Met-Ed/Penelec/Penn Power/West Penn
Statement No. 6

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

METROPOLITAN EDISON COMPANY
DOCKET NO. R-2014-2428745

PENNSYLVANIA ELECTRIC COMPANY
DOCKET NO. R-2014-2428743

PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2014-2428744

WEST PENN POWER COMPANY
DOCKET NO. R-2014-2428742

Direct Testimony of Patricia M. Larkin

List of Topics Addressed

Cash Working Capital

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DIRECT TESTIMONY
OF
PATRICIA M. LARKIN

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. My name is Patricia M. Larkin and my business address is 2800 Pottsville Pike, Reading, Pennsylvania 19612.

Q. Ms. Larkin, by whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company as a State Regulatory Analyst in the Rates and Regulatory Affairs Department – Pennsylvania.

Q. What are your responsibilities as a State Regulatory Analyst?

A. Generally, the Pennsylvania Rates and Regulatory Affairs Department provides regulatory support for Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec"), Pennsylvania Power Company ("Penn Power") and West Penn Power Company ("West Penn") (collectively, the "Companies"). I am responsible to the Manager of Rates and Regulatory Affairs for the preparation and coordination of the Companies' accounting and financial data in all their rate-related matters before the Pennsylvania Public Utility Commission ("Commission") and the New York State Public Service Commission, including the preparation of statements and reports addressing, among other things, energy costs, regulatory program cost recovery, quarterly earnings, and other financial matters. Also, I am responsible for the administration of the Companies'

wholesale tariffs, the development of retail electric rates and the promulgation of rules and regulations ensuring uniform tariff administration and interpretation.

Q. What is your educational background?

A. I graduated from Allentown College St. Francis DeSales in 2000 with a Bachelor of Science degree in Accounting and Alvernia College in 2003 with a Master in Business Administration degree. I have over fourteen years of experience with GPU Energy/FirstEnergy Corp. My work experience is more fully described in Appendix A.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying in this proceeding on behalf of Met-Ed, Penelec, Penn Power and West Penn. My testimony equally applies to all of the Companies, unless otherwise stated.

Q. Ms. Larkin, have you prepared exhibits to accompany your testimony?

A. Yes. Met-Ed Exhibit PML-1, Penelec Exhibit PML-1, Penn Power Exhibit PML-1 and West Penn Exhibit PML-1 (collectively, "Exhibits PML-1"), were prepared by me or under my supervision and are described in detail in my testimony.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to describe the process I used to determine the total Cash Working Capital requirement for each of the Companies as shown on Page 1 of Exhibits PML-1.

II. CASH WORKING CAPITAL - OVERVIEW

Q. Please define "Cash Working Capital" as it pertains to ratemaking.

A. For ratemaking purposes, Cash Working Capital is generally defined as the average amount of capital provided by investors, over and above the investment in plant and other specifically identified rate base items, to bridge the gap between the time expenditures are required to provide service and the time collections are received for that service. Cash Working Capital is determined for ratemaking purposes by a Lead/Lag Study.

Q. Please define the terms "lead" and "lag" as used in your testimony and explain how each is calculated.

A. In general, a lead or a lag measures the time that elapses between receipt of a product or service and receipt of compensation by the party providing that product or service. A lead occurs when payment is made in advance of receiving a product or service. A lag occurs when payment for a product or service occurs after the product has been received or service has been rendered. Exhibits PML-1 quantify lead or lag time in days, depict all identified lags as positive figures, and depict all identified leads as negative figures.

Q. What time period was used for the Companies' Lead/Lag Studies?

A. These studies incorporate projected financial data for the twelve months ended April 30, 2016. Fully normalized Electric Revenues, reflecting distribution revenues at proposed rates, were used to calculate revenue lag.

Q. What was the source of the relevant data used to calculate Cash Working Capital?

A. For the most part, I used financial data for the fully projected future test year that underlie the development of the Companies' revenue requirement shown in exhibits accompanying Met-Ed/Penelec/Penn Power/West Penn Statement No. 2, the direct testimony of Richard A. D'Angelo. However, the determination of Cash Working Capital and the development of revenue requirement are interdependent because changes in Cash Working Capital will affect rate base and net income. Performing the Cash Working Capital and revenue requirement calculations on an iterative basis reduces, but does not eliminate, the impact of that interdependence. Appropriate adjustments to the pro forma distribution revenue, federal and state income taxes, and Pennsylvania gross receipts taxes were made in my Cash Working Capital calculations to account for that interdependence.

Q. Have you prepared a summary showing each of the components that comprise the Total Cash Working Capital for each Company?

