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August 1, 2019

VIA ELECTRONIC FILING

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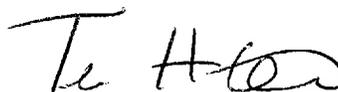
Re: *Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of their Smart Meter Deployment Plans;*
Docket Nos. M-2013-2341990, M-2013-2341991, M-2013-2341993 and M-2013-2341994

Dear Secretary Chiavetta:

Enclosed for filing on behalf of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company is the 2019 Smart Meter Technology Procurement and Installation Plan Annual Progress Report for the twelve-month period ended June 30, 2019 in the above-referenced proceeding.

Please contact me with any questions you may have. Copies of this filing have been served as indicated in the attached certificate of service.

Very truly yours,



Teresa K. Harrold

kbw
Enclosures

c: The Honorable Elizabeth H. Barnes (via first class mail)
The Honorable Katrina L. Dunderdale (via first class mail)
The Honorable Dennis J. Buckley (via first class mail)
Bureau of Audits (via first class mail)
Bureau of Technical Utility Services, Reliability and Emergency Preparedness
Section (via first class mail)
Certificate of Service

**Before the
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Metropolitan Edison Company
Pennsylvania Electric Company
Pennsylvania Power Company
West Penn Power Company**

**Docket No. M-2013-2341990
Docket No. M-2013-2341994
Docket No. M-2013-2341993
Docket No. M-2013-2341991**

**2019
ANNUAL PROGRESS REPORT
SMART METER TECHNOLOGY PROCUREMENT
AND INSTALLATION PLAN
(For the Twelve-Months Ended June 30, 2019)**

August 1, 2019

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I. INTRODUCTION

Pursuant to the Implementation Order entered by the Pennsylvania Public Utility Commission (“Commission”) on June 24, 2009, at Docket No. M-2009-2092655,¹ Metropolitan Edison Company (“Met-Ed” or “ME”), Pennsylvania Electric Company (“Penelec” or “PN”), Pennsylvania Power Company (“Penn Power” or “PP”) and West Penn Power Company (“West Penn” or “WPP”) (collectively, the “Companies”) submit this smart meter progress report for the twelve-months ended June 30, 2019 (“Current Reporting Period”). This report provides an update on events that have taken place since the Companies’ last report submitted on August 1, 2018, at Docket Nos. M-2013-2341990, M-2013-2341991, M-2013-2341993 and M-2013-2341994, which covered the twelve-months ended June 30, 2018 (“Prior Reporting Period”).

II. DEPLOYMENT

The project has been, and continues to be, on schedule and on budget. As has been reported in the past, the Companies’ Revised Deployment Plan² (“Approved Deployment Plan”) called for a Solution Validation Stage, which entailed the complete build out of an end-to-end smart meter system throughout Penn Power’s service territory. Once that was completed, the plan called for full scale deployment in all of the other Companies’ service territories (“Full Scale Deployment Stage”). Consistent with the Approved Deployment Plan, the eighteen-month Solution Validation Stage was successfully completed in Penn Power’s service territory on December 31, 2015. Full scale deployment of smart meters in the other Companies’ service territories began in early 2016 and is in the process of winding down as the goal of 98.5% saturation of smart meters deployed was achieved on May 15, 2019, thus achieving the first of two major milestones in the Full Scale Deployment Stage approximately 45 days ahead of schedule. As of June 30, 2019, approximately 99% of all smart meters (2.063 million) have been deployed with 1.839 million already bill certified. Consistent with the Approved Deployment Plan, the Companies expect to achieve the second milestone – 2.054 million smart meters (98.5%) being billing enabled – no later than September 30, 2019. Thereafter, the Companies will focus on addressing the remaining 15,000 smart meters which represent “difficult to access”, “communication challenged” and /or “complex installation” locations (hereinafter collectively “Nonstandard Installations”) that may require non-standard remote meter reading solutions or other non-standard work to be done. The Companies currently anticipate that these remaining meters will be deployed no later than December 31, 2022, consistent with the timeline set forth in the Approved Deployment Plan.

At the end of the Prior Reporting Period, a total of 1.65 million meters had been installed. During the Current Reporting Period, the Companies installed the remaining 413,000 “standard installation” meters. Below is a summary of installation and bill certification (“Bill Cert”) statistics as of June 30, 2019:

¹ *In re Smart Meter Procurement and Installation*, Docket No. M-2009-2092655 (Order entered June 24, 2009) (“Implementation Order”), p. 14.

² The Commission approved this plan in the case of the *Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company For Approval of Their Smart Meter Deployment Plan*, Docket Nos. M-2013-2341990, M-2013-2341991, M-2013-2341993, and M-2013-2341994 (Order entered June 25, 2014).

