although no one method can capture every factor that influences an investor, including the results of methods less reliable than the DCF does not make the end result more reliable or more accurate. As a result, I stand by my method of using the DCF with a CAPM comparison which is consistent with the methodology historically used by the Commission in base rate proceedings, even as recently as 2017, 2018, and 2020.[1]

EVALUATING THE DCF BASED ON INDIVIDUAL RESULTS

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY REGARDING THE RESULTS OF YOUR DCF?

A. Mr. Moul argues that when some results are unreasonable on their face, the application or the reliability of that method must be questioned. He points to the results of one of my proxy group companies and claims that they fall into that category. Mr. Moul attempts to support his argument by asserting that I erroneously removed Value Line's growth projection for Northwest Natural Gas, explaining that my removal of Northwest Natural Gas was one-sided due to its high growth rate, and had I left this estimate in my analysis, my overall DCF analysis would have yielded a higher result (PECO Energy Statement No. 5-R, pp. 21-24).

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[1] *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company;* Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA;* Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92.

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ATTEMPT TO DISAGGREGATE YOUR RESULTS?

A. Generally, to remove individual companies or data points based solely on the results creates a bias and can be described as tampering with market-based results. I chose criteria for my proxy group with the intention of creating a group that is comparable to PECO Energy, and then calculated a DCF from the companies that fit my criteria. Admittedly, as discussed in greater detail below, I have removed the Value Line projected earnings growth rate for Northwest Natural Gas from my overall projected growth rate average as I believed it had hindered my ability to conduct a reasonable and fair analysis.

As for Mr. Moul's assertion that my removal of Northwest Natural Gas was one-sided due to its high growth rate and that I did not remove any low growth rates, I&E has previously removed growth estimates in its analysis that would have lowered a company's return on equity calculation. For both PECO Energy Company – Electric Division (at Docket No. R-2018-3000164) and Duquesne Light Company (at Docket Nos. R-2018-3000124 and R-2018-3000829), I&E removed all growth estimates that had negative growth projections. I&E believed that the growth projections for some of the proxy companies in those proceedings were extremely inconsistent and would have had an unnecessary and unwarranted negative impact on its DCF analysis, which would have adversely affected the recommended cost of common equity. While I understand the purpose of a proxy group is to smooth out anomalies, I believe it is reasonable to remove extreme abnormalities based on proper objectivity and professional judgement.

GROWTH RATE

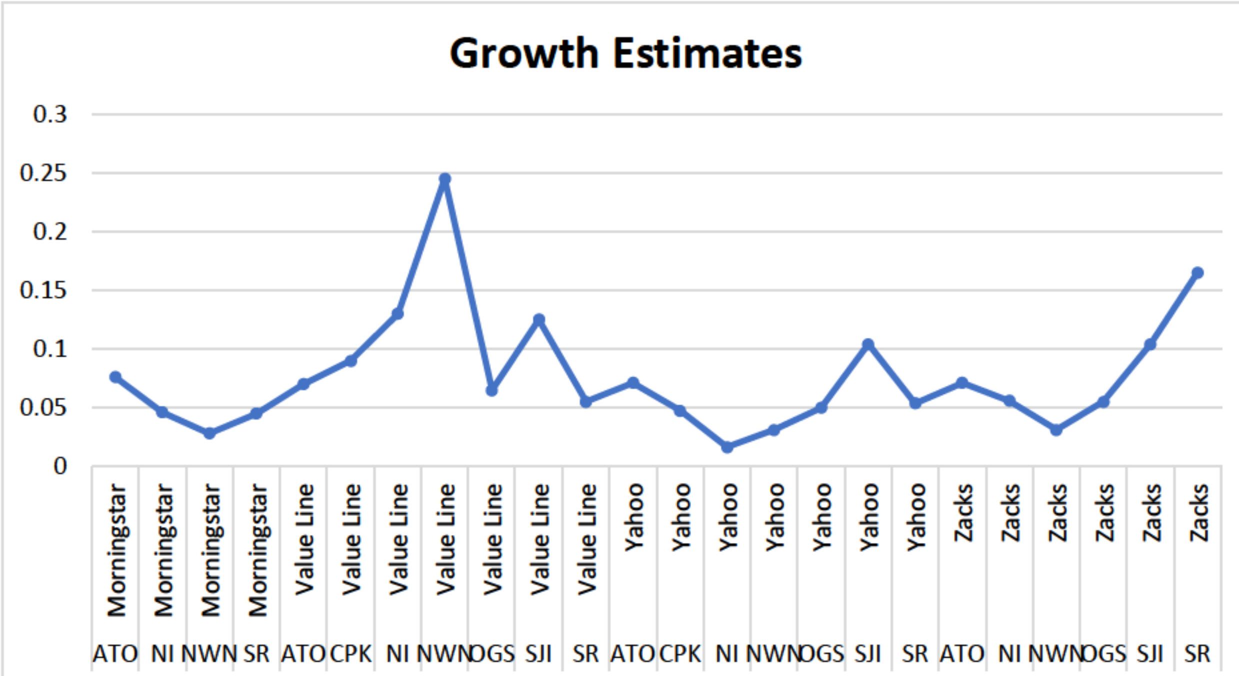
Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR GROWTH RATES.

A. Mr. Moul explains that I adjusted my actual calculated growth rate of 7.63% for my proxy group and instead used a rate of 6.86% (PECO Energy Statement No. 5-R, p. 21). He opines that I erroneously eliminated the Value Line earnings forecast projection for Northwest Natural Gas from my analysis (PECO Energy Statement No. 5-R, pp. 22-23).

Q. PLEASE EXPLAIN YOUR BASIS FOR ELIMINATING THE VALUE LINE EARNINGS FORECAST FOR NORTHWEST NATURAL GAS FROM YOUR GROWTH RATE ANALYSIS.

A. As explained above and in greater detail in my direct testimony, Value Line's projected earnings growth estimate for Northwest Natural Gas is clearly an outlier. The estimate of 24.50% is more than three times higher and greater than three standard deviations over the originally calculated 7.63% overall average. Furthermore, the estimate is almost four times higher than the average of the remaining estimates. The chart below, which is also included in my direct testimony, illustrates just how extreme the Value Line estimate for Northwest

Natural Gas is in comparison to all the other companies and sources used in my analysis (I&E Statement No. 2, pp. 22-23).



Including this anomaly in my analysis would have an unreasonable and unwarranted impact on my DCF analysis and would be harmful to ratepayers as it creates an unjustified increase in return on equity and consequently puts upward pressure on rates, which is not in the public interest.

Q. MR. MOUL ARGUED YOU REMOVED NORTHWEST NATURAL GAS BECAUSE IT RAISED YOUR CALCULATED GROWTH RATE. HAS I&E EVER REMOVED GROWTH ESTIMATES IN ITS ANALYSIS THAT OTHERWISE WOULD HAVE LOWERED A COMPANY'S RETURN ON EQUITY CALCULATION?

A. Yes. As stated above, I&E has removed growth estimates in its analysis that would have lowered a company's return on equity calculation. In both the PECO Energy Company – Electric Division proceeding at Docket No. R-2018-3000164 and the Duquesne Light Company proceeding at Docket Nos. R-2018-3000124 and R-2018-3000829, I&E removed all growth estimates that had negative growth projections. I&E believed that the growth projections for some of the proxy group companies in those proceedings were extremely inconsistent and would have had an unnecessary and unwarranted negative impact on the DCF analysis, adversely affecting I&E's recommendation for the cost of common equity, which is also not in the public interest.

Q. SUMMARIZE MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR GROWTH RATES.

A. Mr. O'Donnell disagrees with how I only used forecasted growth rates in my DCF analysis and how I removed the Value Line earnings forecast projection for Northwest Natural Gas. Mr. O'Donnell opines that historical growth rates as well as forecasted growth rates should be used as this would provide a more complete picture and given the inherent uncertainties as a result of the COVID-19 pandemic. Mr. O'Donnell also opines that the Value Line earnings forecast projection of 24.50% that I removed is reasonable, and had I taken historical growth rates into account, it would be demonstrated that Northwest Natural Gas is recovering from a historical five-year and a ten-year negative growth rate (OCA Statement No. 3R, pp. 10-13).

Q. DO YOU AGREE WITH MR. O'DONNELL'S USE OF HISTORIC GROWTH RATES IN DCF ANALYSIS?

A. No. I have used forecasted growth rates for my DCF recommendation in order to estimate a cost of equity that is forward looking. The growth rate forecasts are made by analysts who are aware of both the historic events of each company and what is expected both at a company and industry level. The past performance of a company is taken into account in a growth rate forecast, and although past performance can produce valuable information, Mr. O'Donnell's method of relying on it for a DCF analysis causes his recommendation to place too much weight on past performance.

Q. HAVE YOU CHANGED YOUR GROWTH RATE AS A RESULT OF MR. MOUL'S OR MR. O'DONNELL'S REBUTTAL TESTIMONY?

A. No. For the reasons discussed above, I continue to recommend a growth rate of 6.86%. Value Line's projected earnings growth estimate for Northwest Natural Gas is clearly an outlier and would have an unreasonable and unwarranted impact on my DCF analysis. This would be harmful to ratepayers as it creates an unjustified increase in return on equity and consequently puts upward pressure on rates, which is not in the public interest. Additionally, only forecasted growth rates should be used to estimate a cost of equity because they are forward looking. The growth rate forecasts are made by analysts who are aware of both the historic events of each company and what is expected both at a company and industry level where past performance of a company is taken into account in a growth rate forecast.

LEVERAGE ADJUSTMENT

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING HIS RECOMMENDED LEVERAGE ADJUSTMENT.

A. First, Mr. Moul clarifies that his "leverage adjustment" is not a traditional "market-to-book" ratio adjustment. Next, he states that credit rating agencies do not measure the market-required cost of equity for a company, nor are they concerned with how it is applied in the rate-setting context. Instead, credit rating agencies are only concerned with the interests of lenders and the timely payment of interest and principal by utilities. Mr. Moul then questions my references to prior Commission Orders and references two prior Commission Orders that granted a leverage adjustment. Finally, Mr. Moul disagrees with my assertion that investors base their decisions on book value capitalization (PECO Energy Statement No. 5-R, pp. 28-31).

Q. HAVE YOU CLAIMED THAT MR. MOUL'S ADJUSTMENT IS A MARKET-TO-BOOK RATIO ADJUSTMENT?

A. No. As I stated in my direct testimony, Mr. Moul does not propose to change the capital structure of the utility (a leverage adjustment), nor does he propose to apply the market-to-book ratio to the DCF model (a market-to-book adjustment) (I&E Statement No. 2, p. 38).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S REBUTTAL TESTIMONY CONCERNING CREDIT RATING AGENCIES?

A. Mr. Moul has supported the I&E argument that his proposed leverage adjustment is not needed by stating that the credit rating agencies are only concerned with the timely payment of interest and principal by utilities (Columbia Statement No. 8-R, p. 23). Mr. Moul's stated need for the leverage adjustment is based on his assertion that the difference between the book value capital structure and his market value capital structure causes a financial risk difference (PECO Energy Statement No. 5, p. 32).

Financial risk does relate to the capital structure of a company, but it is created by the financing decisions (the use of debt or equity) and the amount of leverage or debt a company chooses to finance its assets. Financial risk and the book value capital structure of a company are represented in the income statement, part of what is evaluated by rating agencies. Mr. Moul agrees with me that credit rating agencies use a company's financial statements in their analysis to assess financial risk and determine creditworthiness (PECO Energy Statement No. 5-R, pp. 28-29).

Q. SUMMARIZE MR. MOUL'S RESPONSE TO YOUR REFERENCING PRIOR COMMISSION ORDERS.

A. Mr. Moul refers to the discussion in my direct testimony where I point to three recent cases (Aqua Pennsylvania, Inc., City of Lancaster – Bureau of Water, and UGI Utilities, Inc. – Electric Division) where the Commission has rejected a "leverage adjustment." He claims that the adjustment proposed in the City of Lancaster case was much different than what he is proposing in this proceeding. Additionally, Mr. Moul explains that even though the Commission declined to make a "leverage adjustment" in the Aqua Pennsylvania case, it does not invalidate its use. Further, Mr. Moul states, "Notably, the Commission did not repudiate the leverage adjustment in the Aqua case, but instead arrived at an 11.00% return on equity for Aqua by including a separate return increment for management performance." Finally, Mr. Moul states that the Commission granted basis points for management performance in the UGI Electric case to arrive at the return on equity of 9.85% (PECO Energy Statement No. 5-R, pp. 29-30).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE REFERENCED PRIOR COMMISSION ORDERS IN YOUR DIRECT TESTIMONY AND PRIOR COMMISSION ORDERS REFERENCED BY MR. MOUL?

A. In this proceeding, Mr. Moul is recommending a 196-basis point "leverage adjustment." To be clear, the Commission did in fact refuse to accept the leverage adjustment in the Aqua case by stating "…we reject the ALJ's recommendation to allow a 65 basis point leverage adjustment."[2] The management performance points awarded to Aqua were case-specific and in no way related to the proposed leverage adjustment. Regarding the Lancaster case, the Commission did not reject the leverage adjustment based on the manner in which it was calculated, but rather, the Commission stated, "…the ALJ's recommendation is in error as any adjustment to the results of the market based DCF as we have previously adopted are unnecessary and will harm ratepayers."[3] Regarding the UGI Electric case, the Commission concluded that, "…an artificial adjustment in this proceeding is unnecessary and contrary to the public interest. Accordingly, we decline to include a leverage adjustment in our calculation of the DCF cost of equity."[4]

Finally, regarding the PPL Electric case referenced by Mr. Moul, the Commission stated that, "Based upon the foregoing discussion, we conclude that a financial risk adjustment to the market derived DCF return of 10.25% for PPL's Electric Company Proxy Group *is appropriate at this time* (emphasis added)."[5] Although the Commission concluded a leverage adjustment was appropriate in 2004, it does not mean a leverage adjustment is appropriate in this proceeding. Additionally, the cases I referred to in my direct testimony are three cases that are

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[2] *Pa. PUC v. Aqua Pennsylvania, Inc,*. Docket No. R-00072711, pp. 38-39 (Order entered July 31, 2008).
[3] *Pa. PUC v. City of Lancaster – Bureau of Water*; Docket No. R-2010-2179103, p. 79 (Order entered July 14, 2011).
[4] *Pa. PUC v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058, pp. 93-94 (Order entered October 25, 2018).
[5] *Pa. PUC v. PPL Electric Utilities Corp.,* Docket No. R-000449255, p. 71 (Order entered December 22, 2004).

the most recent instances where the Commission has rejected the use of a "leverage adjustment."

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ASSERTION THAT INVESTORS DO NOT BASE THEIR DECISIONS ON BOOK VALUE, BUT RATHER THE RETURN THEY WILL EARN ON THE DOLLARS THEY INVEST?

A. Mr. Moul's assertion that an investor is concerned with the return earned on dollars invested and not "some accounting value of little relevance to them," (PECO Energy Statement No. 5-R, p. 30) is unsupported. Clearly an investor takes financial risk into consideration when determining a required return. In addition, the market capitalization information included in Value Line's reports and discussed by Mr. Moul is not the same as market value capital structure (PECO Energy Statement No. 5-R, p. 30). Market capitalization refers to the number of shares outstanding multiplied by the current price. A market value capital structure refers to the ratio of market debt to market equity, which is not included in Value Line's reports. Therefore, Mr. Moul's contention that Value Line includes market capitalization data does not offer any support for his leverage adjustment.

Q. HAS MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY CONCERNING HIS PROPOSED LEVERAGE ADJUSTMENT CAUSED YOU TO CHANGE YOUR RECOMMENDATION?

A. No. For the reasons discussed above, I continue to recommend that Mr. Moul's leverage adjustment be rejected.

<u>CAPITAL ASSET PRICING MODEL</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE CAPM.

A. Mr. Moul opines that my CAPM analysis understates the cost of equity for several reasons, including my use of the yield on 10-year Treasury notes for my risk-free rate, failure to use leverage adjusted betas, and rejection of his size adjustment (PECO Energy Statement No. 5-R, p. 31). Each of these topics are discussed in more detail below.

<u>RISK-FREE RATE</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR USE OF THE YIELD ON THE 10-YEAR U.S. TREASURY NOTE.

A. Mr. Moul claims that his use of the yield on a 30-year U.S. Treasury Bond is more appropriate than my use of the yield on a 10-year Treasury Note because a longer-term bond is less susceptible to Federal policy actions (PECO Energy Statement No. 5-R, p. 32).

Q. DO YOU AGREE WITH MR. MOUL THAT USING THE YIELD OF A 30-YEAR U.S. TREASURY BOND IS MORE APPROPRIATE DUE TO A LONGER-TERM BOND BEING LESS SUSCEPTIBLE TO FEDERAL POLICY ACTIONS?

A. No. As stated in my direct testimony, I chose the 10-year Treasury Note which balances the shortcomings of the short-term T-Bill and the 30-year Treasury Bond. Although long-term Treasury Bonds have less risk of being influenced by federal policies, they have substantial maturity risk associated with the market risk. In addition, long-term Treasury bonds bear the risk of unexpected inflation. As such, my choice of a 10-year Treasury Note is more appropriate (I&E Statement No. 2, pp. 25-26). Further, as also pointed out in my direct testimony, the Commission has recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[6]

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR RISK-FREE RATE USED IN THE CAPM FORMULA.

A. Mr. Moul opines that I have incorrectly given weight to the yield on the 10-year Treasury Note for the first, second, third, and fourth quarters of 2021 as I do for the entire five-year period encompassing 2022 to 2026. Then, Mr. Moul incorrectly recalculates the risk-free rate by averaging the 10-year treasury yield

[6] *Pa. PUC v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058 p. 99 (Order entered October 25, 2018).

forecasts by year from 2021 through 2026 to inflate my calculated risk-free rate of 1.23% to 1.83% (PECO Energy Statement No. 5-R, pp. 32-33).