A. Yes, I have. Page 1 of Exhibits PML-1 shows each component of the total Cash Working Capital requirement. Using Met-Ed's Exhibit PML-1 to illustrate, the Cash Working Capital requirement associated with revenue lag is $152,122,000, as shown at line 3, column 7. The average lag in payment of the Companies' operating expenses reduces the Cash Working Capital requirement. For Met-Ed, this reduction is $37,061,000 as shown at line 11, column 7. On average, taxes

are paid in advance of the service period to which they relate, which adds to Cash Working Capital requirements ($1,304,000 in the case of Met-Ed as shown at line 22, column 7). The Net Cash Working Capital (shown at line 26, column 7) is the sum of those figures – in Met-Ed's case, $116,365,000 (line 27, column 7). Prepayments and Unamortized Cash Pension Contributions are other elements of Cash Working Capital, as shown at lines 28 and 29, which bring the Total Cash Working Capital, in Met-Ed's case, to $147,828,000, as shown at line 30. Column 8 of the summary identifies the page of Exhibits PML-1 where I developed the lead/lag days for the applicable components of Cash Working Capital.

Q. How did you calculate the lag associated with Electric Revenue?

A. Payment for electric service occurs after service is provided, which produces a lag in receipt of revenues. To calculate total revenue lag, Electric Revenue lag was calculated separately for the periods: (1) from billing to cash collection ("Collection Lag"); (2) from meter reading to billing "Billing Lag"); and (3) from the mid-point of the service period to meter reading ("Service Period Lag").

Collection Lag is the period from mailing a customer's bill until payment is received for that bill. This lag was calculated based on the turn-over in accounts receivable. The ratio of accounts receivable to total billed revenues (identified as "Accounts Receivable Turnover" at page 3 of Exhibits PML-1) is divided into 365 days to derive the average number of days accounts receivable are outstanding or, in other words, the average

time between issuing a bill and collecting a bill. That figure, in days, is the Collection Lag, which, in Met-Ed's case, is 48.5 days.

Billing Lag is the period from the reading of a customer's meter until the bill is mailed. Generally, the bill is prepared the same day the meter is read and is mailed the next day. However, there are exceptions. Reading the meters of large industrial customers can take an additional day because there is more work involved given the nature of the service such customers receive. Also, weekends, holidays, and severe weather may add to the time to read and bill customers. Accounting for these exceptions, the Billing Lag is 1.5 days.

Service Period Lag is measured from the mid-period of the service period to the date a meter is read. Because bills are typically issued once per month, or twelve times per year, the Service Period Lag is 15.2 days (365 days per year/12 billing cycles per year/2). This calculation assumes that electric usage is uniform throughout the month.

The overall Electric Revenue lag is the sum of the Collection Lag, Billing Lag and Service Period Lag, as shown on page 3 at line 21 of Exhibits PML-1. In Met-Ed's case, Total Revenue Lag is 65.2 days.

Q. How did you calculate the lead or lag associated with Other Operating Revenue?

A. The calculation of the Other Operating Revenue lag is shown on page 4 of Exhibits PML-1, which lists each of the individual components of Other Operating Revenue and their respective lead or lag. Lag in receipt of Late Payment Charges and Miscellaneous Service Revenues were calculated with overall Electric Revenue lag because each component is billed with Electric Revenue. The footnotes at the bottom of page 4 explain how leads and lags were calculated for other components of Other Operating Revenue. Total Other Operating Revenue lag is the dollar-weighted average lag time calculated by dividing total (Lead)/Lag Dollars (line 11, column 6) by Total Other Operating Revenue in (line 11, column 4).

Q. Please explain the lag associated with the payment of Energy Costs.

A. The lag days associated with Energy Costs are shown on page 5 of Exhibits PML-1. This measures the average lag between the Companies' receipt of generation service from suppliers of default generation until the Companies pay for that service. The period from the midpoint to the end of each monthly service period is 15.2 days, which assumes uniform purchases over any given month. The Companies' Default Service Supplier Master Agreements require payment on the first business day after the 19th of the month, or twenty days after the end of the service period. The lag is, therefore, 35.2 days (15.2 + 20 days).

Q. How was the lag associated with Payroll determined?

A. Payroll is divided into five categories: Bi-weekly Payroll, Weekly Payroll, Payroll-Adjustments, Payroll Taxes, and Incentive Compensation. A weighted average lag time was calculated for each component, as shown on page 7 of Exhibits PML-1. The lags for each component of Payroll vary among the Companies due to: (1) differing payroll periods; (2) variations in the use of direct deposit and paper checks; and (3) the ratio of Weekly Payroll to Bi-weekly Payroll. The total dollar-weighted Payroll lag time is calculated on page 6 of Exhibits PML-1 by dividing total (Lead)/Lag dollar (line 6, column 6) by total Payroll (line 6, column 4).

Q. Please identify the components of Employee Benefits and explain how the leads and lags were calculated for each component.

A. The principal components of Employee Benefits consist of: (1) Medical Insurance; (2) Life Insurance; (3) Savings Plan Match; (4) Worker's Compensation and Long-Term Disability ("LTD") Insurance; and (5) Other Post-Employment Benefits ("OPEB"). The footnotes on page 8 of Exhibits PML-1 describe how the lag was calculated for each category. The total dollar-weighted average lag for Employee Benefits is shown at line 7, column 6, on page 8.