<u>Company</u>	<u>Meters (000s)</u>	<u>CGRs</u>	<u>REs</u>	<u>Bill Cert (000s)</u>
Met-Ed	575	330	318	519
Penelec	595	632	3,465	576
Penn Power	169	111	511	169
West Penn	<u>724</u>	<u>534</u>	<u>2,631</u>	<u>575</u>
Total	2,063	1,607	6,925	1,839

For a summary of additional smart meter metrics³ and cumulative costs as of June 30, 2019, see attached Exhibit A.

In essence, the Full Scale Deployment Stage has been completed on time and on budget.⁴ All installed smart meter systems are functioning properly, with communication and actual read rates meeting expectations.⁵ The end-to-end solution meets all fifteen functionality requirements established either through Act 129 or the Commission's Implementation Order, with all but the net metering capabilities being fully implemented as of June 30, 2019. (The Companies expect such net metering capabilities to be fully functional during the third quarter of 2019).

Current Reporting Period Activities:

During the Current Reporting Period, the Companies continued to address the disputed installations and 60 Amp round meter socket repair issues that were both discussed in the Companies' last annual progress report. They also addressed standard IT upgrade issues. Below is an update on the progress made in each of these areas:

Disputed Installations: After the completion of a successful pilot study in Penn Power's service territory, the Companies implemented an effective, proven procedure for resolving disputed installations system-wide during Full Scale Deployment in each of the Companies' service territories. With 2.063 million smart meters installed, there have been approximately 7,725 disputed installations since project inception, with 94% successfully resolved with the customer accepting a smart meter. During the Current Reporting Period there were 104 formal complaints and 55 informal complaints filed with the Commission, the number and nature of which that were opened / closed is set forth in attached Exhibit A.

60 Amp Round Meter Socket Repairs: Prior to Full Scale Deployment, the Companies estimated that approximately 75,000 60 Amp round meter sockets were installed throughout the Companies' service territories and were in need of repair at an estimated cost of approximately \$52.5 million. The costs for this repair work exceeded the scope contemplated and the costs

³ On April 9, 2015, the Commission approved a Joint Petition for Partial Settlement in each of the Companies' respective base rate cases. See *Pennsylvania Public Utility Commission v. Metropolitan Edison Company*, Docket No. R-2014-2428745 (Order entered April 9, 2015); *Pennsylvania Public Utility Commission v. Pennsylvania Electric Company*, Docket No. R-2014-2428743 (Order entered April 9, 2015); *Pennsylvania Public Utility Commission v. Pennsylvania Power Company*, Docket No. R-2014-2428744 (Order entered April 9, 2015); and *Pennsylvania Public Utility Commission v. West Penn Power Company*, Docket No. R-2014-2428742 (Order entered April 9, 2015) (hereinafter collectively, "2014 Rate Cases"). As part of this settlement, the Companies agreed to provide certain information related to smart meter deployment, which is also included in Exhibit A and denoted by an asterisk (*).

⁴ Fine tuning of the mesh network is in the final stages of completion, with 448 out of 7,373 Range Extenders still to be deployed.

⁵ Smart Meter one-day read rates are approximately 99.3%; and three-day read rates are approximately 99.7%.