Q. DO YOU AGREE WITH MR. MOUL'S ANALYSIS OF YOUR RISK-FREE RATE?

A. No. Mr. Moul's new calculation proposes to give equal weight to each separate year from 2021 to 2026. The flaw with this approach is that the further out into the future one forecasts, the less reliable and more speculative the estimates become; therefore, to give the less reliable estimates equal weight would not be prudent. It is more appropriate to weight the quarters and years as I have done in my direct testimony (I&E Exhibit No. 2, Schedule No. 8). My calculation provides a more accurate estimation of the risk-free rate during the FPFTY, as the further out one forecasts, the less reliable the information becomes.

<u>FORECASTED MARKET RETURN</u>

Q. SUMMARIZE MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR RECOMMENDED FORECASTED MARKET RETURN.

A. Mr. O'Donnell opines that my use of a 10.46% forecasted market return is not realistic given the current economic situation even when examining market trends prior to the impacts felt by the COVID-19 pandemic and that Exelon has only assumed a 7% market return on its pension assets (OCA Statement No. 3R, pp. 14-15).

Q. WHAT IS YOUR RESPONSE TO MR. O'DONNELL'S REBUTTAL TESTIMONY REGARDING YOUR FORECASTED MARKET RETURN RECOMMENDATION?

A. I agree with Mr. O'Donnell's assertion in direct testimony that, "The development of the current market risk premium is, undoubtedly, the most controversial aspect of the CAPM calculations" (OCA Statement No. 3, p. 82, lines 10-11). Each witness uses a variety of trusted sources in determining the overall market rate of return as well as a degree of professional judgment. As a result, the subjectivity of the CAPM variables allows for such a wide range and interpretations, unlike the DCF that uses specific and defined inputs.

Q. ARE YOU CHANGING YOUR FORECASTED MARKET RETURN AS A RESULT OF MR. O'DONNELL'S REBUTTAL TESTIMONY?

A. No. For the reasons discussed above, I continue to recommend a forecasted market return of 10.46%.

<u>LEVERAGED BETAS</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE USE OF LEVERAGE-ADJUSTED BETAS.

A. Mr. Moul simply mentions my "failure to use leverage adjusted betas…" (PECO Energy Statement No. 5-R, p. 31). He does not offer an explanation beyond what he argued in his direct testimony.

Q. IS THE USE OF LEVERAGE-ADJUSTED BETAS IN CAPM ANALYSES APPROPRIATE?

A. No. As stated in my direct testimony, Mr. Moul's adjustment only serves to inflate the result of his CAPM analysis. Enhancements such as leverage adjusted betas are unwarranted in CAPM analyses for the same reasons that enhancements are unwarranted for DCF results. Until this type of adjustment is demonstrated in academic literature to be valid, such leverage-adjusted betas in a CAPM should be rejected (I&E Statement No. 2, pp. 42-43).

<u>SIZE ADJUSTMENT</u>

Q. SUMMARIZE YOUR DIRECT TESTIMONY REGARDING A SIZE ADJUSTMENT.

A. In direct testimony, I stated that Mr. Moul's 102 basis point CAPM size adjustment is unnecessary because none of the technical literature he cited in his direct testimony supporting investment adjustments related to the size of a company are specific to the utility industry. In addition, I presented an article by Dr. Annie Wong that demonstrated there is no need to make an adjustment for the size of a company in utility rate regulation (I&E Statement No. 2, pp. 43-45).

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY REGARDING A SIZE ADJUSTMENT.

A. Mr. Moul states the distinction between regulated utilities and unregulated industrial companies from the technical literature that he cites is not enough to reject his size adjustment and that the size adjustment he derived from the Ibbotson study included public utilities. Mr. Moul also states that enormous changes have occurred in the industry since the article, "Utility Stocks and the Size Effect: An Empirical Analysis," by Dr. Annie Wong was published. He also references the Fama/French study, "The Cross-Section of Expected Stock Returns," to illustrate that his size adjustment is a separate factor from beta which helps explain systematic risk and returns (PECO Energy Statement No. 5-R, pp. 34-35).

Q. DO THE FAMA/FRENCH STUDY AND THE IBBOTSON STUDY REFUTE DR. WONG'S ARTICLE?

A. No. As stated in my direct testimony, Dr. Wong's article presents evidence that although a size effect may exist for industrial stocks, it does not exist for utility stocks. As the Fama/French study is not specific to utility stocks, and although the

Ibbotson study included public utilities, this does not adequately demonstrate that a size effect exists in the utility industry. In addition, the size effect that exists for industrial stocks varies to such an extent that it is difficult to predict. The difficulty in predicting the effect of size is demonstrated in the variance from year to year of the measurement of difference between the annual returns on the large and small-capitalization stocks of the NYSE/AMEX/NASDAQ in the Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook*. As stated on page 100 of the SBBI Yearbook,

> While the largest stocks actually declined in 2001, the smallest stocks rose more than 30%. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and 10th decile returns was far more substantial. The divergence in the performance of small- and large- cap stocks is evident. In 30 of the 89 years since 1926, the difference between the total returns of the largest stocks (decile 1) and the smallest stocks (decile 10) has been greater than 25 percentage points.

Page 109 states,

> In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected.

Page 112 states,

> Because investors cannot predict when small-cap returns will be higher than large-cap returns, it has been argued that they do not expect higher rates of return for small stocks.

Q. DOES THE TIME WHICH HAS ELAPSED SINCE AN ARTICLE WAS WRITTEN NECESSARILY INVALIDATE ITS RESULTS?

A. No. Although Mr. Moul states that enormous changes have occurred in the industry since the 1960s, he presents no evidence that these "changes" have caused the need for a size adjustment. To the contrary, Dr. Wong's study demonstrated that one does *not* need to be made in the regulated utility industry. As stated in my direct testimony, absent any credible article to refute Dr. Wong's findings, Mr. Moul's size adjustment to his CAPM results should be rejected.

Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. MOUL'S SIZE ADJUSTMENT?

A. I continue to recommend that his use of the 1.02% size adjustment be disallowed in calculating the CAPM.

Q. MR. MOUL HAS RECALCULATED YOUR CAPM RESULTS. DO YOU AGREE WITH HIS RECALCULATION?

A. No. Mr. Moul's recalculation is incorrect for a couple of reasons. He used an inaccurate risk-free rate and an unnecessary size adjustment, as stated in both my direct testimony and above. Because of these factors, a recalculation of my CAPM results is imprudent and any recalculation provided by Mr. Moul of my CAPM results is unreliable and unnecessary.

<u>RISK PREMIUM</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE RP METHOD.

A. Mr. Moul opines that the RP approach should be given serious consideration because it is straight-forward, understandable, and uses a company's own borrowing rate. He claims it provides a direct and complete reflection of a utility's risk and return. Mr. Moul also states that I make an unfounded assertion that the RP method does not measure the current cost of equity as directly as the DCF (PECO Energy Statement No. 5-R, pp. 39-41).

Q. DO YOU AGREE WITH MR. MOUL THAT THE RP METHOD PROVIDES A DIRECT AND COMPLETE REFLECTION OF A UTILITY'S RISK AND RETURN?

A. No. The RP method produces an indirect measure when compared to the DCF method.

Q. PLEASE COMMENT ON THE INDIRECT MEASURE OF THE RP METHOD VERSUS THE MORE DIRECT MEASURE OF THE DCF METHOD.

A. Mr. Moul claims that my statement that the RP method does not measure the current cost of equity as directly as the DCF is without foundation. In my direct testimony, I have clearly illustrated how the two measures are different (I&E

Statement No. 2, pp. 13-19). The main reason is that the RP method determines the rate of return on common equity indirectly by observing the cost of debt and adding to it an equity risk premium. The DCF measures equity more directly through the stock information (using equity information), whereas the RP method measures equity indirectly using debt information. Thus, I continue to disagree with Mr. Moul's use of the RP method in determining an appropriate cost of equity.

COMPARABLE EARNINGS

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE COMPARABLE EARNINGS METHOD.

A. Mr. Moul claims that using the CE method satisfies the comparability standard established in the *Hope* case. Additionally, he states, "…the financial community has expressed the view that the regulatory process must consider the returns that are being achieved in the non-regulated sector to ensure that regulated companies can compete effectively in the capital markets" (PECO Energy Statement No. 5-R, p. 42, lines 10-13). Finally, Mr. Moul addresses my statement that the use of 20% as the point where returns can be viewed as profitable is arbitrary, unjustified, and that there needs to be some point of demarcation to identify high returns and the 20% which he uses as the point where returns would be viewed as highly profitable (PECO Energy Statement No. 5-R, pp. 41-43).

Q. DO YOU AGREE THAT COMPANIES USED BY MR. MOUL IN HIS CE METHOD ARE COMPARABLE TO PECO ENERGY?

A. No. As stated in my direct testimony, the companies in Mr. Moul's analysis are not utilities, and therefore, are too disparate to be used in a CE analysis (I&E Statement No. 2, pp. 28-29). For example, the criteria Mr. Moul uses to choose the companies in his CE group results in the selection of companies such as Dollar Tree Inc., Healthcare Services Group Inc., McCormick and Company, Scholastic Corporation, and Vail Resorts. All these companies operate in industries very different from a utility company and operate under varying degrees of regulation. Also, most, if not all, of the companies Mr. Moul uses in his analysis are not monopolies in the sense that utilities are. This means that they have significantly more competition and would require a higher return for the added risk. Further, the CE method should be excluded because it is entirely subjective as to which companies are comparable and it is debatable whether historic accounting returns are representative of the future.

MANAGEMENT PERFORMANCE POINTS

Q. SUMMARIZE MR. MOUL'S AND MR. BRADLEY'S REBUTTAL TESTIMONY REGARDING MANAGEMENT PERFORMANCE POINTS.

A. Mr. Moul simply states, "I continue to support the 10.95% return on equity that includes the increment for management performance" (PECO Statement No. 5-R, p. 12, lines 7-8). He does not offer an explanation beyond what he argued in his direct testimony. Mr. Bradley reiterates the same rationale from his direct testimony to support his management performance claim, that the Company has demonstrated exemplary management performance including programs that promote high quality and reliability of service, commitment to energy efficiency, support for community and economic development in the Company's service territory, measures taken to protect the safety of workers, its significant efforts to manage and control its operating expenses, and the high quality of customer service (PECO Statement No. 1-R, p. 15).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S AND MR. BRADLEY'S REBUTTAL TESTIMONY REGARDING MANAGEMENT PERFORMANCE?

A. My position remains unchanged from the arguments made in my direct testimony. By awarding the Company management effectiveness points, it adds an increased cost to ratepayers for service. Furthermore, any savings from effective operating and maintenance cost measures should flow through to ratepayers and investors. These claimed savings would likely be offset by the addition of basis points for management effectiveness as ratepayers would have to fund the additional costs. This defeats the purpose of implementing cost saving measures to benefit ratepayers. Ensuring that these cost saving measures flow to ratepayers is especially important now as many have recently experienced reduced household income as a result of job losses or reductions in work hours due to the global pandemic where the Pennsylvania unemployment rate was 6.4% as of the end of December 2020.[7]

Finally, as I discussed in my direct testimony, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from cost savings and true efficiency in management and operations is available to be passed on to shareholders. PECO Energy, or any utility should not be awarded additional basis points for doing what they are required to do in order to provide adequate, efficient, safe, and reasonable service under 66 Pa C.S.A. §1501.

OVERALL RATE OF RETURN

Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION CHANGED FROM YOUR DIRECT TESTIMONY?

A. Yes. While I continue to support each recommendation made in I&E Statement No. 2 regarding the Company's return on equity, I am updating my recommendation to reflect the Company's update to its cost of long-term debt from 3.97% to 3.84% (PECO Energy Statement No. 5-R, p. 9, line 21 through p. 10, line 1), which results in a weighted cost of debt of 1.79% or a decrease of 0.06% (1.85% - 1.79%) to the Company's original claim.

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[7] https://www.bls.gov/web/laus/laumstrk.htm, accessed February 1, 2021.

Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION?

A. I recommend the following rate of return for PECO Energy:

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	46.62%	3.84%	1.79%
Common Equity	53.38%	10.24%	5.47%
Total	100.00%		7.26%

NEIGHBORHOOD GAS PILOT RIDER

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR THE COMPANY'S PROPOSAL TO CHANGE ITS NEIGHBORHOOD GAS PILOT RIDER.

A. In direct testimony, I recommended allowing up to 40 feet of main line per contracted residential customer at no cost with certain limitations such as abnormal underground conditions or unusual permit requirements, but that the calculation for the contribution in aid of construction (CIAC) above the free allowance should remain the same as the current program. I also recommended an annual allowance of \$5,000,000 (\$25,000,000 ÷ 5 years) for the capital costs associated with the proposed change to the Neighborhood Gas Pilot Rider (NGPR) or a reduction of \$2,500,000 (\$7,500,000 - \$5,000,000) to the Company's claim. My recommendation was based on the fact that the Company has only spent \$15,500,000 since the beginning of the NGPR (PECO Energy Statement No. 9, p. 12, lines 4-6) despite having a spending limit of \$25,000,000 (PECO Energy Statement No. 9, p. 11, lines 18-20). This demonstrates the Company has not spent the amount currently allocated to the NGPR. My recommendation was also based on the Company's current CIAC calculation which assumes 66% of customers would take service over a 20-year period (PECO Energy Statement No. 9, p. 11, lines 4-6); however, only 44% of eligible customers have taken service since the inception of the NGPR. Finally, with the current difficult financial times due to the COVID-19 pandemic, I would not anticipate the voluntary commitment of personal funds from residential customers for both CIAC and the conversion costs needed for at least the next one to two years. Therefore, planning a large investment increase at this time is inappropriate from both the expectation of likely program success and due to the burden that would be placed on all customers through subsidizing these program costs. As a result, I recommended that the calculation for the CIAC remain the same as the current program as well as the total spending limit of $25,000,000 for an annual allowance of $5,000,000 ($25,000,000 ÷ 5 years) for the capital costs associated with the proposed change to the NGPR (I&E Statement No. 2, pp. 48-51).

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION FOR THE COMPANY'S PROPOSAL TO CHANGE ITS NEIGHBORHOOD GAS PILOT RIDER?

A. Yes. Company witness Doreen L. Masalta responded to my NGPR change proposal recommendation. Ms. Masalta states the Company is revising the CIAC calculation to assume that 66% of potential customers will contract for service in the first year to better align with data from the NGPR. Ms. Masalta opines that there will be an increased interest in participating in the NGPR as a result of the 40 feet of main line per contracted residential customer and the revised CIAC calculation. Ms. Masalta states that customers are expressing interest in participating in the NGPR but are awaiting the outcome of this proceeding and the Company expects an increase of 25 neighborhoods per year under the revised NGPR which would require the Company's initial $7,500,000 claim. Finally, Ms. Masalta asserts that despite the COVID-19 pandemic, the Company has received only slightly less inquiries in 2020 compared to 2019 regarding the NGPR and it was able to complete 27 main extension projects for 337 residential customers in 2020 compared to 39 main extension projects for 391 residential customers in 2019 (PECO Energy Statement No. 9, pp. 10-12).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR THE NGPR CHANGE PROPOSAL?

A. No. I continue recommend allowing up to 40 feet of main line per contracted residential customer at no cost with certain limitations such as abnormal underground conditions or unusual permit requirements as stated by the Company. I also continue to recommend an annual allowance of $5,000,000 ($25,000,000 ÷ 5 years) for the capital costs associated with the proposed change to the NGPR or a reduction of $2,500,000 ($7,500,000 - $5,000,000) to the Company's claim. The Company has not spent the amount currently allocated to the NGPR. The

Company may be able expand its program sufficiently to achieve its originally projected targets, but there is no data to support increasing the funding for this program at this time based on historic performance where there was a decrease in inquiries regarding the NGPR, the number of main extension projects, and number of residential customers having gas available from the NGPR from 2019 to 2020. Additionally, although the Company's revised CIAC calculation assumes 66% of customers would take service in the first year, only 44% of eligible customers have taken service since the inception of the NGPR. Finally, with the current difficult financial times due to the COVID-19 pandemic, I continue to assert that I would not anticipate the voluntary commitment of personal funds from residential customers for both the CIAC and the conversion costs needed for at least the next one to two years. Therefore, planning a large investment increase at this time is inappropriate from both the expectation of likely program success and due to the burden that would be placed on all customers through subsidizing these program costs.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 3
Witness: Ethan H. Cline

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3018929

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Rate Base
FPFTY Reporting Requirements
Cost of Service Study
Customer Cost Analysis
Revenue Allocation
Negotiated Rate Service
Scale Back of Rates

TABLE OF CONTENTS

<u>INTRODUCTION</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission in the Bureau of Investigation and Enforcement ("I&E") as a Fixed Utility Valuation Engineer.

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?

A. An outline of my education and employment experience is attached as Appendix A.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for representing the public interest in rate and other proceedings before the Commission. I&E's analysis in this proceeding is based on its responsibility to represent the public interest. This responsibility requires the balancing of the interests of ratepayers, the utility company, and the regulated community as a whole.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to evaluate PECO Energy Company – Gas Division's ("PECO" or "Company") request for an annual increase in total operating revenue of approximately $68.7 million, or 8.9%. This increase represents an 18.7% increase in distribution revenue (PECO Ex. JAB-1). My testimony will address issues related to the rate base, fully projected future test year reporting requirements, proposed revenue, cost allocation, negotiated rate service, and rate design.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 3 contains schedules relating to my testimony.

Q. PLEASE DESCRIBE THE FILING.

A. On September 30, 2020, PECO filed a base rate case using the Fully Projected Future Test Year ("FPFTY") ending June 30, 2022 for an increase of approximately $68.7 million. (PECO St. No. 1, p. 5).