Q. Please explain how you calculated the lag in payment of the Service Company O&M Allocation.

A. The lag associated with the Service Company O&M Allocation is based on the period from the midpoint of the monthly service period to the date the

intercompany accounting transaction closes. Under the Companies' Service Agreement with FirstEnergy Service Company ("Service Company") and accompanying annual Service Requests, the intercompany accounting transactions occur on the last day of the service period, which is the date when the Service Company bills for those transactions. The bills are paid as part of the monthly accounting close on the same day. Therefore, the lag in payment is 15.2 days. This calculation is shown on page 9 of Exhibits PML-1.

Q. How did you calculate the lag for Other O&M-Distribution?

A. Other O&M-Distribution consists of non-labor related expenses incurred in the normal course of business for products and services that are not addressed elsewhere in Exhibits PML-1. The lag was calculated as the sum of: (1) the period from the midpoint to the end of the monthly service period; and (2) the thirty-day "default" payment period incorporated in the Companies' accounts payable system. This calculation is shown on line 4 of page 9 of Exhibits PML-1.

Q. How did you calculate the lag for Other O&M-Riders?

A. The Companies incur expenses for services and functions provided pursuant to its Universal Service Charge ("USC"), Energy Efficiency and Conservation Charge ("EEC"), Smart Meter Technologies Charge ("SMT"), and Default Service Support ("DSS") Riders. Each of these categories and their associated payment terms are shown on page 10 of Exhibits PML-1 and further explained by footnotes on page 11. The categories and dollar amounts for the USC and EEC Riders are based on the Companies' 2015 Universal Service and Energy

Efficiency and Conservation Plans. The categories and dollar amounts associated with the SMT and DSS Riders are based on the Companies' forecast for the twelve months ending April 30, 2016, as adjusted for ratemaking purposes. The lag days for each category consist of the period from the midpoint of the relevant service period to the applicable vendors' payment dates, which were obtained from personnel responsible for administering each of these programs. For any costs that relate to services provided internally, the lag used is the same as the lag for Service Company O&M Allocation discussed previously.

Q. How did you calculate the lag for Uncollectible Accounts expense?

A. Uncollectible Accounts expense is not considered a cash expense and, therefore, was not included in calculating the Cash Working Capital requirement, as explained in footnote (d) on page 9 of Exhibits PML-1.

Q. How did you calculate the leads and lags associated with Taxes?

A. A weighted average lead or lag was calculated based on the required payment dates and percentage of the payment due on those dates for each tax listed on page 12 of Exhibits PML-1. The calculation of each weighted average lead or lag is set forth on page 13 of Exhibits PML-1.

Q. Why did you assign Depreciation, Amortization, Provision for Deferred Income Taxes and Investment Tax Credit a zero lag?

A. These are considered non-cash items by the Commission and, therefore, they were not included in calculating the Cash Working Capital requirement, as shown on page 1, lines 12, 13, 23, and 24 of Exhibits PML-1.

Q. Was any element of the return on invested capital included in the Companies' Lead/Lag Studies?

A. No element of the return on invested capital was included in calculating Cash Working Capital in Exhibits PML-1. A return on invested capital, in any form, becomes the property of the utility's investors when service is rendered. Consequently, even if some portion of that stream of income were available for use as working capital before being paid out as interest or dividends, it would represent the use of investor-supplied capital to cover the on-going costs of providing service to customers and, as such, does not reduce the Companies' Cash Working Capital requirement.

Q. Why are Prepayments included in the Companies' Cash Working Capital?

A. The Companies must pay certain costs before such costs are charged to expense for accounting and ratemaking purposes. Prepayments are cash expenditures that, while made in one period are not charged to expense until a future period. The claim for Prepayments is based on a thirteen-month average of the various prepaid items, including Prepaid Commission Assessments, Prepaid Property and Liability Insurance, Prepaid Edison Electric Institute ("EEI") Dues Assessments,

and Other Prepaid items, which include rating agency fees, financing fees, line of credit fees, and trustee fees. The detailed calculations of Prepayments are shown on page 14 of Exhibits PML-1.

Q. Please explain the basis for including Unamortized Cash Pension Contributions in the Companies' Cash Working Capital claim.

A. In Met-Ed's and Penelec's 2006 base rate cases, the Commission approved the recovery of pension expense calculated on the basis of a ten-year historical average of actual cash contributions. In its Final Order in that case, the Commission stated:

> Fundamentally, we believe that, regarding the recovery of pension expense, the alternative method requested by MEPN [the Companies] in this proceeding is fair to both ratepayers and stockholders. The Companies' normalization methodology will provide a more consistent and less variable expense claim to be included within base rates as compared to the more significant sums contributed in the two years preceding the 2006 test year in this proceeding. Additionally, we should not ignore this significant benefit to current and former employees just because the Companies' did not make a contribution to the pension fund during any given year."[1]

Q. How does recovering a cash contribution to the pension plan over a ten year period create a working capital need?

A. The Companies have made large cash contributions to their pension trust fund over the last ten years. For ratemaking purposes, the Companies recover those cash outlays over ten years. Throughout those ten years, the Companies bear the

[1] *Pa. PUC v. Metropolitan Edison Company, Pennsylvania Electric Company*, Docket Nos. R-00061366, *et. al*, p. 92 (Order entered January 11, 2007).

carrying costs associated with the prior period expenditures that they made but have not recovered in base rates. That unrecovered amount constitutes the Unamortized Cash Pension Contributions that form the basis for the Companies' claim, as shown on page 15 of Exhibits PML-1.