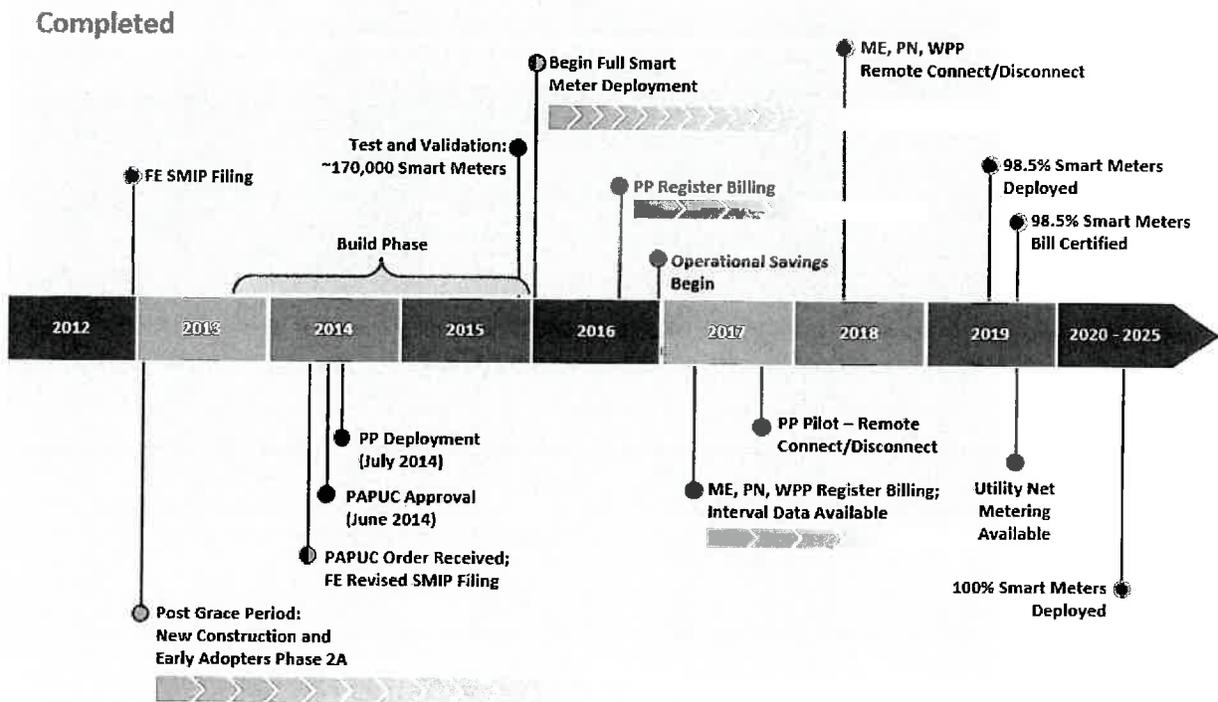
originally estimated for maintenance/repair work included in the Approved Deployment Plan. The Companies informed the Commission and customer advocates of this issue and, on June 27, 2016, the Companies submitted a letter to the Secretary of the Commission providing public notice of the same to all interested parties. No party filed comments or expressed opposition in response to the Companies' letter.

As of June 30, 2019, approximately 52,685 round meter sockets have been repaired and an additional 30,023 round meter sockets have been identified for future repair. It is anticipated that all remaining round meter sockets will be repaired by the end of 2020.

Upgrades/Enhancements to the End-to-End Smart Meter Infrastructure: The Companies continue to enhance and maintain the end-to-end smart meter IT infrastructure through system upgrades, software update installations, and equipment upgrades and replacements. These actions are necessary in order to comply with vendor support agreements and to ensure that cyber security is up to date and the infrastructure meets operational service level agreement requirements.

Future Deployment:

Inasmuch as the Full Scale Deployment Stage is virtually complete, the Companies will focus their future efforts on (i) addressing the Nonstandard Installations; and (ii) enabling net metering functionality consistent with the timeline set forth below:



III. REGULATORY

Consistent with the Commission's directive to the Companies to work with stakeholder groups during smart meter deployment, the Companies held a number of meetings throughout the life of the project. The Commission also directed the Companies to report on multi-jurisdictional smart meter related costs. The status of both during the Current Reporting Period are discussed below:

Collaboration:

Stakeholder Meetings: The Companies hosted stakeholder meetings in Harrisburg Pennsylvania, on November 15, 2018 and April 18, 2019. These meetings provided timely updates on the status of the Companies' implementation of the Approved Deployment Plan. In addition to providing an update on deployment and the anticipated smart meter deployment schedule, the Companies also summarized the status of various other issues, including billing enablement, customer and supplier portals, disputed installations, round socket repairs, voluntary remote connections/disconnections, customer privacy and cyber security. Stakeholders were also given the opportunity to raise any concerns or questions and make any suggestions during these sessions.

Other: In addition to these formal meetings, the Companies continue to maintain an open door policy to answer any questions or address any specific concerns raised by interested parties.

Cost Allocation of SMIP Costs Among FirstEnergy Utilities In Other States:

In its March 6, 2014 Order, the Commission ordered the Companies "to provide a report with their next SMT-C filing that identifies expenditures on all components of their [Approved Deployment] Plan that have the potential to benefit their sister utilities in other states when they begin deploying smart meters and that describes the method through which the Companies will receive credit from FirstEnergy Service Company for those expenditures."⁶ The Commission further ordered "that to the extent any system upgrades are currently being utilized by the Companies' sister utilities, the Companies are directed to properly allocate those costs to the sister utilities."⁷

As of June 30, 2019, none of the FirstEnergy Companies' have been approved to proceed with a smart meter project and, therefore, no Pennsylvania smart meter related costs are being allocated to those utilities.⁸ If and when smart meter deployment outside of Pennsylvania occurs, the Companies, as part of their SMT-C filing, will provide a report that identifies expenditures on all components of their Approved Deployment Plan that have the potential to benefit their sister

⁶ *Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company For Approval of Their Smart Meter Deployment Plan*, Docket Nos. M-2013-2341990, M-2013-2341991, M-2013-2341993, and M-2013-2341994, p. 47 (Final Order entered March 6, 2014).