<u>TEST YEAR</u>

Q. WHAT IS A TEST YEAR AND HOW IS IT USED BY A COMPANY IN A RATE PROCEEDING?

A. A test year is the twelve-month period over which a utility's costs and revenues are measured as the basis for setting prospective base rates. In order to meet its burden of proof, a utility has the option of selecting to use a historic test year ("HTY"), a future test year ("FTY"), or a FPFTY. An HTY is a twelve-month period selected by a company that represents a recent full year of actual data. An FTY begins the day after the HTY ends and is determined using a combination of actual data and a projection of annualized and normalized estimates of future revenues and expenses and a corresponding rate base at the end of that period. The FPFTY is defined as the twelve-month period that begins with the first month that the new rates will be placed into effect, after the application of the full suspension period permitted under Section

1308(d). The FPFTY is a shift from the fundamental ratemaking principle that a public utility should only be permitted to include projects in rate base and earn a reasonable return on its investments after they become "used and useful" for the utility's public service.

Q. WHAT TEST YEARS HAS THE COMPANY USED IN THIS PROCEEDING?

A. PECO has selected the year ended June 30, 2020 as the HTY, the year ending June 30, 2021 as the FTY, and the year ending June 30, 2022 as the FPFTY.

Q. WHAT TEST YEAR HAS THE COMPANY BASED ITS REVENUE REQUIREMENT ON IN THIS PROCEEDING?

A. PECO based its requested revenue requirement on the FPFTY ending June 30, 2022 (PECO St. No. 1, p. 5).

<u>RATE BASE</u>

Q. WHAT IS RATE BASE?

A. Rate base is the depreciated original cost of a utility's investment in plant a utility has in place to serve customers plus other additions and deductions that the Commission determines to be necessary in order to keep the utility operating and providing safe and reliable service to its customers. Rate base includes all the utility's intangible assets (i.e., organization costs, franchise and consents costs, and land right costs) and tangible assets (i.e., facilities, equipment, and land) which have been depreciated over a period of time, or depreciated original cost plant in service, as well as the other allowed additions and deductions.

Q. HOW IS THE DEPRECIATED ORIGINAL COST PLANT IN SERVICE AT THE END OF THE TEST YEAR DETERMINED?

A. The depreciated original cost is determined by subtracting the book reserve, which is the accumulation of all prior annual depreciation expense, and other items such as salvage value from the original cost of the plant in service that is projected to be used and useful in the public service. The depreciated original cost of the plant in service is determined by taking a "snapshot" look at the depreciated original cost value of used and useful utility plant in service at the end of the fully projected future test year. I will discuss my adjustments to plant in service and depreciated original cost plant in service below.

Q. WHAT OTHER ADDITIONS AND DEDUCTIONS TO THE DEPRECIATED ORIGINAL COST OF UTILITY PLANT ARE ALLOWED?

A. Some of the additions to the depreciated original cost of a company's investment in utility include materials and supplies, gas in storage, prepayments, and cash working capital. Some of the deductions include deferred income taxes and customer deposits. Certain additions, such as gas in storage, are applicable to a specific utility or utility type. The depreciated utility plant in service claimed by PECO for the year ending June 30, 2022 is $2,780,992,000, shown on PECO Exhibit MJT-1, Schedule C-1, p. 1 of 94. The claimed additions to the Company's depreciated utility plant in service are as follows:

1. Working Capital;
2. Pension Assets / (Liability);
3. Materials and Supplies;
4. Gas Storage;

The deductions to the depreciated original cost are:

1. Accumulated Deferred Income Taxes;
2. Customer Deposits;
3. Customer Advances for Construction; and
4. Accumulated Deferred Income Taxes – Reg Liability.

Q. HOW IS THE RATE BASE USED WITHIN THE RATEMAKING FORMULA?

A. The rate base is one part of the financial equation used by the Commission, along with allowable expenses and rate of return, to determine the level of income a utility is granted an opportunity to earn and the revenue level needed to achieve that return. The equation used to determine the proper revenue requirement level is:

RR = E + D + (RB x ROR)

Where:

RR	=	Revenue Requirement
E	=	Operating Expense
D	=	Depreciation Expense
RB	=	Rate Base
ROR	=	Overall Rate of Return

Each item in the revenue requirement equation is synchronized to the test year period. If the date of any of the items in this equation is changed, all the other necessary data that a utility must file in a rate proceeding, such as the test year income statement, actual and projected customer levels and usage, cost of service study and other financial information used to determine the utility's rate of return, must also be changed.

Q. WHAT IS THE TOTAL RATE BASE CLAIMED BY THE COMPANY FOR THE FULLY PROJECTED FUTURE TEST YEAR ENDING JUNE 30, 2022?

A. The Company's claimed measure of value for the FPTY ending June 30, 2021, is $2,461,939,000 (PECO Ex. MJT-1, Sch. C-1).

<u>REPORTING REQUIREMENTS</u>

Q. WHAT AMOUNT OF ADDITIONAL RATE BASE DOES THE COMPANY CLAIM WILL BE ASSOCIATED SOLELY WITH THE INCLUSION OF THE FULLY PROJECTED TEST YEAR ENDING JUNE 30, 2022?

A. The Company's claimed rate base for the FPFTY ending June 30, 2022, is $2,461,939,000 (PECO Ex. MJT-1, Sch. C-1). Therefore, $270,729,000 ($2,461,939,000 – $2,191,210,000) of the Company's claimed rate base as of June 30, 2022 is associated solely with the inclusion of the FPFTY.

Q. DOES PAWC'S $2,461,939,000 RATE BASE CLAIM FOR THE FPFTY INCLUDE NET FORECASTED PLANT IN SERVICE?

A. Yes. PECO Exhibit MJT-3, Schedule C-1 shows that the Company's net plant in service in the HTY ended June 30, 2020 is $2,254,798,000. Schedules C-2 and of PECO Exhibits MJT-1, MJT-2, and MJT-3 provide the Company's projected depreciated original cost, plant additions, retirements, jurisdictional allocations, accumulated depreciation, and cost of removal annually for the years ended June 30, 2022, 2021, and 2020, respectively. This exhibit supports the Company's net forecasted plant in service of $2,780,992,000 at June 30, 2022, which is included in the Company's $2,461,939,000 rate base claim for the FPFTY ending December 31, 2014 (PECO Ex. MJT-1, Sch. C-1).

Q. HOW MUCH NET PLANT IS THE COMPANY PREDICTING IT WILL ADD IN THE FUTURE TEST YEAR ENDING JUNE 30, 2021?

A. The net utility plant additions projected by the Company for the year ending June 30, 2021 are $253,767,000. This total was calculated by subtracting the net utility plant in service for the year ending June 30, 2021 ($2,508,565,000) from the net utility plant in service for the year ended June 30, 2020 ($2,254,798,000) (PECO Exhibits. MJT-2 and MJT-3, Sch. C-1).

Q. HOW MUCH NET PLANT IS THE COMPANY PREDICTING IT WILL ADD IN THE FULLY PROJECTED FUTURE TEST YEAR ENDING JUNE 30, 2022?

A. The plant additions for the year ending June 30, 2022 projected by the Company are $272,427,000. The $272,427,000 was calculated by subtracting the net utility plant in service for the year ending June 30, 2022 ($2,780,992,000) from the net utility plant in service for the year ended June 30, 2021 ($2,508,565,000) (PECO Exhibits. MJT-1 and MJT-2, Sch. C-1).

Q. WHAT ROLE DOES THE CONCEPT OF "USED AND USEFUL" PLAY IN THE TEST YEAR CONTEXT?

A. Historically, a fundamental principle of utility regulation was that a public utility should be permitted to include projects in rate base and earn a reasonable return on its investments after they became "used and useful" for the utility's public service. However, with the passage of Act 11, the traditional interpretation of the "used and useful" requirement for rate base inclusion of investments no longer applies because utilities are now permitted to project plant additions and begin to recover their investment before the project is completed and in service to the public.

Q. DO YOU HAVE ANY RECOMMENDATIONS CONCERNING PLANT ADDITIONS THAT ARE PROJECTED TO BE IN SERVICE DURING THE FULLY PROJECTED FUTURE TEST YEAR AND THUS INCLUDED IN RATE BASE FOR RATEMAKING PURPOSES?

A. As shown in the Company's response to I&E-RB-4-D, attached as I&E Exhibit No. 3, Schedule 2, PECO has a fairly extensive list of plant additions planned for the FTY and FPFTY. There is value in determining how closely PAWC's projected investments in future facility comport with the actual investments that are made by the end of the FTY and the FPFTY. Determining the correlation between PAWC's projected and actual plant additions and retirements will help inform the Commission and the parties in PAWC's future rate cases as to the validity of PAWC's projections. This is particularly true in this case as it is the first time that PECO has elected to use a FPFTY in a base rate proceeding.

Therefore, I recommend that the Company provide the Commission's Bureaus of Technical Utility Services and Investigation and Enforcement with an update to PECO Exhibits MJT-1 and MJT-2, Schedule C-2 through no later than October 31, 2021, which should include actual capital expenditures, plant additions, and retirements by month from July 1, 2020 through June 30, 2021. I also recommend an additional update be provided comparing projected additions and retirements with actual additions and retirements through June 30, 2022, no later than October 1, 2022.

Q. WHY DO YOU RECOMMEND THE COMPANY PROVIDE THESE UPDATES?

A. Through use of the FPFTY, a utility is allowed to require ratepayers, in essence, to pre-pay a return on a utility's projected investment in future facilities that are not in place and providing service at the time the new rates take effect and are not subject to any guarantee of being completed and placed into service. While the FPFTY provides for such projections, there should be some timely verification of the projections. Even though usage of the FPFTY has become common practice by Pennsylvania utilities, the present proceeding is the first case in which PECO has elected to make use of the FPFTY. Furthermore, when asked to provide specific details regarding its plant additions in the FPFTY in the form of anticipated completion dates, amount spent to date, and estimation of percent completion in I&E-RB-4-D, attached as I&E Exhibit No. 3, Schedule 2, many of the Company's responses contained none of that information. Therefore, requiring PECO to provide updates demonstrating that actual investment comports with projections used in setting rates using the FPFTY, allows the Commission to measure and verify the accuracy of the Company's projected investments in future facilities on a timely basis.

PLANT ADDITIONS

Q. WHAT PLANT ADDITIONS HAS PECO CLAIMED IN RATE BASE FOR ITS FPFTY?

A. PECO claimed $322,146,000 in plant additions for the FPFTY as shown on PECO Exhibit MJT-1, Schedule C-2, p. 16. It should be noted that the plant additions shown on this exhibit are net of the cost of removal shown on PECO Exhibit MJT-1, Schedule C-3, p. 22.

Q. DID THE COMPANY PROVIDE A RESPONSE TO A DATA REQUEST CONCERNING PLANT ADDITIONS IN THE FPFTY?

A. Yes. As described above, in its response to I&E-RB-4-D, the Company was asked to provide detailed information regarding its claimed plant additions in the FPFTY. Most of the information provided showed either completion dates that were far beyond the FPFTY or listed as "Various." The Company explained in its narrative response to this question that "Baseline Projects are typical work that is short in duration and is capitalized on a monthly or quarterly basis. Program work are work programs that have a defined period of time but are longer in duration (6 months to 1 year)." (I&E Ex. No. 3, Sch. 2)

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE COMPANY'S PLANT ADDITION LISTED AS "VARIOUS" CLAIMED IN THE FPFTY?

A. No. I am not recommending any adjustments to these types of projects as they appear to include the work that will be completed within the time period of the FPFTY or represents remediation of mains that may represent safety concerns.

Q. DO YOU RECOMMEND ANY ADJUSTMENTS TO THE COMPANY'S PLANT ADDITION CLAIM IN THE FPFTY?

A. Yes. I recommend that the projected $82,481,428 in claimed plant additions for the "Natural Gas Reliability – Install 11.5 miles of OHP gas main, upgrade LNG plant and construct a new gate station" project shown on I&E Exhibit No. 3, Sch. 2, p. 3 of 3 be reduced by $47,624,803 from $82,481,428 to $34,856,625.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED $47,624,803 REDUCTION IN PLANT IN THE FPFTY?

A. As shown on I&E Exhibit No. 3, Schedule 2, p. 3 of 3, the Natural Gas Reliability project is 28% completed with $33,888,385 spent to date. Dividing the $33,888,385 by 28% indicates that the total project cost is $121,029,946. Therefore, the remaining cost of the project is $87,141,561 ($121,029,946 - $33,888,385). The Company further listed the completion date of this project as June 2023, or approximately 2.5 years remaining to complete the project. Therefore, the Company is projecting it will spend $87,141,561 over 2.5 years, or, on a linear basis, $34,856,625 per year ($87,141,561 / 2.5 years). As the Company is unlikely to spend 94.6% of the remaining project costs in the FPFTY ($82,481,428 / $87,141.561 x 100%), I recommend an allowance of the linearly determined remaining cost share in the FPFTY, or $34,856,625. Therefore, I recommended that the Company's claim for plant additions in the FPFTY be reduced by $47,624,803 from $82,481,428 to $34,856,625 as shown on I&E Exhibit No. 3, Schedule 1.

Q. WILL YOUR RECOMMENDED ADJUSTMENT TO PLANT ADDITIONS HAVE ANY AFFECT ON THE COMPANY'S CLAIMED ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE?

A. Yes. I will discuss my recommendations regarding the Company's claimed accumulated depreciation and depreciation expense below.

<u>ANNUAL DEPRECIATION EXPENSE</u>

Q. WHAT IS ANNUAL DEPRECIATION EXPENSE?

A. Annual depreciation expense is an operating expense. It represents the loss of service value of plant in service that is incurred in connection with consumption and use of such plant that is neither restored by current maintenance nor covered by off-setting insurance payments. Annual depreciation expense is accrued over time as accumulated depreciation, which offsets installed plant to establish depreciated original cost or book value in the rate base value determination.

Q. WHAT IS THE COMPANY'S CLAIM FOR ANNUAL DEPRECIATION EXPENSE IN THE FPFTY?

A. The Company's claim for accumulated depreciation in the FPFTY is $86,146,000 (PECO Ex. MJT-1, Sch. D-1).

Q. WHAT IS YOUR RECOMMENDED ADJUSTMENT TO ANNUAL DEPRECIATION EXPENSE?

A. The overall accumulated depreciation should be decreased by approximately $804,000 (I&E Ex. No. 3, Sch. 1, line 16). The $804,000 decrease corresponds with my recommendation to remove a portion of the Natural Gas Reliability project plant addition described above.

Q. WHAT ASSUMPTIONS DID YOU MAKE IN YOUR ANALYSIS OF ANNUAL DEPRECIATION EXPENSE?

A. As of the writing of this testimony, I had sent an interrogatory to the Company requesting that the Company provide details of how the projects listed on the Company's response to I&E-RB-4-D are divided among the Company's utility accounts shown on PECO Exhibit MJT-1, Schedule C-2. The Company has yet to provide that information. My recommendation is based upon the assumption that the entire plant addition adjustment be applied to Account G3763 – Plastic Gas Mains in order to determine an approximate adjustment to annual depreciation expense. I recognize that my adjustment is an estimate and, if necessary, I will correct my recommendation in surrebuttal testimony when the information is provided.

Q. HOW DID YOU DETERMINE THE $804,000 DECREASE TO ANNUAL DEPRECIATION EXPENSE?

A. The annual depreciation expense decrease of $804,000 was determined using the information provided on PECO Exhibit CF-3. First, I divided the Company's calculated annual depreciation accrual for the FPFTY ending June 30, 2022 of

$17,680,736 by the estimated original cost of gross plant for the FPFTY ending June 30, 2022 of $1,047,503,869, which resulted in a depreciation rate of 1.69% ($17,680,736 / $1,047,503,869). Second, I determined the adjusted annual depreciation expense of $16,876,881 by multiplying the annual depreciation rate of 1.69% by the adjusted estimated original cost of gross plant less the $47,624,803 adjustment to plant additions discussed above, or $1,047,803,869 - $47,624,803 = $999,879,066 x 1.69% = $16,876,881. This results in a reduction of the Company's annual depreciation expense claim for plastic mains of $803,855 from $17,680,736 to $16,876,881. I then reduced the overall annual depreciation expense claim by approximately $804,000 from $86,146,000 to $85,342,000 (I&E Ex. No. 3, Sch. 1, line 16).

ACCUMULATED DEPRECIATION

Q. WHAT IS ACCUMULATED DEPRECIATION?

A. Accumulated Depreciation, or Plant Reserve, is the sum of annual depreciation expense over the years the asset was in service. As stated above, the accumulated depreciation is subtracted from original cost plant in service as part of the total rate base calculation.

Q. WHAT IS THE COMPANY'S CLAIM FOR ACCUMULATED DEPRECIATION IN THE FPFTY?

A. The Company's claim for accumulated depreciation in the FPFTY is $893,447,000 (PECO Ex. MJT-1, Sch. C-1).

Q. DID THE COMPANY INDICATE ANY ERRORS OR CORRECTIONS TO ITS ACCUMULATED DEPRECIATION CLAIM?

A. Yes. In its response to OCA-II-8, the Company indicated that it "overstated the plant reserve ending balance as of June 30, 2022 in accounts 376 and 380 by $791,315 and $273,099, respectively." These corrections result in a reduction in the accumulated depreciation claim of approximately $1,064,000 from the $893,447,000 shown on PECO Exhibit MJT-1, Schedule C-1, line 2 to $892,383,000 ($893,447,000 - $1,064,000). I will base my analysis on the corrected $892,383,000 accumulated depreciation claim.

Q. WHAT IS YOUR RECOMMENDED ADJUSTMENT TO ACCUMULATED DEPRECIATION?

A. To remain consistent with the plant in service and annual depreciation expense adjustments I discussed above, I recommend the accumulated depreciation claim be reduced by approximately $804,000 from $892,383,000 to $891,579,000 (I&E Ex. No. 3, Sch. 1).

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED $804,000 ADJUSTMENT TO ACCUMULATED DEPRECIATION?

A. As I described above, accumulated depreciation is the sum of annual depreciation expense. Therefore, the reduction in annual depreciation expense would require a likewise reduction to accumulated depreciation.

Q. HOW DOES YOUR RECOMMENDED ADJUSTMENT TO ACCUMULATED DEPRECIATION AFFECT RATE BASE?

A. As accumulated depreciation is a deduction to rate base, a negative adjustment to accumulated depreciation would necessarily mean a positive adjustment to rate base as shown on I&E Exhibit No. 3, Schedule 1.