Q. Did you consider the effect of the earnings on the pension trust fund in your Cash Working Capital claim?

A. Yes. The average earnings on the pension trust fund are reflected in the calculation of the amount of cash contributions and, in that way, reduce the cash contribution. Stated another way, earnings on the cash contributions accrue to the benefit of the fund, reduce the Companies' contribution obligations, and, in that way, provide an "upfront" benefit to customers.

Q. Was Pension expense included in the Companies' Cash Working Capital requirement as a component of their Lead/Lag Studies?

A. No, it was not. Pension expense is shown on page 1, line 7, of Exhibits PML-1 at a zero lag. Thus, pension expense is reflected in the Cash Working Capital requirement only once, through the Unamortized Cash Pension Contribution Balance I described above.

Q. How does the methodology used to calculate the Total Cash Working Capital claim for the Companies in this case compare to that employed by Met-Ed and Penelec in their previous base rate proceedings?

A. Except for the inclusion of Unamortized Cash Pension Contributions to reflect the Cash Work Capital requirement associated with pension expense, the Companies are using the same methodology in this case that Met-Ed and Penelec employed in their 2006 base rate cases at Docket Nos. R-00061366 and R-00061367.

III. SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS

Q. Are all of Met-Ed's lead/lag calculations consistent with the general calculations you described above?

A. No. The employees belonging to the International Brotherhood of Electrical Workers Local 777 do not participate in the Company-sponsored medical insurance plan. Therefore, the weighted average lag for Medical Insurance shown on line 1 of page 8 of Met-Ed Exhibit PML-1 was calculated based on the medical insurance lag appropriate to the expenses incurred for Local 777 employees in addition to the balance of Met-Ed's employees who do participate in the Company-sponsored medical insurance plan.

Q. Please summarize your testimony and recommendations regarding Met-Ed.

A. Met-Ed has supported a Total Cash Working Capital requirement of $147,828,000, as shown on page 1, line 30, of Met-Ed Exhibit PML-1.

Q. Are all of Penelec's lead/lag calculations consistent with the general calculations you described above?

A. Yes. The calculations set forth in Penelec Exhibit PML-1 are consistent with the calculations I described above.

Q. Please summarize your testimony and recommendations regarding Penelec.

A. Penelec has supported a Total Cash Working Capital requirement of $124,842,000, as shown on page 1, line 30, of Penelec Exhibit PML-1.

Q. Are all of Penn Power's lead/lag calculations consistent with the general calculations you described above?

A. Yes. The calculations on Penn Power Exhibit PML-1 are consistent with the calculations I described above.

Q. Please summarize your testimony and recommendations regarding Penn Power.

A. Penn Power has supported a Total Cash Working Capital requirement of $27,636,000, as shown on page 1, line 30, of Penn Power Exhibit PML-1.

Q. Are all of West Penn's lead/lag calculations consistent with the general calculations you described above?

A. Yes. The calculations on West Penn Exhibit PML-1 are consistent with the calculations I described above.

Q. Please summarize your testimony and recommendations regarding West Penn.

A. West Penn has supported a Total Cash Working Capital requirement of $117,080,000, as depicted on page 1, line 30, of West Penn Exhibit PML-1.

Q. Ms. Larkin, does this complete your direct testimony?

A. Yes, it does.

Resume: Education and Experience of Patricia M. Larkin

Education:

2000	Bachelor of Science Degree in Accounting – Allentown College of St. Francis de Sales
2003	Master of Business Administration Degree – Alvernia College

Experience:

6/00 - 8/07	Accountant – Property Accounting Services – GPU Energy
8/07 - 9/08	Accountant – Accounting Research – FirstEnergy Service Company
9/08 - 6/12	Accountant – General Accounting Services (Regulatory Accounting focus) – FirstEnergy Service Company
6/12 – Present	Analyst – Rates & Regulatory Affairs – Pennsylvania – FirstEnergy Service Company

Assisted in development and preparation of filings in the following rate-related proceedings:

Pa. P.U.C. Cases: Docket Nos.

P-2013-2391368
P-2013-2391372
P-2013-2391375
P-2013-2391378
P-2011-2273650
P-2011-2273668
P-2011-2273669
P-2011-2273670
R-00061366
R-00061367