⁷ *Id.*

⁸ On February 28, 2016, the Ohio FirstEnergy Companies filed a proposed Grid Modernization business plan with the Public Utility Commission of Ohio in Case No. 16-0481-EL-UNC. This proposed plan included a timeline for the Companies to achieve full smart meter implementation with data and transfer capabilities and examples of grid modernization initiatives. On November 9, 2018, the Ohio FirstEnergy Companies filed a settlement, which was approved by the Ohio Commission on July 17, 2019. *In re Filing by Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for a Grid Modernization Plan, et al*, Case Nos. 16-481-EL-UNC, 17-2436-EL-UNC, 18-1604-EL-UNC, 18-1656-EL-ATA, Opinion and Order (PUCO July 17, 2019).

utilities in other states, and will propose a method by which said costs will be shared by those other utilities.

Other Regulatory - Remote Connect/Disconnect (“RCD”):

After discussions with interested parties, the Companies implemented Remote Connect and Disconnect procedures for “move-in”/“move out” scenarios, and for reconnections. These actions continue to provide significantly improved customer response times and have further enhanced employee safety as additional meters become RCD certified. The Companies continue to look for additional opportunities to leverage this smart meter feature in an effort to further reduce costs and further enhance customer service.

IV. COMMUNICATIONS

During the Current Reporting Period, communications, training, and workshops were held to finalize the capabilities that will support smart meter operations throughout deployment and into steady state activities. The Companies continued to utilize the “90-60-30” day communication strategy as set forth in their approved Communication Plan.

The Companies continue to monitor smart meter related customer interactions, which to date include over 3.1 million direct mail pieces (letters or brochures), approximately 220,000 customer website visits, and approximately 26,000 customer calls to the call center. (Additional customer-related metrics are included in Exhibit A.) The Companies also enhanced portal functionality that allows all customers with bill certified meters to view interval usage through the Companies’ portal.

V. FINANCIAL ANALYSIS / COST RECOVERY

In accordance with Act 129 and subsequent Commission Orders, the Companies, with the assistance of outside consultants, developed a detailed smart meter financial analysis model (“Financial Model”) to estimate and analyze the costs and operational cost savings associated with the smart meter program. The Program Management Office ensures that this Financial Model is being followed and updated to reflect the most current project-related information.

Cost Recovery Overview:

As a result of the Commission orders in the 2014 and 2016 Rate Cases,⁹ the Companies are recovering the smart meter revenue requirements through base rates. The Commission-approved settlements allow the Companies to recover through the Smart Meter Technologies Charge (“SMT-C”) Riders any costs incurred that exceed those in base rates. Smart meter related costs began exceeding the revenue requirement in base rates for all four operating companies in June 2019. The incremental amount is being booked and will be recovered through the SMT-C Rider in the next SMT-C Computation Year (January 1 through December 31, 2020) in accordance with the terms and conditions of the Companies’ tariffs.

⁹ The Commission approved partial settlements on January 19, 2017 in *Pennsylvania Public Utility Commission v. Metropolitan Edison Company, et al*, Docket Nos. R-2016-2537349 (Met-Ed), R-2016-2537352 (Penelec), R-2016-2537355 (Penn Power), and R-2016-2537359 (West Penn) (hereinafter collectively, “2016 Rate Cases”).

As a result of the Tax Cuts and Jobs Act of 2018 (“TCJA”), the Companies were required by the Commission to establish a TCJA Surcharge Rider to refund to customers the reduction in the corporate federal tax rates from 35% to 21%. As of July 1, 2018, the Companies are refunding a Commission approved percentage of distribution rates to customers monthly. Since the smart meter costs are also recovered through distribution rates, the Companies deem it appropriate that the smart meter revenue requirements as stated in the 2016 Rate Cases be reduced by the same percentages and requested the same from the Commission. This request is currently pending before the Commission.

Benefits Realization:

For purposes of measuring savings related to the installation of smart meters, baselines of pre-existing cost levels were identified in the 2014 and 2016 Rate Cases for the following categories: (1) Meter Reading; (2) Meter Services; (3) Back Office; (4) Contact Center; (5) Reduction of Theft of Service; (6) Revenue Enhancements; (7) Avoided Capital Costs; (8) Distribution Operations; and (9) Load Research.¹⁰ When actual costs are less than the established baselines, those savings flow through the Companies’ SMT-C Rider rates.