<u>MATERIALS AND SUPPLIES</u>

Q. WHAT IS THE COMPANY'S CLAIM FOR MATERIALS AND SUPPLIES IN THE FPFTY?

A. The Company's claim for materials and supplies in the FPFTY is $489,000 (PECO Ex. MJT-1, Sch. C-1).

Q. HOW DID THE COMPANY DETERMINE ITS $489,000 CLAIM FOR MATERIALS AND SUPPLIES IN THE FPFTY?

A. As described on pages 26-27 of PECO Statement No. 3, and shown on PECO Exhibit MJT-1, Schedule C-11, the Company based its materials and supplies claim on a sum of thirteen-month averages of materials and supplies, allocated 100% to the gas distribution system, and undistributed stores expense, allocated 23.03% to the gas distribution system. The Company used data from the thirteen-month period June 2019 through June 2020.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE COMPANY'S MATERIALS AND SUPPLIES CLAIM IN THE FPFTY?

A. Yes. I recommend the Company's materials and supplies claim in the FPFTY be reduced by approximately $45,000 from $489,000 to $444,000 (I&E Ex. No. 3, Schedule 1, line 7).

Q. DID THE COMPANY STATE THAT IT WOULD UPDATE ITS MATERIALS AND SUPPLIES CLAIM THROUGHOUT THIS PROCEEDING?

A. No. However, in response to I&E-RB-6, the Company provided a schedule with the most recent materials and supplies balances available, through September 2020 (I&E Exhibit No. 3, Schedule 3).

Q. WHY ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S CLAIM FOR MATERIALS AND SUPPLIES?

A. I am recommending an adjustment to the Company's claim because it is appropriate for the materials and supplies claim to be based on the most up-to-date data available.

Q. IF THE COMPANY PROVIDES ADDITIONAL MATERIALS AND SUPPLIES DATA, WILL YOU UPDATE YOUR RECOMMENDATION?

A. Yes.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ADJUSTMENT TO MATERIALS AND SUPPLIES?

A. Using the same allocation methodology used by the Company, I determined the 13-month averages based on the period September 2019 through September 2020, as shown on I&E Exhibit No. 3, Schedule 4.

GAS STORAGE

Q. WHAT IS THE COMPANY'S CLAIM FOR GAS STORAGE IN THE FPFTY?

A. The Company's claim for gas storage in the FPFTY is $30,870,000 (PECO Ex. MJT-1, Sch. C-1).

Q. HOW DID THE COMPANY DETERMINE ITS $30,870,000 CLAIM FOR GAS STORAGE IN THE FPFTY?

A. As described on page 27 of PECO Statement No. 3, and shown on PECO Exhibit MJT-1, Schedule C-13, the Company based its gas storage claim on a sum of thirteen-month averages of gas stored underground, LNG, and propane gas. The Company used data from the thirteen-month period June 2019 through June 2020.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE COMPANY'S GAS STORAGE CLAIM IN THE FPFTY?

A. Yes. I recommend the Company's gas storage claim in the FPFTY be increased by approximately $286,000 from $30,870,000 to $31,156,000 (I&E Ex. No. 3, Schedule 1, line 8).

Q. DID THE COMPANY STATE THAT IT WOULD UPDATE ITS GAS STORAGE CLAIM THROUGHOUT THIS PROCEEDING?

A. No. However, in response to I&E-RB-7, the Company provided a schedule with the most recent gas storage balances available, through September 2020 (I&E Ex. No. 3, Sch. 5).

Q. WHY ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S CLAIM FOR GAS STORAGE?

A. I am recommending an adjustment to the Company's claim because it is appropriate for the gas storage claim to be based on the most up-to-date data available.

Q. IF THE COMPANY PROVIDES ADDITIONAL GAS STORAGE DATA, WILL YOU UPDATE YOUR RECOMMENDATION?

A. Yes.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ADJUSTMENT TO GAS STORAGE?

A. I updated the 13-month averages based on the period September 2019 through September 2020, as shown on I&E Exhibit No. 3, Schedule 6.

<u>CUSTOMER DEPOSITS</u>

Q. WHAT IS THE COMPANY'S CLAIM FOR CUSTOMER DEPOSITS IN THE FPFTY?

A. The Company's claim for customer deposits in the FPFTY is $13,418,000 (PECO Ex. MJT-1, Sch. C-1).

Q. HOW DID THE COMPANY DETERMINE ITS $13,418,000 CLAIM FOR CUSTOMER DEPOSIT IN THE FPFTY?

A. As described on page 25 of PECO Statement No. 3, and shown on PECO Exhibit MJT-1, Schedule C-7, the Company based its customer deposits claim on the thirteen-month average of the customer deposits related solely to the Company's gas distribution operations. The Company used data from the thirteen-month period June 2019 through June 2020.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE COMPANY'S CUSTOMER DEPOSITS CLAIM IN THE FPFTY?

A. Yes. I recommend the Company's customer deposits claim in the FPFTY be decreased by approximately $17,000 from $13,418,000 to $13,401,000 (I&E Ex. No. 3, Schedule 1, line 11).

Q. DID THE COMPANY STATE THAT IT WOULD UPDATE ITS CUSTOMER DEPOSITS CLAIM THROUGHOUT THIS PROCEEDING?

A. No. However, in response to I&E-RB-3, the Company provided a schedule with the most recent customer deposits balances available, through September 2020 (I&E Exhibit No. 3, Schedule 7).

Q. WHY ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S CLAIM FOR CUSTOMER DEPOSITS?

A. I am recommending an adjustment to the Company's claim because it is appropriate for the customer deposits claim to be based on the most up-to-date data available.

Q. IF THE COMPANY PROVIDES ADDITIONAL CUSTOMER DEPOSIT DATA, WILL YOU UPDATE YOUR RECOMMENDATION?

A. Yes.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ADJUSTMENT TO CUSTOMER DEPOSITS?

A. I updated the 13-month averages based on the period September 2019 through September 2020, as shown on I&E Exhibit No. 3, Schedule 8.

<u>**CUSTOMER ADVANCES FOR CONSTRUCTION**</u>

Q. WHAT IS THE COMPANY'S CLAIM FOR CUSTOMER ADVANCES FOR CONSTRUCTION ("CAC") IN THE FPFTY?

A. The Company's claim for customer advances for construction in the FPFTY is $1,334,000 (PECO Ex. MJT-1, Sch. C-1).

Q. HOW DID THE COMPANY DETERMINE ITS $1,334,000 CLAIM FOR CAC IN THE FPFTY?

A. As described on page 26 of PECO Statement No. 3, and shown on PECO Exhibit MJT-1, Schedule C-7, the Company based its CAC claim on the thirteen-month average of customer advances for construction that were attributable to its gas distribution operations. The Company used data from the thirteen-month period June 2019 through June 2020.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE COMPANY'S CAC CLAIM IN THE FPFTY?

A. Yes. I recommend the Company's CAC claim in the FPFTY be decreased by approximately $79,000 from $1,334,000 to $1,255,000 (I&E Ex. No. 3, Schedule 1, line 12).

Q. DID THE COMPANY STATE THAT IT WOULD UPDATE ITS CAC CLAIM THROUGHOUT THIS PROCEEDING?

A. No. However, in response to I&E-RB-5, the Company provided a schedule with the most recent CAC balances available, through September 2020 (I&E Ex. No. 3, Sch. 9).

Q. WHY ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S CLAIM FOR CAC?

A. I am recommending an adjustment to the Company's claim because it is appropriate for the CAC to be based on the most up-to-date data available.

Q. IF THE COMPANY PROVIDES ADDITIONAL CAC DATA, WILL YOU UPDATE YOUR RECOMMENDATION?

A. Yes.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ADJUSTMENT TO CAC?

A. I updated the 13-month averages based on the period September 2019 through September 2020, as shown on I&E Exhibit No. 3, Schedule 10.

Q. WHAT IS YOUR TOTAL RATE BASE RECOMMENDATION?

A. My total rate base recommendation, based on the adjustments I recommended above, is to reduce rate base by $46,483,000 from $2,463,003,000 to $2,416,520,000 (I&E Ex. No. 3, Sch. 1, line 15).

OTHER OPERATING REVENUE

Q. WHAT IS INCLUDED IN OTHER OPERATING REVENUE?

A. Other operating revenue refers to revenue received by the Company from sources other than the customer charges, distribution rates, and gas cost rate. Sources of other operating revenue are forfeited discounts, sales for resale, and miscellaneous service revenues (PECO Ex. MJT-1, Sch. D-5).

Q. HOW MUCH OTHER OPERATING REVENUE IS THE COMPANY PROJECTING IT WILL RECEIVE UNDER PROPOSED RATES IN THE FPFTY?

A. In this filing, the Company reflected $1,617,000 of other operating revenue under proposed rates for the test year ending June 30, 2022 (PECO Ex. MTJ-1, Sch. A-1, line 21).

Q. WHAT DO YOU RECOMMEND CONCERNING THE $1,617,000 IN OTHER OPERATING REVENUE UNDER PRESENT RATES?

A. I recommend that forfeited discount revenue be increased as described below.

FORFEITED DISCOUNTS

Q. WHAT ARE FORFEITED DISCOUNTS?

A. A public utility can assess a separate charge to customers who do not pay their bill on time. The term forfeited discounts revenue, also referred to as late payment charges, refers to the revenue received by the utility as a result of this charge.

Q. HOW MUCH REVENUE FROM FORFEITED DISCOUNTS DID THE COMPANY ACTUALLY RECEIVE IN THE HISTORIC TEST YEAR ENDING JUNE 30, 2020 UNDER PRESENT RATES?

A. As shown on PECO Volume IX of IX, SDR-RR-35, the Company received $718,591 in forfeited discounts revenue for the year ended June 30, 2020. This amount represented 0.133% of Gas Service Revenue (I&E Ex. No. 3, Sch. 11, line 3).

Q. WHAT LEVEL OF FORFEITED DISCOUNTS IS THE COMPANY CLAIMING AT PROPOSED RATES FOR THE FPFTY ENDING JUNE 30, 2022?

A. PECO is projecting $926,000 of forfeited discounts under proposed rates for the FPFTY ending June 30, 2022, which is 0.141% of Gas Service Revenue (I&E Ex. No. 3, Sch. 11, line 6).

Q. WHAT DO YOU RECOMMEND REGARDING THE AMOUNT OF REVENUE FROM FORFEITED DISCOUNTS THE COMPANY WILL RECEIVE UNDER PROPOSED RATES FOR THE FPFTY ENDING?

A. I recommend that the revenue from forfeited discounts be increased by approximately $358,000 from $926,000 to $1,284,000 under proposed rates for the FPFTY ending June 30, 2022(I&E Ex. No. 3, Sch. 11, lines 9-10).

Q. HOW DID YOU DETERMINE THE $1,284,000?

A. The $1,284,000 represents 0.195% of $658,591,000 of proposed Gas Service Revenues for the year ending June 30, 2022 (PECO Ex. MJT-1, Sch. D-1, line 11).

Q. HOW DID YOU DETERMINE THE 0.195%?

A. Over the three years ended June 30, 2018, 2019, and 2020, the average level of forfeited discounts has been 0.195% (I&E Ex. No. 3, Sch. 11, line 4). I selected a three-year average because the amount of forfeited discounts varies from year to year and a three-year average is long enough to smooth out short term variations and short enough to exclude out of date data.

Q. WHY DO YOU RECOMMEND THAT THE REVENUE FROM FORFEITED DISCOUNTS UNDER PROPOSED RATES BE 0.195% OF TOTAL GAS SERVICE REVENUES?

A. I believe it is reasonable to expect that forfeited discounts revenues will increase when a utility's base rates are increased as a result of a base rate proceeding. Since forfeited discounts are generally a percentage of a customer's bill, increasing gas service revenue through a rate increase will cause revenues from forfeited discounts to increase over time.

Q. SHOULD THE $1,284,000 BE REDUCED IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE?

A. Yes. I recommend that the Company include revenue under proposed rates from forfeited discounts equal to 0.195% of Gas Service Revenues upon determination of the total revenue granted by the Commission.

COST OF SERVICE

Q. DID THE COMPANY PROVIDE A COST OF SERVICE STUDY IN THIS PROCEEDING?

A. Yes. The Company provided a cost of service study on PECO Exhibit JD-1 through JD-6).

Q. DID THE COMPANY UPDATE ITS COST OF SERVICE STUDY WHILE RESPONDING TO DATA REQUESTS?

A. Yes. The Company provided an updated cost of service study ("COSS") in its response to OSBA-I-2. I based my analysis on the updated cost of service study provided in that response.

CUSTOMER COST ANALYSIS – CUSTOMER CHARGES

Q. WHAT IS A CUSTOMER COST ANALYSIS AND HOW IS IT USED?

A. A customer cost analysis is a part of a COSS that is used to determine the appropriate fixed customer charges for the various classes and meter sizes. It includes customer costs only.

Q. WHY IS IT NECESSARY TO PERFORM A CUSTOMER COST ANALYSIS?

A. A fixed customer charge represents the revenue that the Company is guaranteed to receive each month, regardless of the level of usage. As acknowledged in the seventh edition of the American Water Works Association M1 Manual, there is a tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates.[1]

Q. WHAT IS A DIRECT CUSTOMER COST?

A. A direct customer cost is a cost that changes with the increase or decrease of a single customer.

Q. WHAT IS AN INDIRECT CUSTOMER COST?

A. An indirect customer cost is a customer related cost that does not change with the increase or decrease of a single customer. The Commission has allowed, in past instances, certain indirect customer costs to be included in a customer cost analysis and thus recovered in a customer charge. As an example, in previous cases, the Commission has allowed the indirect cost of Employee Pension and Benefits.

Q. DID PECO PREPARE A CUSTOMER COST ANALYSIS TO SUPPORT THE PROPOSED CUSTOMER CHARGE INCREASES IN THIS PROCEEDING?

A. Yes. The Company presented a customer cost analysis in PECO Exhibits JD-4 and JD-5.

Q. WHAT IS THE RESULT OF THE COMPANY'S CUSTOMER COST ANALYSIS FOR RESIDENTIAL CUSTOMERS?

A. The result of the customer cost analysis for residential customers, shown on PECO

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[1] AWWA Manual of Water Supply Practices M1 Principles of Water Rates, Fees, Charges, Seventh Edition. pp. 154-155.

Exhibit JD-5, is a cost per customer of $26.21 which supports the Company's proposed $16.00 customer charge.

Q. ARE YOU RECOMMENDING ANY CHANGES TO THE COMPANY'S PROPOSED RESIDENTIAL CUSTOMER CHARGE?

A. Not at this time. It should be noted, though, that while the Company's proposed $16.00 customer charge is supported by the customer cost analysis, the $4.25 increase from $11.75 to $16.00, or 36%, is a significant increase. Therefore, I recommend that the customer charge be included in the scale back of rates if the Commission grants less than the full requested increase.

<u>REVENUE ALLOCATION</u>

Q. DID THE COMPANY HAVE ANY REVENUE ALLOCATION REQUIREMENTS IN THIS CASE BASED ON THE SETTLEMENTS OF PRIOR CASES?

A. Yes. As described in PECO Statement No. 7, p. 3, the Company was required to "eliminate the remaining difference between the class rates of return for Rates GC – General Service – Commercial and Industrial and L – Large High Load Factor Service and the system average rate of return" which was required by the settlement of PECO's 2008 gas base rate case.

Q. DID THE COMPANY INDICATE THAT IT COMPLIED WITH THE TERMS OF THE 2008 BASE RATE CASE?

A. No. On page 5 of PECO Statement No. 7, Mr. Bisti stated that "[t]he proposed revenue allocation in this case attempts to achieve this balance by more closely aligning the class rates of return for these two rate classes with the proposed system average rate of return while limiting the degree to which rates for other classes diverge from their indicated cost of service." He further stated on pages 10-11 of PECO Statement No. 7 that the Company believes that moving further towards eliminating the differences between the system average rate of return and the class rates of return for the rate classes GC and L in this case and completely eliminating any remaining differences in the Company's next gas base rate case is the most reasonable approach.

Q. WHAT ARE RATE OF RETURN AND RELATIVE RATE OF RETURN?

A. The rate of return is the Commission authorized return on rate base that is determined in a base rate proceeding. A relative rate of return indicates how the rate of return of each customer class compares to the system average rate of return. In general, a relative rate of return that provides revenue equal to its cost to serve would have a relative rate of return equal to 1.0.

Q. HOW DID THE COMPANY DETERMINE THE RATES OF RETURN AND RELATIVE RATES OF RETURN UNDER PROPOSED RATES FOR ITS RATE CLASSES?

A. Mr. Bisti stated on page 9 of PECO Statement No. 7 that the revenue allocation and relative rates of return were developed based on four factors; the COSS prepared by Ms. Ding, the 2008 settlement discussed above, adjustments based on proposed changes to PECO's GPC rate and MFC uncollectible write-off factors, and moderation of the impact on each major rate class while making meaningful movement toward each class' cost of service.

Q. DID THE COMPANY PROVIDE A SCHEDULE SHOWING THE RATE OF RETURN AND RELATIVE RATE OF RETURN UNDER PROPOSED RATES IN THE FILING OR DURING DISCOVERY?

A. No. In the original filing, the Company only provided a schedule under proposed rates under the scenario of all customer classes paying the same rate of return. This schedule is useless in determining the rate of return under proposed rates and does not support what the Company is claiming under proposed rates. When asked in I&E-RS-13, attached as I&E Exhibit No. 3, Schedule 12, to provide a schedule that shows the proposed revenue, expenses, taxes, net income and rate base by class that supports each rate of return and relative rate of return, the Company did not. Instead, the Company stated that it develops its relative rates of return by class based on the four considerations described above and that the proposed rates of return by class are calculated as the product of the proposed relative rates of return by class and the system average rate of return.