P.U.C. Ohio Case: Docket No. 07-551-EL-AIR

Pennsylvania Power Company
Cash Working Capital
Income Statement
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	Daily Amount (5) = (4) / 365	(Lead) / Lag Days (6)	Cash Working Capital (7) = (5) * (6)	Supporting Page of Penn Power Exhibit PML-1 (8)
	Operating revenues								
1	Electric Revenue	$ 95,966	$ 85,281	$ 28,482	$ 209,729	575	56.1	$ 32,258	2 and 3
2	Other Operating Revenue	2,923	95	-	3,018	8	41.6	333	4
3	Total Operating Revenue	$ 98,889	$ 85,376	$ 28,482	$ 212,747			$ 32,591	
	Operating Expenses								
4	Energy Costs	$ -	$ 76,623	$ 831	$ 77,454	212	35.2	$ 7,462	5
5	Payroll	7,222	-	-	7,222	20	17.1	342	6 and 7
6	Employee Benefits	1,376	-	-	1,376	4	36.9	148	8
7	Pension	2,995	-	-	2,995	8	0.0	-	
8	Service Company Labor Allocation	3,584	-	-	3,584	10	15.2	152	9 through 11
9	Service Company OTL Allocation	4,773	-	-	4,773	13	15.2	198	9 through 11
10	Other O&M	8,193	-	23,909	32,102	88	31.2	2,746	9 through 11
11	Operating Expense Before Tax	$ 28,143	$ 76,623	$ 24,740	$ 129,506			$ 11,048	
	Depreciation and Amortization								
12	Depreciation	$ 17,377	$ -	$ 2,554	$ 19,931	55	0.0	$ -	
13	Amortization	-	3,733	(5,114)	(1,381)	(4)	0.0	-	
14	Total Depreciation and Amortization	$ 17,377	$ 3,733	$ (2,560)	$ 18,550			$ -	
	Taxes								
15	Federal Income Tax	$ 14,672	$ (3)	$ (166)	$ 14,503	40	37.5	$ 1,500	12 and 13
16	Corportate Net Income Tax - PA	4,653	(1)	(52)	4,600	13	29.8	387	12 and 13
17	Property / Real Estate Tax	73	-	-	73	-	20.0	-	12 and 13
18	PA Gross Receipts Tax	5,662	5,032	1,680	12,374	34	(71.5)	(2,431)	12 and 13
19	PA Sales and Use Tax	-	-	-	-	-	36.0	-	12 and 13
20	Public Utility Realty Tax	266	-	-	266	1	(61.0)	(61)	12 and 13
21	Capital Stock	37	-	-	37	-	29.8	-	12 and 13
22	Total Taxes	25,363	5,028	1,462	31,853			(605)	
23	Provision for Deferred Income Taxes	$ (444)	$ -	$ 2,285	$ 1,841	5	0.0	$ -	
24	Investment Tax Credit	$ (29)	$ -	$ -	$ (29)	-	0.0	$ -	
25	Total Operating Expenses	$ 70,410	$ 85,384	$ 25,927	$ 181,721			$ 10,443	
26	**Operating Income**	$ 28,479	$ (8)	$ 2,555	$ 31,026			$ 22,148	
27	**Net Cash Working Capital**							$ 22,148	
28	**Prepayments**							$ 363	14
29	**Unamortized Cash Pension Contributions**							$ 5,125	15
30	**Total Cash Working Capital**							$ 27,636	

Pennsylvania Power Company
Cash Working Capital
Electric Revenue
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)	
1	Electric Revenue	$ 95,966	$ 85,281	$ 28,482	$ 209,729	56.1	(a)
2	Total Electric Revenue	$ 95,966	$ 85,281	$ 28,482	$ 209,729	56.1	

Footnote

(a) Lag calculated on Page 3.

Pennsylvania Power Company
Cash Working Capital
Revenue Lag (Based On Actuals)
For the 12 Months Ended March 31, 2014
($000)

Line No	Description	Factor	Accounts Rec. Balance	Billed Revenues	A/R Turnover	(Lead) / Lag Days
		(1)	(2)	(3)	(4)	(5) = 365 / (4)
1	Annual Number of Days					365
2	April, 2013		$ -	$ 15,690		
3	May		-	$ 12,878		
4	June		18,279	$ 14,530		
5	July		-	$ 17,589		
6	August		-	$ 16,508		
7	September		16,358	$ 15,448		
8	October		-	$ 12,624		
9	November		-	$ 13,286		
10	December, 2013		20,447	$ 16,083		
11	January, 2014		-	$ 18,493		
12	February		-	17,524		
13	March, 2014		25,844	16,937		
14	Total Accounts Receivable Balance		$ 80,928			
15	Quarterly Average (Line 14 / 4)	4	$ 20,232			
16	Total Billed Revenues			$ 187,590		
17	Accounts Receivable Turnover (Line 16 / Line 15)				9.27	
18	Collection Days Lag (Line 1 / Line 17)					39.4 days
19	Lag from Meter Reading to Billing (a)					1.5 days
20	Lag from Service Period to Meter Reading (b)		365 / 12 / 2 =			15.2 days
21	Total Revenue Lag					**56.1 days**

Footnotes

(a) Lag based on On-demand billing with additional lag stemming from weekends and holidays.

(b) Lag based on a meter being read 12 times annually and service being rendered evenly throughout the meter reading period.