As of June 30, 2019, the Companies have captured approximately \$39 million in cumulative operational savings. For the 12 months ending June 30, 2019, the Companies recognized incremental savings of almost \$14 million, most of which is attributable to meter reading efficiencies. Other savings occurred in the back office as a result of fewer billing issues needing to be resolved. Below is a summary of the incremental savings realized during the Current Reporting Period:

	Penn Power (\$ Millions)	Met-Ed (\$ Millions)	Penelec (\$ Millions)	West Penn (\$ Millions)	Total (\$ Millions)
Meter Reading	1.2	4.5	3.9	3.7	13.3
Back Office	0.1	0.1	0.2	0.2	0.6
Total	1.3	4.6	4.1	3.9	13.9

On August 1, 2019, the Companies are also filing their respective SMT-C Rider rates and tariff supplements for Commission approval, which are proposed to be effective on January 1, 2020 consistent with the terms and conditions of the SMT-C Riders. These savings are reflected in those rates.

VI. LOOK AHEAD

With the Full Scale Deployment Stage virtually complete, the Companies will begin to transition from “deployment” mode to “steady state” operational mode. This will entail: (i) fine tuning the back office systems and updating portions of said systems consistent with the Approved Deployment Plan; (ii) completing the Nonstandard Installations that will include the development of cost effective communications solutions for certain installations; (iii) resolving any final disputed installations consistent with both the Companies’ and Commission’s policies; (iv) addressing any remaining customer service entrance issues and repairing the remaining 60 Amp round meter sockets; (v) expanding remote connect/disconnect procedures; and (vi) finalizing the systems and processes necessary for both standard and virtual net metering billing capabilities.

¹⁰ The Companies’ established baselines for various categories of potential savings in the 2014 Rate Cases. These baselines were updated in the 2016 Rate Cases.

VII. CONCLUSION

In sum, the Companies have completed the implementation of the smart meter plan consistent with the Approved Deployment Plan. The number of meters installed, as well as the deployment costs and benefits to date, generally comport with the overall projections included in the Approved Deployment Plan.¹¹ The Companies have not encountered any significant problems with any of the components selected as part of their smart meter solution and the end-to-end smart meter system is operating as expected.

Met-Ed, Penelec, Penn Power, and West Penn thank the Commission for the opportunity to provide a status update on their Smart Meter Implementation Plan and would be pleased to answer any questions the Commission or its Staff may have.

¹¹ A limited exception relates to the Companies' 60 amp meter socket repairs that were discussed earlier in the report.

EXHIBIT A

Smart Meter Costs and Metrics Cumulative As Of June 30, 2019

SMART METER COSTS:

	Capital (\$ Millions)	O&M (\$ Millions)	Total (\$ Millions)
IT Hardware/Software	68.8	25.2	94.0
IT Labor/Contractor	67.0	22.3	89.3
Bus. Unit Labor/Contractor	0.1	140.2	140.3
Bus. Unit Other	1.5	26.6	28.1
Meter Installation/Network Install	<u>462.4</u>	<u>11.7</u>	<u>474.1</u>
Total	599.8	226.0	825.8

SMART METER DEPLOYMENT METRICS:

Smart Meters Deployed (000s)*	2,063
Smart Meters Deployed and Communicating (000s)*	2,044
Smart Meters Certified for Billing (000s)	1,839
Smart Meters Deployed for New Construction* (000s)	63
Early Adopters*	0
Customers With Home Area Network (HAN) Devices*	65
CGRs Installed	1,607
Range Extenders Installed	6,925
Formal PUC Complaints Open/Closed (Current Reporting Period only)*	
Installation	88/12
AMI Functionality or Accuracy	4 / 0
HAN Related	0 / 0
Other	0 / 0
Informal Customer Complaints Open/Closed (Current Reporting Period only)*	
Installation	17/33
AMI Functionality or Accuracy	1/4
HAN Related	0 / 0
Other	0 / 0
Estimated Reduction in Greenhouse Gas Emissions*	705 MT CO ₂ e
Voltage/Var Controls (Number/Percentage)* ¹²	0 / 0%

* Denotes Metrics Reported Pursuant to Agreement in 2014 Rate Cases.

¹² This metric reflects the total number and percentage of distribution lines utilizing sensing from AMI meters as part of the Companies' voltage regulation scheme.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Joint Petition of Metropolitan Edison	:	Docket No. M-2013-2341990
Company, Pennsylvania Electric Company,	:	M-2013-2341991
Pennsylvania Power Company and West	:	M-2013-2341993
Penn Power Company for Approval of	:	M-2013-2341994
their Smart Meter Deployment Plans	:	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing document upon the individuals listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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