Q. DID YOU PERFORM AN ANALYSIS OF RELATIVE RATE OF RETURN UNDER PROPOSED RATES?

A. Yes. I developed a schedule that shows the calculation of relative rates of return based on proposed revenue, expenses, taxes, net income and rate base by class as best as I could with the information provided. It is included as I&E Exhibit No. 3, Schedule 13. The relative rates of return that were developed as a result of my analysis are very different than those proposed by the Company as shown in the table below.

Relative Rate of Return by Rate Class			
Rate Class	Company Present	Company Proposed	I&E Calculated
GR	0.82	0.97	0.81
GC	1.41	1.02	1.41
L	-0.36	0.85	-0.42
MV-F	2.18	1.30	2.41
MV-I	5.59	1.30	5.79
IS	-0.97	1.00	-1.21
TCS	7.71	1.30	7.60
TS-I	1.54	1.22	1.72
TS-F	1.13	1.22	1.35

As shown in the chart above, under the Company's proposal, the calculated relative rates of return for most of the rate classes move away from the system average rate of return. Therefore, the Company's rate allocation methodology is unsupported and should be rejected.

Q. ARE YOU RECOMMENDING A RATE ALLOCATION?

A. Yes. As shown in the table above, under the Company's proposed allocation, many of the rate classes move away from the relative rate of return. The table below, based on the information provided in I&E Exhibit No. 3, Schedules 14 and 15, shows my recommended revenue allocation and a comparison of the relative rates of return under the Company's proposed allocation and my recommendation.

Relative Rate of Return by Rate Class				
Class	I&E Revenue Increase ($000)	Percent Increase/(Decrease)	Company Proposed	I&E Proposed
GR	$66,662	27.7%	0.81	0.98
GC	($1,818)	(2.2%)	1.41	0.99
L	$35	46.0%	-0.42	-0.42
MV-F	($14)	(4.3%)	2.41	1.67
MV-I	$0	(0.1%)	5.79	5.1
IS	$0	0.0%	-1.21	-1.21
TCS	($30)	(4.3%)	7.60	6.59
TS-I	$1,338	14.1%	1.72	1.46
TS-F	$2,549	15.2%	1.35	1.05
Total:	$68,724	18.5%		

Q. ARE YOU RECOMMENDING RATE CLASSES GC AND L RELATIVE RATES OF RETURN BE MOVED TO 1.0 IN THIS RATE CASE AS WAS AGREED TO IN PECO'S 2008 BASE RATE CASE?

A. No. I do not believe it is possible to increase rate class L so that it fully recovers its cost to serve in this rate case. Therefore, I did not change the Company's proposed 46% increase. However, as I discuss below, I also recommend that the L class not be included in any scale back of rates. This will serve to move that class closer to its cost to serve. Regarding the GC class, I am recommending a slight rate decrease, which will move that class very nearly to its cost to serve.

Q. WHY ARE YOU RECOMMENDING A $66,289,000 INCREASE FOR THE RESIDENTIAL CLASS?

A. Based on the relative rate of return for the residential class, a $66,289,000 moves this class very nearly to its cost to serve. Additionally, I believe a 27.9% increase is reasonable.

Q. HOW DID YOU DETERMINE YOUR PROPOSED RATE INCREASES FOR THE REMAINING RATE CLASSES?

A. For the remaining rate classes, I recommended increases and decreases that were reasonable while moving their relative rates of return towards 1.0.

<u>**NEGOTIATED GAS SERVICE**</u>

Q. DOES THE COMPANY'S TARIFF ALLOW IT TO NEGOTIATE RATES FOR CUSTOMERS WITH AN ALTERNATIVE COMPETITIVE SUPPLY?

A. Yes. The Company's tariff currently includes Rate NGS- Negotiated Gas Service which allows certain customers who can show that they have a competitive alternative to the Company's gas supply. The Rate NGS provisions are described in the Company's Tariff; PECO Energy Company Gas - PA P.U.C. No. 4, p. 74.

Q. DOES THE COMPANY CURRENTLY HAVE ANY CUSTOMERS RECEIVING SERVICE UNDER RATE NGS?

A. Yes. As indicated by the Company's response to OCA-I-4, the costs associated with the NGS class are included in rate classes GC, TS-F, and TS-I (I&E Ex. No. 3, Sch. 16).

Q. DOES THE COMPANY CURRENTLY HAVE A POLICY OF REQUIRING ITS RATE NGS CUSTOMERS TO VERIFY THE COMPETITIVE ALTERNATIVES OUTSIDE OF WHEN THEIR RESPECTIVE CONTRACTS ARE SIGNED?

A. No. As described in its response to I&E-RS-10, the Company does not have a policy of verifying its negotiated rate customers outside of when those customers sign their contracts (I&E Ex No. 3, Sch. 17).

Q. DOES THE COMPANY APPEAR TO FOLLOW ITS OWN TARIFF WHEN ALLOWING CUSTOMERS TO RECEIVE SERVICE UNDER A NEGOTIATED RATE?

A. No. As I described above, the Company's Tariff states that Rate NGS customers "must document a viable, currently available competitive alternative to service under the Rate GC, L, TS-F, or TS-I including any applicable riders." (PECO Energy Company Gas - PA P.U.C. No. 4, p. 74). However, in response to I&E RS-11, which requested the date each negotiated customers' alternate fuel source was last verified by either the Company or the customer, the Company responded that "[t]he Company does not require customers to have an alternative fuel source to be eligible for a negotiated or reduced rate." (I&E Ex. No. 3, Sch. 18). This response is concerning as it shows that customers may currently be receiving service under reduced or negotiated rates while not having a viable competitive alternative.

Q. WHY IS IT IMPORTANT TO PERIODICALLY ANALYZE COMPETITIVE ALTERNATIVES?

A. It is important to periodically analyze competitive alternatives to ensure that the rates of flex rate customers are not discounted lower than is necessary to avoid the customer choosing the alternative supply. Providing excessive discounts to customers would be harmful to both the Company and its customers since the other customers make up the lost revenue that results when flex-rate customers pay less than tariff rates.

Q. WHAT ARE SOME POTENTIAL CHANGES IN THE COMPANY'S ABILITY AND COST TO SUPPLY SERVICE?

A. Some potential changes are situations in which the Company can no longer supply the customer utilizing the current source of gas, utilize the existing capacity, or the cost to supply customers has increased or will increase. As an example, a situation could arise where a larger pipeline project is needed to serve both the flex-rate and tariff customers. In that case, termination of the flex-rate contract could result in the scale-back or cancellation of the larger pipeline project, and avoidance of capital and operating expense, which would result in savings for the Company and its customers.

Q. WHAT ARE SOME CHANGES IN THE CUSTOMER'S ALTERNATIVE SUPPLY THAT COULD AFFECT NEGOTIATED RATE CUSTOMERS?

A. Some of the possible changes in the customer's alternative supply that could affect flex-rate customers are situations where the customers may no longer have a viable alternative supply, or the customer no longer has a viable alternative source of gas or gas capacity, or the cost of the alternate supply to customers has increased or will increase. The natural gas industry is continuously changing. For example, a customer may have had access to an interstate pipeline that is now no longer available. Also, the cost and difficulty a customer would face to construct interconnections to pipelines may have increased over the time since the last competitive alternative was verified due to inflation, public concerns, restoration costs, and environmental impacts.

Q. WHAT DO YOU RECOMMEND REGARDING THE COMPANY'S RATE NGS CUSTOMERS?

A. I recommend that the Company provide an update to the competitive alternative analysis for any customer that has not had their alternative fuel source verified for a period of 5 years or more at the point at which PECO files a base rate case. This recommendation will ensure that each customer that receives service under flex rates is doing so for appropriate reasons. I also recommend that the Company cease NGS service to any customer that does not have a verified alternative supply and switch those customers to the appropriate tariffed rate.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS REGARDING THE NGS CUSTOMERS?

A. Yes. I recommend that, in future base rate cases, PECO separate the costs and revenues of customers discounted or reduced rates in their own class in the cost of service study.

Q. WHY DO YOU RECOMMEND THAT THE NGS CUSTOMERS BE REPRESENTED BY THEIR OWN RATE CLASS IN FUTURE COST OF SERVICE STUDIES PRODUCED BY THE COMPANY?

A. Separating the customers paying less than full rates will enable the Commission to determine whether each non-discount rate class is covering their cost to provide service to that class. Including discounted customers in any rate class skews the results of the class and the cost of service study. Therefore, it is reasonable to separate the NGS customers into their own rate class and put all the negotiated rate customers in one separate class.

SCALE BACK OF RATES

Q. DID THE COMPANY PROPOSE A SCALE BACK METHODOLOGY IF THE COMMISSION GRANTS LESS THAN THE COMPANY'S FULL REQUESTED INCREASE?

A. Yes. On page 19 of PECO Statement No. 7, Mr. Bisti proposed that rates be "reduced in proportion to the proposed increase for each class" and that customer charges for all rate classes remain as proposed.

Q. DO YOU AGREE WITH THE COMPANY'S SCALE BACK PROPOSAL?

A. No. Under my revenue allocation, above, several rate classes are receiving either no increase or a rate decrease. It is not appropriate to scale back rates on rate classes that are receiving no increase or a rate decrease. Further, as I described above, because Rate L remains far below its cost to serve, its increase should not be scaled back. Therefore, the only rate classes that should receive a scale back if the Commission should grant less than the Company's full requested increase are the residential, TS-I, and TS-F classes. Finally, as I stated above, I recommend that the customer charges of the residential class be included in the proportional scale back of rates because the R customer charge increase is so large The customer charges increase for the TS-1 and TS-F rate classes are more reasonable and do not need to be included in the scale back.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

ETHAN H. CLINE

PROFESSIONAL EXPERIENCE AND EDUCATION

EXPERIENCE:

03/2009 - Present
Bureau of Investigation and Enforcement, Pennsylvania Public Utility Commission - Harrisburg, Pennsylvania

Fixed Utility Valuation Engineer – Assists in the performance of studies and analyses of the engineering-related areas including valuation, depreciation, cost of service, quality and reliability of service as they apply to fixed utilities. Assists in reviewing, comparing and performing analyses in specific areas of valuation engineering and rate structure including valuation concepts, original cost, rate base, fixed capital costs, inventory processing, excess capacity, cost of service, and rate design.

06/2008 – 09/2008
Akens Engineering, Inc. - Shiremanstown, Pennsylvania

Civil Engineer – Responsible, primarily, for assisting engineers and surveyors in the planning and design of residential development projects

10/2007 – 05/2008
J. Michael Brill and Associates - Mechanicsburg, Pennsylvania

Design Technician – Responsible, primarily, for assisting engineers in the permit application process for commercial development projects.

01/2006 – 10/2007
CABE Associates, Inc. - Dover, Delaware

Civil Engineer – Responsible, primarily, for assisting engineers in performing technical reviews of the sewer and sanitary sewer systems of Sussex County, Delaware residential development projects.

EDUCATION:

Pennsylvania State University, State College, Pennsylvania
Bachelor of Science; Major in Civil Engineering, 2005

- Attended NARUC Rate School, Clearwater, FL
- Attended Society of Depreciation Professionals Annual Conference and Training

TESTIMONY SUBMITTED:

I have testified and/or submitted testimony in the following proceedings:

1. Clean Treatment Sewage Company, Docket No. R-2009-2121928
2. Pennsylvania Utility Company – Water Division, Docket No. R-2009-2103937
3. Pennsylvania Utility Company – Sewer Division, Docket No. R-2009-2103980
4. UGI Central Penn Gas, Inc., 1307(f) proceeding, Docket No. R-2010-2172922
5. PAWC Clarion Wastewater Operations, Docket No. R-2010-2166208
6. PAWC Claysville Wastewater Operations, Docket No. R-2010-2166210
7. Citizens' Electric Company of Lewisburg, Pa, Docket No. R-2010-2172665
8. City of Lancaster – Bureau of Water, Docket No. R-2010-2179103
9. Peoples Natural Gas Company LLC, Docket No. R-2010-2201702
10. UGI Central Penn Gas, Inc., Docket No. R-2010-2214415
11. Pennsylvania-American Water Company, Docket No. R-2011-2232243
12. Pentex Pipeline Company, Docket No. A-2011-2230314
13. Peregrine Keystone Gas Pipeline, LLC, Docket No. A-2010-2200201
14. Philadelphia Gas Works 1307(f), Docket No. R-2012-2286447
15. Peoples Natural Gas Company LLC, Docket No. R-2012-2285985
16. Equitable Gas Company, Docket Nos. R-2012-2312577, G-2012-2312597
17. City of Lancaster – Sewer Fund, Docket No. R-2012-2310366
18. Peoples TWP, LLC 1307(f), Docket No. R-2013-2341604
19. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2013-2361763
20. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2013-2361764
21. Joint Application, Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651
22. City of Dubois – Bureau of Water, Docket No. R-2013-2350509
23. The Columbia Water Company, Docket No. R-2013-2360798
24. Pennsylvania American Water Company, Docket No. R-2013-2355276
25. Generic Investigation Regarding Gas-on-Gas Competition, Docket Nos. P-2011-227868, I-2012-2320323
26. Philadelphia Gas Works 1307(f), Docket No. R-2014-2404355
27. Pike County Light and Power Company (Gas), Docket No. R-2013-2397353
28. Pike County Light and Power Company (Electric), Docket No. R-2013-2397237
29. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2014-2403939
30. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2014-2420273
31. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2014-2420276
32. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2014-2420279
33. Emporium Water Company, Docket No. R-2014-2402324
34. Borough of Hanover – Hanover Municipal Water, Docket No. R-2014-2428304
35. Philadelphia Gas Works 1307(f), Docket No. R-2015-2465656
36. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2015-2465172
37. Peoples Natural Gas Company – Equitable Division 1307(f), Docket No. R-2015-2465181

38. PPL Electric Utilities Corporation, Docket No. R-2015-2469275
39. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2015-2480934
40. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2015-2480937
41. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2015-2480950
42. UGI Utilities, Inc. – Gas Division, Docket No. R-2015-2518438
43. Joint Application of Pennsylvania American Water, et al., Docket No. A-2016-2537209
44. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2016-2543309
45. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2016-2543311
46. City of Dubois – Company, Docket No. R-2016-2554150
47. UGI Penn Natural Gas, Inc., Docket No. R-2016-2580030
48. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2017-2602627
49. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2017-2602633
50. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2017-2602638
51. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the City of McKeesport, Docket No. A-2017-2606103
52. Pennsylvania American Water Company, Docket No. R-2017-2595853
53. Pennsylvania American Water Company Lead Line Petition, Docket No. P-2017-2606100
54. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058
55. Peoples Natural Gas Company, LLC – Peoples and Equitable Division 1307(f), Docket Nos. R-2018-2645278 & R-2018-3000236
56. Peoples Gas Company, LLC 1307(f), Docket No. R-2018-2645296
57. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577
58. Duquesne Light Company, Docket No. R-2018-3000124
59. Suez Water Pennsylvania, Inc., Docket No. R-2018-3000834
60. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the Township of Sadsbury, Docket No. A-2018-3002437
61. The York Water Company, Docket No. R-2018-3000006
62. Application of SUEZ Water Pennsylvania, Inc. Acquisition of the Water and Wastewater Assets of Mahoning Township, Docket Nos. A-2018-3003517 and A-2018-3003519
63. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645 and R-2018-3002647
64. Joint Application of Aqua America, Inc. et al., Acquisition of Peoples Natural Gas Company LLC, et al., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063
65. Implementation of Chapter 32 of the Public Utility Code Regarding Pittsburgh Water and Sewer Authority, Docket Nos. M-2018-2640802 and M-2018-2640803
66. Philadelphia Gas Works 1307(f), Docket No. R-2019-3007636
67. People Natural Gas Company, LLC, Docket No. R-2018-3006818
68. Application of Pennsylvania American Water Company Acquisition of the Steelton Borough Authority, Docket No. A-2019-3006880

69. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the Township of Cheltenham, Docket No. A-2019-3006880
70. Philadelphia Gas Works, Docket No. R-2019-3009016
71. Wellsboro Electric Company, Docket No. R-2019-3008208
72. Valley Energy, Inc., Docket No. R-2019-3008209
73. Citizens' Electric Company of Lewisburg, Pa, Docket Non. R-2019-3008212
74. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the East Norriton Township, Docket No. A-2019-3009052
75. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2020-3017850
76. Peoples Gas Company, LLC 1307(f), Docket No. R-2020-3017846
77. Philadelphia Gas Works, Docket No. R-2020-3017206
78. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 et al.
79. Columbia Gas of Pennsylvania, Docket No. R-2020-3018835
80. Pennsylvania American Water Company, Docket Nos. R-2020-3019369 and R-2020-3019371

I&E Statement No. 3-SR
Witness: Ethan H. Cline
NON-PROPRIETARY

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY – GAS DIVISION

Docket No. R-2020-3019829

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Rate Base
FPFTY Reporting Requirements
Cost of Service Study
Customer Cost Analysis
Revenue Allocation
Negotiated Rate Service
Scale Back of Rates

TABLE OF CONTENTS

<u>INTRODUCTION</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Pennsylvania Public Utility Commission in the Bureau of Investigation and Enforcement ("I&E") as a Fixed Utility Valuation Engineer.

Q. ARE YOU THE SAME ETHAN H. CLINE THAT SUBMITTED I&E STATEMENT NO. 3 AND I&E EXHIBIT NO. 3 ON DECEMBER 22, 2020?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony submitted by witnesses on behalf of PECO Energy Company – Gas Division ("PECO" or "Company"): by Ronald A. Bradley (PECO St. No. 1-R), by Robert J. Stefani (PECO St. No. 2-R), Michael J. Trzaska (PECO St. No. 3-R), Jian Ding (PECO St. No. 6-R), and Joseph A. Bisti (PECO St. No. 7-R). I will also address the rebuttal testimony submitted on behalf of the Office of Consumer Advocate ("OCA") by witness Glenn A. Watkins (OCA St. No. 4R) and the Office of Small Business Advocate ("OSBA") by witness Robert D. Knecht (OSBA St. No. 1-R).

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. My exhibits are attached as I&E Exhibit No. 3-SR.