Pennsylvania Power Company
Cash Working Capital
Other Operating Revenue
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	FERC Account	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)		(Lead) / Lag Dollars (6) = (4) * (5)
1	Sales for Resale	447	$ -	$ -	$ -	$ -	35.2	(a)	$ -
2	Late Payment Charges	450	1,291	-	-	1,291	56.1	(b)	72,425
3	Misc. Service Revenues	451	194	-	-	194	56.1	(b)	10,883
4	Pole Rentals - Telecom	454	89	-	-	89	187.9	(c)	16,723
5	Pole Rentals - Cable	454	33	-	-	33	67.4	(c)	2,224
6	Assoc Co's	454	1,316	-	-	1,316	15.2	(d)	20,003
7	Other	454	-	-	-	-	35.2	(a)	-
8	Other Revenue	456	-	6	-	6	35.2	(a)	211
9	NITS Contra Revenue	456	-	-	-	-	35.2	(a)	-
10	Wheeling Revenues	456	-	89	-	89	35.2	(a)	3,133
11	Total Other Revenues		$ 2,923	$ 95	$ -	$ 3,018	41.6	(e)	$ 125,602

Footnotes

(a) Lag based on service midpoint (15.2) + the PJM settlement date, the first common banking day after the 19th of the month (20).

(b) Lag conservatively based on electric revenue lag, calculated on Page 3.

(c) Lag based on the weighted average of the five largest customers.

(d) Lag based on midpoint of service period (15.2). Intercompany accounting transactions occur on the last day of the service period. Service Company bills and the Company pays on the same day.

(e) Line 11, Column 6 / Line 11, Column 4

Pennsylvania Power Company
Cash Working Capital
Energy Costs
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)	
1	Energy Costs	$ -	$ 76,623	$ 831	$ 77,454	35.2	(a)
2	Total Energy Costs	$ -	$ 76,623	$ 831	$ 77,454	35.2	

Footnotes

(a) Lag based on service midpoint (15.2) + Supplier Master Agreement payment terms, the first common banking day after the 19th of the month (20).

Pennsylvania Power Company
Cash Working Capital
Payroll
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)		(Lead) / Lag Dollars (6) = (4) * (5)
1	Bi-weekly Payroll	$ 1,510	$ -	$ -	$ 1,510	12.0	(a)	18,120
2	Weekly Payroll	4,153	-	-	4,153	8.5	(b)	35,301
3	Payroll - Adjustments	-	-	-	-	9.4	(c)	-
4	Payroll Taxes	1,332	-	-	1,332	11.4	(d)	15,185
5	Incentive Compensation	227	-	-	227	242.5	(e)	55,048
6	Total Payroll	$ 7,222	$ -	$ -	$ 7,222	17.1	(f)	$ 123,654

Pennsylvania Power Company
Cash Working Capital
Payroll Expense Lag Days - Footnotes
For the 12 Months Ending April 30, 2016

Footnotes	Line No.	Description		Payment Weighting Factor	Payment Weighting Ratio	Days Until Payment After Service Period	Midpoint of Service Period	(Lead) / Lag Payment Days	Weighted (Lead) / Lag Days
				(1)	(2)	(3)	(4)	(5) = (3) + (4)	(6) = (5) * (2)
(a)		**BI-WEEKLY PAYROLL (Saturday - Friday)** - Pay date is Friday after the end of the pay period. Direct deposit amounts are withdrawn from the Company's bank account on Wednesday.							
	1	Direct Deposit			100%	5.0	7.0	12.0	12.0
	2	Paper Check			0%	7.0	7.0	14.0	0.0
	3	Total			100%				12.0
(b)		**WEEKLY PAYROLL (Saturday - Friday)** - Pay date is Friday after the end of the pay period. Direct deposit amounts are withdrawn from the Company's bank account on Wednesday.							
	4	Direct Deposit			100%	5.0	3.5	8.5	8.5
	5	Paper Check			0%	7.0	3.5	10.5	0.0
	6	Total			100%				8.5
(c)		**PAYROLL - ADJUSTMENTS** - weighted on bi-weekly and weekly payroll expense using the total lag days calculated in (a) and (b) above.							
	7	Bi-weekly Payroll weighted lag days	$	1,510	27%			12.0	3.2
	8	Weekly Payroll weighted lag days		4,153	73%			8.5	6.2
	9	Total	$	5,663	100%				9.4
(d)		**PAYROLL TAXES** - ADP withdraws Tax Expense from the Company's bank account on payday; Weighted on bi-weekly and weekly payroll expense using the paper check lag days calculated in (a) and (b) above.							
	10	Bi-weekly Payday			27%			14.0	3.7
	11	Weekly Payday			73%			10.5	7.7
	12	Total			100%				11.4
(e)		**INCENTIVE COMPENSATION** - paid for the entire year in early March of the following year; Assume March 1.							
	13	Payment			100%	60.0	182.5		242.5

(f) Line 6, Column 6 / Line 6, Column 4

Pennsylvania Power Company
Cash Working Capital
Employee Benefits
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)		(Lead) / Lag Dollars (6) = (4) * (5)
1	Medical Insurance	$ 590	$ -	$ -	$ 590	42.5	(a)	$ 25,075
2	Life Insurance	9	-	-	9	30.2	(b)	272
3	Savings Plan Match	182	-	-	182	11.4	(c)	2,075
4	Worker's Compensation / LTD	44	-	-	44	14.0	(d)	616
5	OPEB - Medical/Health Insurance	47	-	-	47	0.0	(e)	-
6	Other Employee Benefits	504	-	-	504	45.2	(f)	22,781
7	Total Employee Benefits	$ 1,376	$ -	$ -	$ 1,376	36.9	(g)	$ 50,819

Footnotes

(a) Lag based on a typical claim processing time of 1.4 months.

(b) Lag based on premiums being paid on the 15th of the next month for the current month coverage.

(c) See the calculation associated with Footnote (d) - Payroll Taxes on Page 7. The Savings Plan Match is also paid on payday.

(d) Lag based on premiums and claims being paid bi-weekly on a Friday for the prior weeks.

(e) Lag based on non-cash items being assigned a zero lag.

(f) Lag based on Accounts Payable defaulting to a 30 day lag if payment terms are not established + 15.2 midpoint

(g) Line 7, Column 6 / Line 7, Column 4

Pennsylvania Power Company
Cash Working Capital
Service Company O&M Allocation and Other O&M
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)		(Lead) / Lag Dollars (6) = (4) * (5)
	SERVICE COMPANY O&M ALLOCATION							
1	Service Company Labor Allocation	$ 3,584	$ -	$ -	$ 3,584	15.2	(a)	$ 54,477
2	Service Company OTL Allocation	4,773	-	-	4,773	15.2	(a)	72,550
3	Total Service Company O&M (Lines 1 + 2)	$ 8,357	$ -	$ -	$ 8,357			$ 127,027
	OTHER O&M							
4	Other O&M - Distribution	$ 7,614	$ -	$ -	$ 7,614	45.2	(b)	$ 344,153
5	Other O&M - Riders	-	-	22,878	22,878	28.7	(c)	656,599
6	Uncollectibles	579	-	1,031	1,610	0.0	(d)	-
7	Total Other O&M (Lines 4 + 5 + 6)	$ 8,193	$ -	$ 23,909	$ 32,102	31.2	(e)	$ 1,000,752

Footnotes

(a) Lag based on midpoint of service period (15.2). Intercompany accounting transactions occur on the last day of the service period. Service Company bills and the Company pays on the same day.

(b) Accounts Payable defaults to a 30 day lag.

(c) Lag calculated on Page 10

(d) Lag based on non-cash items being assigned a zero lag.

(e) Line 7, Column 6 / Line 7, Column 4

Pennsylvania Power Company
Cash Working Capital
Other O&M - Riders Lag Days
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional USC	EEC	SMT	DSS	PAPUC Total	(Lead) / Lag Days		(Lead) / Lag Dollars
		(1)	(2)	(3)	(4)	(5)	(6)		(6) = (4) * (5)
	USC (a)								
1	USC - PCAP - Admin	$ 530				$ 530	60.2	(c)	$ 31,906
2	USC - PCAP - Bill Subsidy	4,241				4,241	15.2	(d)	64,463
3	USC - Dollar Energy Fund	35				35	182.5	(e)	6,388
4	USC - Gatekeeper	1				1	15.2	(f)	15
5	USC - CARES	1				1	15.2	(f)	15
6	USC - WARM	2,167				2,167	60.2	(c)	130,453
	EEC (a)								
7	EEC - Program Admin		$ 2,376			2,376	25.2	(g)	59,875
8	EEC - Program Admin		438			438	60.2	(c)	26,368
9	EEC - Marketing		267			267	25.2	(g)	6,728
10	EEC - M&V		255			255	75.2	(h)	19,176
11	EEC - Incentives		3,169			3,169	15.2	(f)	48,169
12	EEC - Labor		167			167	15.2	(f)	2,538
13	EEC - Tracking and Reporting		68			68	25.2	(g)	1,714
14	EEC - Other		93			93	45.2	(i)	4,204
	SMT (b)								
15	SMT - Contractors			$ 778		778	25.2	(g)	19,606
16	SMT - Contractors			1,350		1,350	45.2	(i)	61,020
17	SMT- Labor and Program Admin			3,800		3,800	15.2	(f)	57,760
	DSS (b)								
18	DSS - Non-Market Based Charges				$ 3,902	3,902	35.2	(j)	137,350
19	DSS - Retail Enhancements	-	-	-	55	55	45.2	(i)	2,486
20	Total	$ 6,975	$ 6,833	$ 5,928	$ 3,957	$ 23,693	28.7		$ 680,234

Pennsylvania Power Company
Cash Working Capital
Other O&M - Riders Lag Days - Footnotes
For the 12 Months Ending April 30, 2016

Footnote

(a) Dollar amounts based on the filed 2015 Plan

(b) Dollar amounts based on the 12 months ended 4/30/16, as adjusted

(c) Per interview with internal program manager, billed monthly, net 45 + 15.2 = 60.2 days

(d) Subsidy is applied to a bill monthy, assume midpoint of the service period

(e) Per interview with internal program manager, billed annually, due immediately. 365 days / 2 = 182.5 days

(f) See the calculation associated with Footnote (a) on Page 9

(g) Per interview with internal program manager, billed monthly, net 10 + 15.2 = 25.2 days

(h) Per interview with internal program manager, billed monthly, net 60 + 15.2 = 75.2

(i) See the calculation associated with Footnote (b) on Page 9

(j) See the calculation associated with Footnote (a) on Page 4.