<u>REPORTING REQUIREMENTS</u>

Q. WHAT DID YOU RECOMMEND REGARDING PLANT ADDITIONS THAT ARE PROJECTED TO BE PLACED IN SERVICE DURING THE FULLY PROJECTED FUTURE TEST YEAR?

A. I recommended that the Company provide the Commission's Bureaus of Technical Utility Services and Investigation and Enforcement with an update to PECO Exhibits MJT-1 and MJT-2, Schedule C-2 no later than October 31, 2021, which should include actual capital expenditures, plant additions, and retirements by month from July 1, 2020 through June 30, 2021. I also recommended an additional update be provided comparing projected additions and retirements with actual additions and retirements through June 30, 2022, no later than October 1, 2022. (I&E St. No. 3, pp. 8-9).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION REGARDING THE FPFTY REPORTING REQUIREMENTS?

A. Yes. PECO witness Trzaska stated that the Company agreed with my recommendation regarding the FPFTY reporting requirements (PECO St. No. 3-R, p. 10).

<u>RATE BASE</u>

Q. DID THE COMPANY REVISE ITS OVERALL RATE BASE CLAIM IN ITS REBUTTAL TESTIMONY?

A. Yes. The Company revised its rate base claim from $2,463,003,000 shown on I&E Exhibit No. 3, Schedule 1 to $2,463,555,000 shown on PECO Exhibit MJT-1 Revised, Schedule A-1, which is an increase of approximately $0.552 million. The Company's revised rate base claim is based on the acceptance of certain rate base adjustments recommended in my direct testimony as well as those of OCA witness Morgan (PECO St. No. 3-R, p. 3).

Q. DO YOU ACCEPT THE COMPANY'S REVISED RATE BASE CLAIM?

A. No. The Company's revised claim only accepted some of the recommendations I made in my direct testimony. Specifically, the Company accepted the adjustments I made to gas storage inventory, materials and supplies, customer deposits, and customer advances. However, as I discuss below, I continue to support the remaining recommendations I made in my direct testimony regarding the Company's plant additions and accrued depreciation claims. Therefore, while I agree with the Company's movement on the adjustments identified above, I do not accept the Company's revised rate base claim.

PLANT ADDITIONS

Q. DID YOU RECOMMEND ADJUSTMENTS TO THE COMPANY'S PLANT ADDITION CLAIM IN THE FPFTY?

A. Yes. I recommended that the projected $82,481,428 in claimed plant additions for the "Natural Gas Reliability – Install 11.5 miles of OHP gas main, upgrade LNG plant and construct a new gate station" project be reduced by $47,624,803 from $82,481,428 to $34,856,625 (I&E St. No. 3, p. 11).

Q. DID THE COMPANY ACCEPT YOUR RECOMMENDATION TO REDUCE ITS PLANT ADDITION CLAIM?

A. No. PECO witness Bradley, on pages 18-20 of PECO Statement No. 1-R, opposed my recommendation to exclude a portion of the "Natural Gas Reliability – Install 11.5 miles of OHP gas main, upgrade LNG plant and construct a new gate station" project. It should be noted that Mr. Bradley incorrectly referenced OCA witness Colton in this section of his rebuttal testimony when he discussed my recommendation.

Q. WHY DID THE COMPANY NOT AGREE WITH YOUR RECOMMENDATION TO REMOVE A PORTION OF THE PLANT IN SERVICE CLAIM IN THE FPFTY?

A. Mr. Bradley explained on pages 18-20 of PECO Statement No. 1-R that the "Natural Gas Reliability project consists of three components (1) upgrades to the West Conshohocken LNG facility; (2) the construction of a new 11.5 mile gas main and (3) a new reliability station." He further claimed that approximately 50% of the aggregate costs will be spent in 2021, the new reliability station and 11.5 mile gas main are scheduled to be in service by the end of the FPFTY, and that the entirety of the Natural Gas Reliability project is scheduled to be in service by the end of 2022.

Q. DID THE COMPANY PROVIDE ANY SPECIFIC TIMELINE OF WHEN THE NATURAL RELIABILITY PROJECT COSTS WILL BE COMPLETED?

A. No. Mr. Bradley only claimed that approximately 50% of the aggregate cost of the Natural Gas Reliability project will be spent in 2021 and provided no further timeline or breakdown of when costs would be spent throughout the year. As the end of the FTY selected by the Company falls on June 30, 2021, it is not possible to accurately determine how much of those spent costs would fall in the FTY or FPFTY.

Q. IS THE COMPANY'S REBUTTAL TESTIMONY CONSISTENT WITH THE RESPONSES IT PROVIDED IN DISCOVERY?

A. No. As stated above, Mr. Bradley's statement that the entirety of the project is scheduled to be in service by the end of 2022 is not consistent with the in-service date provided in the Company's response to I&E-RB-4-D (attached to my direct testimony as I&E Exhibit No. 3, Schedule 2, p. 3) of June 2023.

Q. DID THE COMPANY PROVIDE ANY EXPLANATION FOR THE APPARENT INCONSISTENCY IN IN-SERVICE DATE FOR THE NATURAL GAS RELIABILITY PROJECT?

A. No. The Company provided no evidence or support for its updated claim if the end of 2022 for its in-service date for the Natural Gas Reliability project. Additionally, as the FPFTY ends June 30, 2022, the Company's projection of end of 2022 for the in-service date necessarily means that the project will not be fully in-service within the FPFTY.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. The Company has not provided sufficient support for its claim that the Natural Gas Reliability project will be in service by the end of 2022. Since the plant will not be "used and useful" during the FPFTY, it should not be included in the FPFTY rate base. Therefore, I continue to recommend that the Company's claim for plant additions in the FPFTY be reduced by $47,624,803 from $82,481,428 to $34,856,625 as shown on I&E Exhibit No. 3-SR, Schedule 1.

ANNUAL DEPRECIATION EXPENSE

Q. WHAT DID YOU RECOMMEND REGARDING ANNUAL DEPRECIATION EXPENSE?

A. I recommended that the overall accumulated depreciation should be decreased by approximately $804,000 (I&E St. No. 3, p. 13). The $804,000 decrease corresponds with my recommendation to remove a portion of the Natural Gas Reliability project plant addition described above.

Q. WHAT ASSUMPTIONS DID YOU MAKE IN YOUR ANALYSIS OF ANNUAL DEPRECIATION EXPENSE?

A. As I stated on page 13 of I&E Statement No. 3, I sent an interrogatory to the Company requesting that the Company provide details of how the projects listed on the Company's response to I&E-RB-4-D are divided among the Company's utility accounts shown on PECO Exhibit MJT-1, Schedule C-2. As the Company had yet to provide that information, my recommendation was based upon the assumption that the entire plant addition adjustment be applied to Account G3763 – Plastic Gas Mains in order to determine an approximate adjustment to annual depreciation expense. I further stated that I recognized that my adjustment is an estimate and, if necessary, I would correct my recommendation in surrebuttal testimony when the information is provided.

Q. DID THE COMPANY RESPOND TO THE INTERROGATORY YOU REFERENCED IN YOUR DIRECT TESTIMONY?

A. Yes, the Company provided a response to I&E-RB-8, which I have included as I&E Exhibit No. 3-SR, Schedule 2. However, the Company did not provide the information I requested in its response. Instead, the Company stated that, "[t]he company's budget process uses one depreciation group per utility product (e.g. electricity, gas, transmission). The total in that depreciation group is then allocated to each utility account based on a 3-year average of historical additions for each utility account. As such, the budget process does not allocate at the project level but rather at the depreciation group level." Therefore, it is not possible to provide any adjustment to my recommendation regarding annual depreciation expense.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. Footnote 1 on page 9 of PECO Statement No. 3-R stated that my recommendations regarding annual depreciation expense were contingent upon my recommendation regarding plant additions. Therefore, because the Company is opposing my plant addition recommendation, as discussed above, my annual depreciation expense recommendation should therefore be rejected.

Q. DO YOU AGREE THAT YOUR RECOMMENDATIONS REGARDING ANNUAL DEPRECIATION EXPENSE ARE CONTINGENT UPON YOUR PLANT ADDITIONS RECOMMENDATION?

A. Yes. I agree that my adjustment to annual depreciation expense is contingent upon my adjustment to plant additions. However, as I am continuing to recommend the adjustment to plant additions, discussed above, I am therefore also continuing to recommend the Company's annual depreciation expense claim be decreased by approximately $804,000.

ACCUMULATED DEPRECIATION

Q. WHAT ADJUSTMENT DID YOU RECOMMEND TO THE COMPANY'S ACCUMULATED DEPRECIATION CLAIM?

A. To remain consistent with the plant in service and annual depreciation expense adjustments, I recommended the accumulated depreciation claim be reduced by approximately $804,000 from $892,383,000 to $891,579,000 (I&E St. No. 3, p. 15).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION REGARDING ACCUMULATED DEPRECIATION?

A. As I described above, the Company correctly pointed out that my recommendation regarding accumulated depreciation is contingent upon the adjustment to plant in service.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION REGARDING ACCUMULATED DEPRECIATION?

A. No. As I am continuing to recommend adjustments to plant in service and annual depreciation expense, so too am I continuing to make the associated recommendation to accumulated depreciation.

<u>RATE BASE - OTHER ADDITIONS AND DEDUCTIONS</u>

Q. WHAT ADJUSTMENTS DID YOU RECOMMEND REGARDING THE COMPANY'S OTHER CLAIMED ADDITIONS AND REDUCTIONS TO RATE BASE IN THE FPFTY?

A. I recommended that the Company's materials and supplies, gas in storage, customer deposits, and customer advances for construction claims in the FPFTY be determined using an updated thirteen-month average ended September 2020 as shown on I&E Exhibit No. 3, Schedule 1 (I&E St. No. 3, pp. 16-18, 20-21).

Q. DID THE COMPANY RESPOND TO YOU RECOMMENDATION REGARDING THE OTHER ADDITIONS AND DEDUCTIONS TO RATE BASE?

A. Yes. On pages 2-3 of PECO Statement No. 3-R, PECO witness Trzaska stated that the Company "did not object to updating these claims to reflect data for the 13-months ended September 30, 2020 as shown on Schedules C-4 to C-13 of PECO Exhibit MJT-1 Revised."

Q. WHAT IS YOUR TOTAL RATE BASE RECOMMENDATION?

A. My total rate base recommendation, not including the adjustments accepted by the Company discussed above, is to reduce the Company's revised rate base by $46,821,000 from $2,463,555,000 to $2,416,734,000 (I&E Ex. No. 3-SR, Sch. 1, line 15).

FORFEITED DISCOUNTS

Q. WHAT DID YOU RECOMMEND REGARDING THE AMOUNT OF REVENUE FROM FORFEITED DISCOUNTS THE COMPANY WILL RECEIVE UNDER PROPOSED RATES FOR THE FPFTY?

A. I recommended that the revenue from forfeited discounts be increased by approximately $358,000 from $926,000 to $1,284,000 under proposed rates for the FPFTY ending June 30, 2022 (I&E St. No. 3, p. 24). I further stated on page 25 of I&E Statement No. 3 that the forfeited discount amount should be decreased if the Commission grants less than a full increase and recommended that the Company include revenue under proposed rates from forfeited discounts equal to 0.195% of Gas Service Revenues upon determination of the total revenue granted by the Commission.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. Yes. PECO witness Stefani stated that the Company disagreed with my recommendation because he stated that forfeited discounts should be projected for the FPFTY based on their relationship to past due accounts receivables rather than total revenues (PECO St. No. 2-R, pp. 7-9).

Q. DID THE COMPANY PROVIDE AN EXPLANATION OF ITS METHODOLOGY FOR CALCULATING PROJECTED FORFEITED DISCOUNTS?

A. Yes. Mr. Stefani provided PECO Exhibit RJS-1-R and stated that the Company determined that a period from January 2012 through December 2019 was appropriate to address short term variations in data such as the impact of the COVID-19 pandemic in 2020. He claimed that the "best fit" trend lines shown on second page of PECO Exhibit RJS-1-R confirms that forfeited discounts have a much stronger relationship with past due accounts receivable than with overall revenues (PECO St. No. 2-R, pp. 8-9).

Q. DO YOU AGREE THAT A PROJECTION OF FORFEITED DISCOUNTS SHOULD BE BASED ON A HISTORIC RELATIONSHIP WITH ACCOUNTS RECEIVABLE RATHER THAN TOTAL REVENUE?

A. No. Mr. Stefani's explanation of how the Company calculates its projected forfeited discount revenue illustrated why that projection is understated. Specifically, the time period shown on PECO Exhibit RJS-1-R does not include a year in which the Company increased its rates. Furthermore, Mr. Stefani's explanation of the Company's methodology does not indicate that the increase in rates from the present base rate proceeding was factored into the analysis. Based on the information provided by the Company, it is not possible to determine the level of Accounts Receivable the Company will experience as a result of the base rate increase and, as such, an accurate projection of forfeited discounts cannot be projected based on the

Company's methodology. As I stated on page 25 of I&E Statement No. 3, "I believe it is reasonable to expect that forfeited discounts revenues will increase when a utility's base rates are increased as a result of a base rate proceeding." Therefore, a three-year average of the historic relationship of forfeited discounts and total revenue applied to the projected revenue at proposed rates remains the most reasonable method of projecting forfeited discounts.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend that the Company include revenue under proposed rates from forfeited discounts equal to 0.195% of Gas Service Revenues upon determination of the total revenue granted by the Commission.

<u>CUSTOMER COST ANALYSIS – CUSTOMER CHARGES</u>

Q. DID YOU RECOMMEND ANY CHANGES TO THE COMPANY'S PROPOSED RESIDENTIAL CUSTOMER CHARGE?

A. I noted that while the Company's proposed $16.00 customer charge is supported by the customer cost analysis, the $4.25 increase from $11.75 to $16.00, or 36%, is a significant increase. Therefore, I recommended that the customer charge be included in the scale back of rates if the Commission grants less than the full requested increase. (I&E St. No. 3, p. 28).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION REGARDING THE SCALE BACK OF THE CUSTOMER CHARGE?

A. Yes. PECO witness Bisti disagreed with my recommendation because its proposed residential customer charge is within the range of the residential customer charges of the other major natural gas distribution companies serving customers in the Commonwealth (PECO St. No. 7-R, pp. 6-7).

Q. PLEASE ADDRESS MR. BISTI'S POSITION THAT THE CUSTOMER CHARGE SHOULD NOT BE SCALED BACK.

A. I disagree with Mr. Bisti that the customer charges of other natural gas distribution companies should be the determining factor for the rates of PECO customers. In previous cases, such as the UGI Utilities, Inc. - Electric Division base rate case at Docket No. R-2017-2640058, the Commission determined that the increase in the customer charge was not insignificant and determined that it should be included in the scale back of rates despite approving the customer cost analysis. As I stated on page 28 of I&E Statement No. 3, the Company's proposed customer charge increase from $11.75 to $16.00, or 36%, is a significant increase and including the customer charge when rates are scaled back is reasonable. Therefore, I continue to recommend the customer charges should be included in the scale back of rates.

COST OF SERVICE

Q. DID THE COMPANY UPDATE ITS COST OF SERVICE STUDY IN ITS REBUTTAL TESTIMONY?

A. Yes. The Company updated its cost of service study ("COSS") based on interrogatory responses and the direct testimony of the parties.

Q. WHAT CHANGES DID THE COMPANY MAKE TO ITS COSS?

A. As explained by PECO witness Ding in pages 3-5 of PECO Statement No. 7-R, the Company made several corrections to errors in its COSS that were discovered through the discovery process and in the direct testimony of the various parties.

Q. DID YOU DISAGREE WITH THE AVERAGE AND EXCESS METHODOLOGY USED BY THE COMPANY IN ITS COSS?

A. No. I based my analysis on the revised COSS provided by the Company in its response to OSBA-II-1, as I described on page 26 of I&E Statement No. 3. However, because the Company provided a revised COSS, revenue allocation, and scale back of rates in its rebuttal testimony, presented in PECO Exhibits JD-1R through JD-6R, the analysis presented in my direct testimony is no longer valid. I will discuss my adjusted recommendations based on the Company's revised COSS below.

Q. DID ANY OTHER PARTIES DISAGREE WITH YOUR ANALYSIS OF THE COSS AND REVENUE ALLOCATION?

A. Yes. OCA witness Mr. Watkins presented two comments regarding my recommended COSS and one regarding my revenue allocation recommendation, which I will discuss below. The OCA disagreed with my position that the Average and Excess methodology as presented by the Company is a reasonable method to allocate costs and revenues in this proceeding. Mr. Watkins also referred to my support of the Peak and Average allocation methodology in previous rate cases in support of his objections to the Average and Excess methodology in this case.

Q. PLEASE RESPOND TO OCA WITNESS WATKINS CONCERNS REGARDING YOUR COSS TESTIMONY.

A. Mr. Watkins is correct that I have supported the Peak and Average methodology in previous cases. However, I have also supported the Average and Excess methodology when it was presented in other cases. For example, in the UGI Penn Natural Gas, Inc. base rate case at Docket No. R-2016-2580030 I did not oppose the use of the Average and Excess methodology. I believe that both COSS methodologies are reasonable solutions when performing a COSS for natural gas utilities. Similarly, I have supported a 50% peak / 50% average mains allocation in previous cases as recommended by OSBA witness Knecht in this case as well. However, in this case, I determined that the Company’s proposed main allocation methodology is reasonable. After review of the Company's rebuttal testimony in addition to the opposing testimony from the other parties, I believe the Company’s revised COSS is reasonable except for the calculation of the relative rate of return as I discuss below.