Pennsylvania Power Company
Cash Working Capital
Taxes
For the 12 Months Ending April 30, 2016
($000)

Line No.	Description	Normalized PAPUC Jurisdictional Distribution (1)	PTC (2)	Riders (3)	PAPUC Total (4)	(Lead) / Lag Days (5)	
1	Federal Income Tax	$ 14,672	$ (3)	$ (166)	$ 14,503	37.5	(a)
2	Corportate Net Income Tax - PA ("CNI")	4,653	(1)	(52)	4,600	29.8	(b)
3	Property / Real Estate Tax	73	-	-	73	20.0	(c)
4	PA Gross Receipts Tax	5,662	5,032	1,680	12,374	(71.5)	(d)
5	PA Sales and Use Tax	-	-	-	-	36.0	(e)
6	Public Utility Realty Tax ("PURTA")	266	-	-	266	(61.0)	(f)
7	Capital Stock Tax	37	-	-	37	29.8	(b)
8	Total Taxes	$ 25,363	$ 5,028	$ 1,462	$ 31,853		

Pennsylvania Power Company
Cash Working Capital
Taxes Lag Days - Footnotes
For the 12 Months Ending April 30, 2016

Footnote	Line No.	Description	Payment Percentage	Payment Dates	Midpoint of Service Period	(Lead) / Lag Payment Days	Weighted (Lead) / Lag Days
			(1)	(2)	(3)	(4) = (2) - (3)	(5)
(a)		**FEDERAL INCOME TAX**					
	1	First Payment	25%	4/15/13	7/1/13	(77)	(19.3)
	2	Second Payment	25%	6/15/13	7/1/13	(16)	(4.0)
	3	Third Payment	25%	9/15/13	7/1/13	76	19.0
	4	Fourth Payment	25%	12/15/13	7/1/13	167	41.8
	5	Total					37.5
(b)		**CNI AND CAPITAL STOCK TAX**					
	6	First Payment	25%	3/15/13	7/1/13	(108)	(27.0)
	7	Second Payment	25%	6/15/13	7/1/13	(16)	(4.0)
	8	Third Payment	25%	9/15/13	7/1/13	76	19.0
	9	Fourth Payment	25%	12/15/13	7/1/13	167	41.8
	10	Total					29.8
(c)		**PA PROPERTY TAX**					
	11	First Payment	33%	4/30/13	7/1/13	(62)	(20.6)
	1	Second Payment	67%	8/31/13	7/1/13	61	40.7
	2	Total					20.0
(d)		**PA GROSS RECEIPTS TAX**					
	3	First Payment	90%	3/15/13	7/1/13	(108)	(97.2)
	4	Second Payment	10%	3/15/14	7/1/13	257	25.7
	5	Total					(71.5)
(e)		**PA SALES AND USE TAX**					
	6	Payment	100%	8/20/13	7/15/13	36	36.0
		PURTA					
(f)	7	Payment	100%	5/1/13	7/1/13	(61)	(61.0)

Pennsylvania Power Company
Cash Working Capital
Calculation of 13 Month Average Prepayments
For the 12 Months Ended March 31, 2014
($000)

Line No.	Year	Month	Prepaid Commission Assessment	Prepaid Property and Liability Insurance	Prepaid EEI Dues Assessment	Other Prepaid	Total
			(1)	(2)	(3)	(4)	(5)
1	2013	March	$ 144	$ 45	$ 27	$ 72	$ 288
2		April	96	35	24	(1)	154
3		May	48	25	21	34	128
4		June	-	142	18	78	238
5		July	-	143	15	95	253
6		August	-	127	12	88	227
7		September	(155)	116	9	135	105
8		October	414	125	6	153	698
9		November	363	111	3	172	649
10		December	311	98	-	191	600
11	2014	January	259	84	31	10	384
12		February	207	70	28	218	523
13		March	155	58	25	238	476
14		Total	$ 1,842	$ 1,179	$ 219	$ 1,483	$ 4,723
15	Thirteen Month Average Balance		$ 142	$ 91	$ 17	$ 114	$ 363
16	Eliminate FERC Jurisdictional (a)			$ -	$ -	$ -	-
17	Amount Allocated to Distrtibution (Line 15 - Line 16)						$ 363

Footnote

(a) 0.00% of the Thirteen Month Average Balance was allocated to Transmission -FERC Jurisdiction based on the allocation factor of Distribution Plant.

Pennsylvania Power Company
Cash Working Capital
Unamortized Cash Pension Contribution Balance

Line No.	Payment Date	O&M Payment Amount	Amortization End Date	Months Remaining at 4/30/2016	Unamortized Balance
		(1)		(2)	(3) = (1) * ((2)/120)
1	9/14/2004	$ 6,560	9/30/2014	-19	$ -
2	12/23/2005	9,531	12/31/2015	-4	-
3	1/5/2007	1,730	1/31/2017	9	130
4	9/2/2009	7,123	9/30/2019	42	2,493
5	3/30/2011	5,003	3/31/2021	60	2,502
		$ 29,947			$ 5,125