REVENUE ALLOCATION

Q. DID THE COMPANY ADJUST ITS REVENUE ALLOCATION IN ITS REBUTTAL TESTIMONY?

A. Yes. The Company revised its proposed revenue allocation in order to conform to its revised COSS and also to eliminate the differences between the system average rates of return for the GC and L rate classes as required under the terms of the 2008 base rate case settlement at Docket No. R-2008-2028934 (PECO St. No. 7-R, pp. 4-5). The following table shows the Company's revised proposed relative rates of return, as shown on Table 1 on PECO Statement No. 7-R p. 5 as well as the proposed rate increases for each rate class, as shown on PECO Exhibit JAB-1R:

PECO Revised Revenue Allocation			
Class	Net Proposed Increase ($000)	Percent Increase/(Decrease)	Proposed Relative ROR
GR	$63,921	27.3%	0.98
GC	($3,877)	(3.9%)	1.00
L	$292	389.4%	1.00
MV-F	($86)	(18.2%)	1.25
MV-I	($1)	(27.4%)	1.25
IS	($4)	(11.4%)	1.00
TCS	($497)	(72.9%)	1.47
TS-I	($75)	(0.8%)	1.24
TS-F	$4,583	27.7%	1.09
Total:	$64,257	17.8%	

Q. DID YOU RECOMMEND A REVENUE ALLOCATION?

A. Yes. The table below, which was shown on page 32 of I&E Statement No. 3 shows my recommended revenue allocation and a comparison of the relative rates of return under the Company's originally proposed allocation and my recommendation.

Relative Rate of Return by Rate Class				
Class	I&E Revenue Increase ($000)	Percent Increase/(Decrease)	Company Proposed	I&E Proposed
GR	$66,662	27.7%	0.81	0.98
GC	($1,818)	(2.2%)	1.41	0.99
L	$35	46.0%	-0.42	-0.42
MV-F	($14)	(4.3%)	2.41	1.67
MV-I	$0	(0.1%)	5.79	5.1
IS	$0	0.0%	-1.21	-1.21
TCS	($30)	(4.3%)	7.60	6.59
TS-I	$1,338	14.1%	1.72	1.46
TS-F	$2,549	15.2%	1.35	1.05
Total:	$68,724	18.5%		

Q. DID ANY OTHER PARTIES RESPOND TO YOUR RATE ALLOCATION METHODOLOGY?

A. Yes. OCA witness Watkins and OSBA witness Knecht each disagreed with my rate allocation in favor of their own recommendations. Mr. Watkins stated that, given the economic hardships all of the rate classes are experiencing, he does not consider it fair for some rate classes to experience a rate decline while other experience a rate increase. Mr. Watkins also indicated his support for OSBA witness Knecht's evaluation of the class peak demands, which would result in a significant shift in cost responsibility for the Rate L class (OCA St. No. 4R, p. 16). Mr. Watkins additionally brought up the issue of my proposed rate roll-back for the GC, MV-F, and TCS classes as I discussed above (OCA St. No. 4R, pp. 15-16). Mr. Knecht disagreed with my allocation of revenue to the GC and TC-I classes (OSBA St. No. 1-R, p. 12).

Q. DID YOU IDENTIFY ANY ISSUES REGARDING THE COMPANY'S RATE ALLOCATION METHODOLOGY?

A. Yes. As shown on PECO Exhibit JAB-1 R, the Company is proposing a 389% increase for the L rate class and approximately 27% increases for the GR and TS-F classes while proposing rate decreases for the remaining classes. First, the 389% rate increase for the L rate class is excessive and violates the concept of gradualism and could result in rate shock for those customers. Second, I agree with the rebuttal testimony of OCA witness Watkins regarding the fairness of certain rate classes receiving rate increases while other rate classes are receiving rate decreases. For these two reasons, the Company's proposed revenue allocation is not reasonable and should be rejected.

Additionally, it should be noted that the present rate revenue for rate class L of $75,130 shown on PECO Exhibit JAB-1 Revised is not consistent with the present rate revenue for rate class L of $75,475,000 shown on PECO Exhibit JAB-4 Revised, p. 4. I based my analysis on the $75,475 present rate revenue level shown on the proof of revenue on PECO Exhibit JAB-4 Revised.

Q. ARE YOU RECOMMENDING A REVISED REVENUE ALLOCATION AT THIS TIME?

A. Yes. As a result of the revised COSS presented by PECO witness Ding, my previous revenue allocation is no longer applicable. To determine my revised revenue allocation, I used the data provided by the Company in PECO Exhibits JD-1R through JD-6R to create a schedule that shows the calculation of relative rates of return based on proposed revenue, expenses, taxes, net income and rate base by class. This schedule is attached as I&E Exhibit No. 3-SR, Schedule 3.

Based on this schedule and taking into consideration the issues brought forth by the OCA and OSBA discussed above, I am recommending the revenue allocation shown on I&E Exhibit No. 3-SR, Schedule 4, line 2 and in the table below. It should be noted that while the MV-F class shows a revenue decrease, which is due to the DSIC being set at 0%, the Tax Reform Base Rate Impact, and the GPC reduction, not due to a reduction in rates. Additionally, the revenue increases shown below include adjustments for the GPC and MFC reductions.

Increase and Relative Rate of Return by Rate Class					
Class	Company Revised Increase ($000)	Percent Increase/(Decrease)	I&E Revised Increase ($000)	Percent Increase/(Decrease)	I&E Revised
GR	$63,921	27.3%	$62,074	26.5%	0.97
GC	($3,877)	(3.9%)	$0	0.0%	1.04
L	$292	389.4%	$32	43.0%	-0.45
MV-F	($85)	(18.2%)	($34)	(7.2%)	1.54
MV-I	($1)	(27.4%)	$0	11.1%	2.51
IS	($4)	(11.4%)	($2)	0.0%	1.11
TCS	($497)	(72.9%)	$7	1.0%	7.09
TS-I	($75)	(0.8%)	$1,515	16.4%	1.26
TS-F	$4,583	27.7%	$664	4.0%	0.99
Total:	$64,257	17.2%	$64,257	17.2%	

Q. WHY DID YOU LIMIT THE INCREASE IN RATE CLASS L TO 43% GIVEN THE NEGATIVE 2.08% RATE OF RETURN FOR THIS CLASS UNDER PRESENT RATES?

A. The 43% is approximately 2.5 times the system average increase of 17.2%. This 43% increase will provide additional revenue from these customers without causing the L customer to experience rate shock.

Q. HOW DID YOU DETERMINE THE INCREASES FOR THE TS-I AND TS-F CLASSES?

A. The 16.4% increase will move the relative rate or return for TS-I rate class to 1.0 and the 4.0% increase for the TS-F will move the relative rate of return for the TS-F class towards 1.0 (I&E Ex. No. 3-SR, Sch.3, columns K-L).

NEGOTIATED GAS SERVICE

Q. WHAT DID YOU RECOMMEND REGARDING THE COMPANY'S RATE NGS CUSTOMERS?

A. I recommended that the Company provide an update to the competitive alternative analysis for any customer that has not had their alternative fuel source verified for a period of 5 years or more at the point at which PECO files a base rate case. I also recommended that the Company cease NGS service to any customer that does not have a verified alternative supply and switch those customers to the appropriate tariffed rate (I&E St. No. 3, p. 36). I also recommended that, in future base rate cases, PECO separate the costs and revenues of customers discounted or reduced rates in their own class in the cost of service study (I&E St. No. 3, p. 36).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATIONS?

A. Yes. Mr. Bisti clarified PECO's response to RS-11 to indicate that the Company does not require an alternate fuel source as a competitive alternative, but instead allows for pipeline bypass or relocation to be a viable alternative for customers applying to negotiated rates (PECO St. No. 7-R, p. 22). This clarification is reasonable and consistent with the policies of other Pennsylvania Gas Utilities that offer negotiated rate service.

The Company also stated that it disagreed with my overall recommendation for periodic updates to the associated competitive analysis. **[BEGIN CONFIDENTIAL]** [redacted]

[redacted] **[END CONFIDENTIAL]**

Q. WHY DID THE COMPANY DISAGREE WITH YOUR OVERALL RECOMMENDATION FOR PERIODIC UPDATES TO THE COMPETITIVE ANALYSIS FOR NEGOTIATED RATE CUSTOMERS?

A. Mr. Bisti indicated on pages 22 and 23 of PECO Statement No. 7-R that "PECO and its customers generally evaluate the potential benefits" from negotiated rate agreements potentially over decades in the case of a bypass alternative or relocation. He further claims that if the Company required periodic re-evaluation and potentially re-negotiation of the negotiated agreements customers might be less likely to enter into competitive agreements with the Company due to long-term uncertainty. This would, according to Mr. Bisti, result in a greater risk of lost revenues that could impact all PECO gas customers.

Q. IS THE POTENTIAL RISK OF LOSING SOME OF THE COMPANY'S NEGOTIATED RATE CUSTOMERS SUFFICIENT REASON TO NOT REQUIRE TIMELY CONFIRMATION OF EXISTING COMPETITIVE ALTERNATIVES?

A. No. As I stated on page 34 of I&E Statement No. 3, "[i]t is important to periodically analyze competitive alternatives to ensure that the rates of flex rate customers are not discounted lower than is necessary to avoid the customer choosing the alternative supply. Providing excessive discounts to customers would be harmful to both the

Company and its customers since the other customers make up the revenue shortfall that results when flex-rate customers pay less than tariff rates." The rates of non-negotiated customers will always be higher than if the negotiated customers were paying non-discounted rates whether the Company is providing service to those customers or not. The only safeguard that customers have to protect them from absorbing the costs from excessively discounted rates is the verification of competitive alternatives for the negotiated rate customers. The potential risk of losing some of those customers is not sufficient to allow the Company to provide excessive or unwarranted discounts.

Q. DID ANY OTHER PARTIES ADDRESS YOUR RECOMMENDATION TO PROVIDE

A. Yes. OSBA witness Knecht opposed my recommendation regarding the verification of competitive alternatives because it does not address his claim that the Company failed to meet the requirements necessary for most of its negotiated rate customers (OSBA St. No. 1-R, pp. 14-15).

Q. DO YOU AGREE WITH MR. KNECHT'S TESTIMONY THAT THE SHORTFALL IN REVENUES SHOULD BE BORNE BY PECO'S SHAREHOLDERS AND NOT ITS CUSTOMERS (OSBA ST. NO. 1-R, PP. 14-15)?

A. Yes. If the Commission agrees with Mr. Knecht that the Company has not sufficiently supported the requirements for its negotiated rate customers, then that shortfall in revenues should be borne by PECO's shareholders and not its customers. However, such a determination was not part of my direct testimony.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend that the Company provide an update to the competitive alternative analysis for any customer that has not had their alternative fuel source verified for a period of 5 years or more at the point at which PECO files a base rate case.

Q. DID ANY PARTIES ADDRESS YOUR RECOMMENDATION REGARDING THE SEPARATION OF NEGOTIATED RATE CUSTOMERS INTO THEIR OWN RATE CLASS IN FUTURE BASE RATE CASES?

A. Yes. The OSBA agreed with my recommendation on page 15 of OSBA Statement No. 1-R. On pages 21-22 of PECO Statement No. 7-R, the Company referenced my recommendation but did not address it thereafter. As such I will continue to recommend that the negotiated rate customers be separated into their own rate class in future base rate cases.

SCALE BACK OF RATES

Q. DID YOU RECOMMEND A SCALE BACK METHODOLOGY IN YOUR DIRECT TESTIMONY?

A. Yes. Under my original revenue allocation, I proposed that several rate classes receive either no increase or a rate decrease. Further, because Rate L remains far below its cost to serve, I recommended that its increase should not be scaled back. Therefore, the only rate classes that I recommended receive a scale back if the Commission should grant less than the Company's full requested increase are the residential, TS-I, and TS-F classes (I&E Statement No. 3, p. 37).

Q. DO YOU WISH TO REVISE YOUR PROPOSED SCALE BACK METHODOLOGY?

A. Yes. As I revised my revenue allocation above, so too must I revise my scale back methodology. Therefore, I recommend that only the rates of those rate classes that receive an increase be scaled back proportionately based on the COSS ultimately approved by the Commission. Also, as discussed above, I continue to recommend that the customer charges be included in the scale back of rates.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 4
Witness: Elena Bozhko
NON-PROPRIETARY VERSION

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY

Docket No. R-2020-3018929

Direct Testimony

of

Elena Bozhko

Bureau of Investigation & Enforcement

NON-PROPRIETARY VERSION

Concerning:

DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM
LEAK MANAGEMENT
FACILITY EXCAVATION DAMAGE

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Elena Bozhko. I am a Fixed Utility Valuation Engineer in the Safety Division of the Pennsylvania Public Utility Commission's ("Commission") Bureau of Investigation and Enforcement ("I&E"). My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.

A. I&E is responsible for protecting the public interest in proceedings before the Commission. The I&E analysis in the proceeding is based on its responsibility to represent the public interest. This responsibility requires the balancing of the interests of ratepayers, the regulated utility, and the regulated community as a whole.

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?

A. I attended the Yaroslavl State Technical University where I earned a Master of Science Degree in Engineering in 2008. I attended Temple University where I earned a Master of Science Degree in Environmental Engineering in 2015. I joined the Pennsylvania Public Utility Commission's Safety Division in November of 2016.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY FOR I&E?

A. Yes. I have previously testified as a witness for I&E in the UGI Utilities Inc. base rate case at Docket No. R-2018-3006814.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to address the federal and state regulations that PECO Energy Company ("PECO" or "Company") is required to follow and to evaluate the effectiveness of PECO's mitigation of known risks within its system. My direct testimony addresses the following issues:

A. Distribution Integrity Management Program ("DIMP").

B. Leak Management, particularly hazardous leak[1] management.

C. Analysis of PECO's facility excavation damages.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 4 PROPRIETARY contains schedules relating to my testimony.

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[1] Hazardous leak means a leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous, as defined in Code of Federal Regulations Chapter 49 Part 192.1001.

Q. IS PECO REQUIRED TO COMPLY WITH FEDERAL REGULATIONS THAT AFFECT PIPELINE REPLACEMENTS?

A. Yes, PECO is mandated to adhere to the DIMP under Subpart P of the Code of Federal Regulations Chapter 49 Part 192.1001-192.1015.

Q. WHY MUST A NATURAL GAS OPERATOR COMPLY WITH THE DIMP REGULATIONS?

A. DIMP is a performance based regulatory program applicable to gas distribution operators driven by risk management. The federal Pipeline and Hazardous Materials Safety Administration ("PHMSA") created the DIMP regulations to reduce the number of Department of Transportation ("DOT") reportable incidents.[2] Two of the main causes of reportable incidents are pipeline leaks caused by corrosion and damage to pipelines caused by third parties.[3]

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[2] A PHMSA reportable incident means any of the following events: (1) An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences: (i) A death, or personal injury necessitating in-patient hospitalization; (ii) Estimated property damage of $50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost; (iii) Unintentional estimated gas loss of three million cubic feet or more; (2) An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident. (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

[3] Third Party Damages are defined as damages to natural gas facilities (or other such underground facilities) caused by someone other than the operator or the operator's contractor.

Q. WHAT DOES DIMP REQUIRE?

A. DIMP requires a natural gas distribution utility to:

1. Demonstrate knowledge of the gas distribution system;
2. Identify the threats to its facilities;
3. Evaluate and rank the risks of threats to the facilities;
4. Identify and implement measures to reduce risk;
5. Measure performance, monitor the results, and evaluate effectiveness;
6. Periodically evaluate and make improvements to the program;
7. Report the results.

DIMP regulations mandate PECO to identify the risks to its pipeline facilities and create a plan or plans to mitigate and reduce these risks. PECO determines pipeline replacements by risk ranking the different pipeline types and then replacing the pipe based on the highest risk ranking. DIMP compliance is not optional.

Q. HOW DOES THE COMPANY'S DIMP IMPACT ITS PIPELINE REPLACEMENT?

A. In my opinion, PECO's pipeline replacement efforts must be driven by the DIMP regulation. PECO must implement the pipeline replacement based on its DIMP to reduce the risks to the Company's system as required under the regulations.

Q. WHAT ARE THE TOP TEN THREATS TO PECO'S DISTRIBUTION SYSTEM AS IDENTIFIED BY DIMP?

A. [BEGIN PROPRIETARY] [redacted] [END PROPRIETARY]

Q. IN YOUR OPINION, IS MEASURED RISK DIRECTLY PROPORTIONAL TO INVESTMENTS INTO RISK MITIGATION?

A. No, not necessarily. A decrease in DIMP calculated risks depends on the proper allocation and application of dollars and the appropriate implementation of preventive measurements to effectively mitigate risk. An effective DIMP will examine the benefits of the application of additional dollars to mitigate risks and

[4] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 1 – Confidential.

where those dollars should be invested in order to maximize risk reduction. PECO has determined in its DIMP plan that iron pipe and unprotected steel pipe is more prone over time to leakage and failure,[5] PECO's primary method for reducing those risks to the distribution system is pipeline replacement and therefore replacement of cast iron main, bare steel main and bare steel services is prioritized.

Q. DOES A REVIEW OF THE HISTORICAL DATA REVEAL WHETHER PECO'S DIMP IS MITIGATING SYSTEM RISKS?

A. Yes. A review of the historical data reveals that PECO's DIMP may not be effectively guiding efforts to proactively reduce system risks and might be inefficient in prioritizing the replacement projects to mitigate the riskiest threats in the distribution system.

Q. HAVE PECO'S DIMP CALCULATED RISKS DECREASED AS A RESULT OF PECO'S INVESTMENT OF ADDITIONAL DOLLARS INTO RISK MITIGATION?

A. Not necessarily. **[BEGIN PROPRIETARY]** [redacted]

[5] Mr. Bradley's statement page 16 lines 4-9.
[6] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 2 – Confidential.

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
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[END PROPRIETARY]

Q. WHY DO YOU BELIEVE THE RISK SCORE INCREASED FOR CERTAIN CATEGORIES?

A. In my opinion, it is possible that the DIMP scores are not decreasing because the identified system risks are not being successfully addressed or the asset categories are too broad for remedial actions to have a positive effect.

[7] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 – Confidential.

Q. CAN MATERIAL TYPE, AGE, ENVIRONMENT, SIZE, PRESSURE, LOCATION, LEAK HISTORY, AND OTHER INFORMATION HELP PECO MAKE A MORE INFORMED DECISION ABOUT PIPELINE REPLACEMENT?[8]

A. Yes. It is very important to consider material type, age, environment, size, pressure, location, leak history, and other information in order to mitigate risks though pipeline replacement. Additionally, this information should be used to evaluate and rank other risks to PECO's distribution system.

Q. WOULD A MORE GRANULAR ASSET CATEGORY ALLOW THE COMPANY TO MORE REPRESENTATIVELY MEASURE PERFROMANCE, MONITOR RESULTS AND EVALUATE EFFECTIVENESS AS REQUIRED IN 49 CFR 192.1007(E)?

A. Yes, the division of asset groups into smaller measurable categories would allow the Company to increase effectiveness of threat remediation. This approach would also allow the Company to have more granular data to prioritize remediation efforts and pipeline replacement.

[8] PECO St. No. 1, page 15 line 22 and page 16 lines 1-4.

Q. DOES PECO CONSIDER PRESSURE OF THE FACILITIES WHEN ASSET RISK CATEGORIES ARE ESTABLISHED?

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

Q. WHY IS IT IMPORTANT TO CONSIDER PRESSURE OF THE FACILITY WHEN ESTABLISHING THREAT CATEGORIES?

A. It is important to consider pressure of a facility when establishing a threat category because in some instances the pressure is directly corelated to the risk the facility would pose in the event of failure. **[BEGIN PROPRIETARY]** [redacted]

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9 This statement may be updated after receipt of outstanding interrogatories.

10 I&E Exhibit No. 4 PROPRIETARY, Schedule No. 6 - Confidential.

11 I&E Exhibit No. 4 PROPRIETARY, Schedule No. 4 - Confidential.

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[redacted]	[redacted]	[redacted]

[END PROPRIETARY]

Q. WAS PECO EFFECTIVE AT REDUCING RISK OF CORROSION FAILURES ON BARE STEEL MAINS?

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

[12] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 – Confidential.
[13] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 6 – Confidential.
[14] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 4 – Confidential.
[15] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 15 – Confidential.

Q. WAS PECO EFFECTIVE AT REDUCING RISK OF MATERIAL, WELD OR JOINT FAILURES ON DUCTILE IRON MAINS?

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

Q. WAS PECO EFFECTIVE IN REDUCING RISK OF CORROSION FAILURE ON BARE STEEL SERVICES?

A. **[BEGIN PROPRIETARY]** [redacted]

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[16] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 – Confidential.
[17] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 1 – Confidential.
[18] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 – Confidential.
[19] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 – Confidential.
[20] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 7 – Confidential.
[21] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 5 – Confidential.

[redacted] [END PROPRIETARY]

Q. DO YOU THINK IT IS IMPORTANT TO CONSIDER THE CATHODIC PROTECTION[22] STATUS OF A FACILITY WHEN EVALUATING CORROSION RISKS?

A. Yes. I believe it is very important to consider whether a facility is protected from corrosion when evaluating its risk for corrosion failure.

Q. WHY IS IT IMPORTANT TO CONSIDER THE CATHODIC PROTECTION STATUS OF A FACILITY WHEN EVALUATING CORROSION RISKS?

A. It is important because otherwise the risk for corrosion failure on a facility protected from corrosion cannot be distinguished from the risk for failure on pipeline that is not protected.

Q. HAS PECO INDICATED THAT A LACK OF CATHODIC PROTECTION MEASURES AFFECT STEEL PIPELINES OVER TIME?

A. It appears so. In his direct testimony, Mr. Bradley specifically states that

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[22] Cathodic protection is a technique to control the corrosion of a metal surface by making the structure work as the cathode of an electrochemical cell, as defined in NACE SP0169.

unprotected steel pipe is more prone to leakage and ultimately failure than newer plastic pipe.[23]

Q. [BEGIN PROPRIETARY] [redacted]

A. [redacted]

Q. [redacted]

A. [redacted] **[END PROPRIETARY]**

[23] PECO St. No. 1, p., 16, lines 4-7
[24] Awaiting responses to outstanding discovery requests.

Q. PLEASE DESCRIBE HOW PECO CLASSIFIES LEAKS ON ITS SYSTEM.

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

Q. HAVE YOU REVIEWED PECO'S REPAIRED LEAK INFORMATION AS PROVIDED IN RESPONSE TO I&E DISCOVERY REQUESTS?

A. Yes. I have reviewed the repaired leak information for mains and services for each year from 2015 through 2019. The information provided as a response to the request included all repaired leaks on mains and services by leak grade, pipeline size, pressure, material, and cause of failure.

Q. HOW HAVE PECO'S OPEN LEAKS TRENDED FROM 2017 TO 2019?

A. **[BEGIN PROPRIETARY]** [redacted]

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[25] Awaiting responses to outstanding discovery requests.

[redacted] **[END PROPRIETARY]**

Q. IS FACILITY EXCAVATION DAMAGE A RISK TO PECO'S DISTRIBUTION SYSTEM?

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

Q. HOW HAVE PECO'S EXCAVATION DAMAGES PER 1,000 TICKETS TRENDED FROM 2018 TO 2019?

A. **[BEGIN PROPRIETARY]** [redacted]

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[26] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 8 - Confidential.
[27] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 - Confidential.
[28] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 10 – Confidential.

Q. [redacted]

A. [redacted] [redacted] [redacted] [redacted] [redacted] [END PROPRIETARY]

Q. **DO YOU HAVE CONCERNS ABOUT THE WAY PECO DIVIDED ASSETS INTO CATEGORIES AS IT RELATES TO EXCAVATION DAMAGE RISK?**

A. **[BEGIN PROPRIETARY]** [redacted] [redacted] [redacted] **[END PROPRIETARY]**

[29] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 11 – Confidential.
[30] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 14 – Confidential.
[31] Awaiting outstanding responses to discovery requests.

Q. WHICH ACTIONS DOES PECO USE TO MITIGATE RISK OF EXCAVATION DAMAGE TO STEEL FACILITIES?

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

Q. WHICH OTHER TOOLS ARE AVAILABLE TO MITIGATE RISK OF EXCAVATION DAMAGE TO PECO'S STEEL FACILITIES?

A. **[BEGIN PROPRIETARY]** [redacted]

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[32] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 1 – Confidential.

[33] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 11 – Confidential.

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[redacted] **[END PROPRIETARY]**

Q. HOW DOES INEFFECTIVE ASSET PROPERTY CATEGORIZATION LEAD TO A MISCALCULATION OF POSSIBLE RISK OF FAILURE?

A. An ineffective asset property categorization could lead to underestimation of the possibility of failure. **[BEGIN PROPRIETARY]** [redacted]

[34] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 3 – Confidential.

[redacted] **[END PROPRIETARY]**

Q. WHAT COULD HELP PECO MORE EFFECTIVELY REDUCE RISKS OF FAILURE FROM EXCAVATION DAMAGE?

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

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35 I&E Exhibit No. 4 PROPRIETARY, Schedule No. 9.

36 I&E Exhibit No. 4 PROPRIETARY, Schedule No. 7 – Confidential.

37 I&E Exhibit No. 4 PROPRIETARY, Schedule No. 7 – Confidential.

Q. [BEGIN PROPRIETARY] [redacted]

A. [redacted] [END PROPRIETARY]

Q. [BEGIN PROPRIETARY] [redacted]

A. [redacted]

	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

[END PROPRIETARY]

[38] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 11 – Confidential.
[39] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 11 – Confidential.

Q. **[BEGIN PROPRIETARY]** [redacted]

A. [redacted]

[END PROPRIETARY]

Q. **BASED ON THE INFORMATION YOU HAVE REVIEWED, IS THE GAS MAPPING PROGRAM EFFECTIVE?**

A. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

[40] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 12 – Confidential.
[41] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 13 – Confidential.
[42] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 13 – Confidential.
[43] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 11 – Confidential.

Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING PECO'S FACILITY DAMAGES?

A. **[BEGIN PROPRIETARY]** [redacted]

[redacted]			
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[44] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 11 – Confidential.

[45] I&E Exhibit No. 4 PROPRIETARY, Schedule No. 12 – Confidential.

[redacted] **[END PROPRIETARY]**

Q. DO YOU HAVE ANY FURTHER RECOMMENDATIONS FOR PECO?

A. **[BEGIN PROPRIETARY]** [redacted]

[46] Traceable rodder is non-invasive tracing system used to locate active or inactive underground mains and services.

[redacted] **[END PROPRIETARY]**

Q. ARE YOUR RECOMMENDATIONS STATED ABOVE COMPLETE AS OF THE WRITING OF YOUR DIRECT TESTIMONY?

A. Yes. Based on the information provided by PECO in discovery responses to date, my recommendations are complete at this time. However, I am still awaiting responses to several outstanding interrogatories. I reserve the right to supplement my discussion and recommendations after I receive those responses, which may be included either in rebuttal testimony or surrebuttal testimony.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes

I&E Statement No. 4 - SR
Witness: Elena Bozhko
NON-PROPRIETARY VERSION

R-2020-3018929
2/17/21 JK

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PECO ENERGY COMPANY

Docket No. R-2020-3018929

Surrebuttal Testimony

of

Elena Bozhko

Bureau of Investigation & Enforcement

NON-PROPRIETARY VERSION

Concerning:

DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM
LEAK MANAGEMENT
FACILITY EXCAVATION DAMAGE

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Elena Bozhko. I am a Fixed Utility Valuation Engineer in the Safety Division of the Pennsylvania Public Utility Commission's ("Commission") Bureau of Investigation and Enforcement ("I&E"). My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

Q. ARE YOU THE SAME ELENA BOZHKO WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 4 AND THE SCHEDULES IN I&E EXHIBIT NO. 4?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address statements made by PECO Energy Company witness Ronald Bradley in his rebuttal testimony (PECO statement No. 1-R) regarding the company's Distribution Integrity Management Program ("DIMP") plan and PECO's leaks and excavation damages.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 4-SR PROPRIETARY contains schedules relating to my testimony.

Q. SUMMARIZE MR. BRADLEY'S RESPONSE IN REBUTTAL TESTIMONY TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. **[BEGIN PROPRIETARY]** [redacted]

[redacted]

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[1] PECO Energy St. No. 1-R, pp. 4-5.

[redacted]

[redacted]

[redacted]

[2] I&E Exhibit No. 4 SR PROPRIETARY, Schedule No. 1 – Confidential.
[3] PECO Energy St. No. 1-R, p. 8.
[4] I&E Exhibit No. 4-SR PROPRIETARY, Schedule No. 2 – Confidential.
[5] PECO Energy St. No. 1-R, p. 8.
[6] I&E Exhibit No. 4-SR PROPRIETARY, Schedule No. 3 – Confidential.

[redacted]

[redacted] [redacted]

[redacted] [redacted] [END PROPRIETARY]

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7 PECO Energy St. No. 1-R, p. 9.

8 I&E Exhibit No. 4-SR PROPRIETARY, Schedule No. 4 – Confidential.

Q. WHAT IS YOUR RESPONSE TO MR. BRADLEY'S EXPLANATION OF THE REASONS BEHIND THE INCREASE IN THE NUMBER OF OPEN LEAKS AND LEAKS SCHEDULED FOR REPAIR BETWEEN 2017 AND 2019?

A. Mr. Bradley objects to my examples of PECO's increasing number of unrepaired leaks in PECO's territory.[9] Mr. Bradley's explanation is that the 2019 end-of-year number was inflated by heightened customer awareness related to the gas events that transpired in Merrimack Valley, Massachusetts. Mr. Bradley claims that the leaks scheduled for repair increased throughout 2019, which included repairs to a greater number of non-hazardous "monitor-only" leaks.[10] **[BEGIN PROPRIETARY]** [redacted]

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[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]

[END PROPRIETARY]

9 PECO Energy St. No. 1-R, p. 10.
10 PECO Energy St. No. 1-R, p. 10.

Q. WHAT IS YOUR RESPONSE TO MR. BRADLEY'S PROPOSAL TO NORMALIZE THE NUMBER OF DAMAGES TO THE NUMBER OF TICKETS RECEIVED?

A. Mr. Bradley's suggestion is misleading and hides the potential issues with the excavation damage rate in PECO's territory. Mr. Bradley implies that the proper way to normalize the damages rate is to use the number of tickets received. The problem with using the "number of tickets received" metric is that PECO's Gas territory overlaps with PECO's Electric territory. That greatly inflates the number of tickets in the calculation because the number of received tickets in PECO's entire service territory is larger than the number received, solely, by its Gas division. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]** Utilizing Mr. Bradley's process for normalizing this data skews PECO's excavation damage rate as being a non-issue when the contrary is true.

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[11] I&E Exhibit No. 4-SR PROPRIETARY, Schedule No. 5 – Confidential.

Q. DO YOU HAVE A SUGGESTION ON HOW THE DAMAGES RATE CAN BE CALCULATED TO ACCOUNT FOR AN INCREASE IN TICKET VOLUME WHILE AVOIDING SHORTCOMINGS BY MR. BRADLEY'S METHOD?

A. Yes, the first suggestion would be to separate the One Call accounts for PECO Gas and PECO Electric. That would avoid counting the tickets in PECO Electric's territory when estimating gas facility damage rate. The second recommendation would be to only count tickets that were physically marked with paint on the ground, flags or otherwise to be included for the metric of damages per tickets marked. When there are no facilities in the vicinity of the excavation site, there is no chance for them to be damaged. Since no mitigation efforts are necessary to avoid the damage in those cases, there should be no credit taken for prevention of excavation damage in those scenarios.

Q. DID THE NEW CALCULATION METHOD CHANGE THE DIRECTION OF THE CURRENT UPWARD TREND OF PECO'S EXCAVATION DAMAGES?

A. The new calculations reinforced my conclusion of the ineffectiveness of PECO's mapping program. While I have no way to exclude the PECO Electric tickets in my evaluation, I have calculated the number of excavation damages caused by mapping errors, poor records, incorrect markings, and facilities not being marked by the locator as they relate to the number of locate requests over the 2017-2019 timeframe. **[BEGIN PROPRIETARY]** [redacted] **[END PROPRIETARY]**

Q. CONSIDERING THE INCREASING NUMBER OF DAMAGES CAUSED BY MAPPING ERRORS, POOR RECORDS, INCORRECT MARKINGS, AND FACILITIES NOT BEING MARKED BY THE LOCATOR SINCE IMPLEMENTATION OF THE MAPPING PROGRAM, DO YOU AGREE WITH MR. BRADLEY THAT CHANGES ARE UNWARRANTED?

A. No, the data does not support Mr. Bradley's claim that the changes are unwarranted. It is unclear why Mr. Bradley expands his analysis of programs effectiveness to 2015 considering the program's 2018 implementation date. This expansion does not demonstrate the results achieved during the program's term. As mentioned in my direct testimony, since the program's inception in January 2018, facility damages caused by mapping errors or poor records per 1,000 tickets marked trended upward with a 9.1% increase. **[BEGIN PROPRIETARY]** [redacted]

[12] I&E Exhibit No. 4-SR PROPRIETARY, Schedule No. 6 – Confidential.

[redacted] **[END PROPRIETARY]**

Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	R-2020-3018929
	:	
PECO Energy Company – Gas Division	:	
Base Rates	:	

BUREAU OF INVESTIGATION AND ENFORCEMENT
LIST OF TESTIMONY AND EXHIBITS

1. I&E Statement No. 1 and I&E Exhibit No. 1, the direct testimony and accompanying exhibit of D.C. Patel.
2. I&E Statement No. 1-SR and I&E Exhibit No. 1-SR, the surrebuttal testimony and accompanying exhibit of D.C. Patel.
3. I&E Statement No. 2 PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 2 PROPRIETARY and Non-Proprietary, the direct testimony and accompanying exhibit of Christopher Keller.
4. I&E Statement No. 2-SR, the surrebuttal testimony of Christopher Keller.
5. I&E Statement No. 3 and I&E Exhibit No. 3, the direct testimony and accompanying exhibit of Ethan Cline.
6. I&E Statement No. 3-SR PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 3-SR, the surrebuttal testimony and accompanying exhibit of Ethan Cline.
7. I&E Statement No. 3-SR ERATTA, the Errata correcting the surrebuttal testimony and accompany exhibit of Ethan Cline.
8. I&E Statement No. 4 PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 4 PROPRIETARY and Non-Proprietary, the direct testimony and accompanying exhibit of Elena Bozhko.
9. I&E Statement No. 4-SR PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 4-SR PROPRIETARY and Non-Proprietary, the surrebuttal testimony and accompanying exhibit of Elena Bozhko.

Respectfully Submitted,

Scott B. Granger
Prosecutor

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	Docket No. R-2020-3018929
	:	
PECO Energy Company – Gas Division Base Rates	:	

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Christopher Keller, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 2 PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 2 PROPRIETARY and Non-Proprietary.
- I&E Statement No. 2-SR.

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ Christopher Keller
Christopher Keller
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: February 17, 2021

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	Docket No. R-2020-3018929
	:	
PECO Energy Company – Gas Division Base Rates	:	

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, D. C. Patel, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 1, and I&E Exhibit No. 1.
- I&E Statement No. 1-SR and I&E Exhibit No. 1-SR.

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ DCPatel

D. C. Patel
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: February 17, 2021

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	Docket No. R-2020-3018929
	:	
PECO Energy Company – Gas Division Base Rates	:	

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Elena Bozhko, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 4 PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 4 PROPRIETARY and Non-Proprietary
- I&E Statement No. 4-SR PROPRIETARY and Non-Proprietary, and I&E Exhibit No. 4-SR PROPRIETARY and Non-Proprietary.

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ Elena Bozhko
Elena Bozhko___

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: February 17, 2021

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
V.	:	Docket No. R-2020-3018929
	:	
PECO Energy Company – Gas Division Base Rates	:	

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Ethan H. Cline, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 3, and, I&E Exhibit No. 3.
- I&E Statement No. 3-SR PROPRIETARY and Non-Proprietary; and I&E Exhibit No. 3-SR.
- I&E Statement No. 3-SR ERRATA and I&E Exhibit No. 3-SR ERRATA.

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ Ethan H. Cline
Ethan H. Cline
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: February 17, 2021