

COMMONWEALTH OF PENNSYLVANIA



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May 24, 2013

Rosemary Chiavetta, Secretary
PA Public Utility Commission
Commonwealth Keystone Bldg.
400 North Street
Harrisburg, PA 17120

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 Plan
Docket Nos. M-2013-2341990, M-2013-2341991,
M-2013-2341993, M-2013-2341994

Dear Secretary Chiavetta:

Enclosed please find the Office of Consumer Advocate's Main Brief in the above-referenced proceeding.

Copies have been served upon all parties of record as shown on the attached Certificate of Service.

Sincerely yours,

A handwritten signature in cursive script that reads "Candis A. Tunilo".

Candis A. Tunilo
Assistant Consumer Advocate
PA Attorney I.D. # 89891

Enclosures
*169701

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

JOINT PETITION OF METROPOLITAN : DOCKET NO. M-2013-2341990
EDISON COMPANY, PENNSYLVANIA : DOCKET NO. M-2013-2341991
ELECTRIC COMPANY, PENNSYLVANIA : DOCKET NO. M-2013-2341993
POWER COMPANY AND WEST PENN : DOCKET NO. M-2013-2341994
POWER COMPANY FOR APPROVAL OF :
THEIR SMART METER DEPLOYMENT :

MAIN BRIEF OF THE
OFFICE OF CONSUMER ADVOCATE

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TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	Act 129 and the Implementation Order	1
B.	Procedural History	3
C.	Overview of Smart Meter Deployment Plan	4
II.	SUMMARY OF ARGUMENT	6
III.	DISCUSSION	10
A.	Plan Cost Estimates	10
1.	The Companies Have Not Performed A Proper Benchmarking Analysis Of Plan Costs To Determine If Their Deployment Costs Are Reasonable	10
2.	The Companies Have Not Appropriately Addressed Cross-Jurisdictional Allocation of Plan Costs Among Their Sister Utilities In Other States	14
3.	The Companies Improperly Allocated Joint Plan Costs	16
B.	Plan Savings Estimates	17
1.	The Companies Have Not Adequately Identified Potential Savings From Smart Meter Deployment	17
2.	The Companies Have Proposed Improper Baselines for Calculating Savings	20
C.	Communications Plan	23
1.	Overview	23
2.	Early Education About The New Functionalities of Smart Meters	25
3.	Safety Educational Materials	27
4.	Customer Privacy	29
i.	Introduction	29
ii.	Principles for Release of Smart Meter Information	30
D.	Remote Disconnection	32
1.	Introduction	32
2.	Voluntary Remote Disconnection For Move-In/Move-Out	32
3.	Involuntary Termination For Non-Payment	33
E.	Cyber-Security	34
F.	West Penn CIS Costs	35

G. Legacy Meters	39
IV. CONCLUSION.....	42

TABLE OF CITATIONS

Cases

<u>Barasch v. Pa. PUC</u> , 516 Pa. 142, 532 A.2d 325 (1987).....	38
<u>Duquesne Light Co. v. Barasch</u> , 488 U.S. 299 (1989).....	38

Administrative Decisions

<u>Joint Application of West Penn Power Company d/b/a Allegheny Power, Trans-Allegheny Interstate Line Company and FirstEnergy Corp. for a Certificate of Public Convenience under Section 1102(a)(3) of the Public Utility Code approving a Change of Control of West Penn Power Company and Trans-Allegheny Interstate Line Company</u> , Docket Nos. A-2010-2176520, A-2010-2176732, Order (March 8, 2011).....	38
<u>Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Approval of Smart Meter Technology Procurement and Installation Plan</u> , Docket Nos. M-2009-2123950 <i>et al.</i> , Order (June 9, 2010).....	2
<u>Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company For Approval of Their Default Service Programs</u> , Docket Nos. P-2011-2273650, P-2011-2273668, P-2011-2273669, and P-2011-2273670.....	25
<u>Petition of West Penn Power Company for Expedited Approval of its Smart Meter Technology Procurement and Installation Plan</u> , Docket No. M-2009-2123951, Settlement (March 9, 2011).....	2, 18, 36
<u>Re: Smart Meter Procurement and Installation</u> , Docket No. M-2009-2092655, Implementation Order (June 24, 2009).....	<i>passim</i>

Statutes & Regulations

66 Pa. C.S. § 315(a).....	10
66 Pa.C.S. § 2807(f).....	1
66 Pa.C.S. § 2807(f)(2).....	1
66 Pa. C.S. § 2807(f)(1)-(f)(3).....	4
66 Pa. C.S. § 2807(f)(7).....	1, 19, 20

Miscellaneous

43 Pa. B. 419-203

I. INTRODUCTION

A. Act 129 and the Implementation Order.

On November 14, 2008, Act 129 of 2008 (Act 129) became effective and among other things, contained a program requiring Electric Distribution Companies (EDCs) with at least 100,000 customers to present a Smart Meter Technology Procurement and Installation Plan (SMIP) to the Commission for approval. 66 Pa.C.S. § 2807(f). Specifically, Section 2807(f)(2) states:

(2) [EDCs] shall furnish smart meter technology as follows:

- (i) Upon request from a customer that agrees to pay the cost of the smart meter at the time of the request.
- (ii) In new building construction.
- (iii) In accordance with a depreciation schedule not to exceed 15 years.

66 Pa.C.S. § 2807(f)(2).

Act 129 permits the recovery of “reasonable and prudent costs of providing smart meter technology.” 66 Pa. C.S. § 2807(f)(7). The reasonable and prudent costs include annual depreciation and capital costs over the life of the smart meter technology plus the cost of any system upgrades required to enable the use of the smart meter technology incurred after November 14, 2008, less operating and capital cost savings realized from the installation and use of the technology. Id. EDCs may recover smart meter technology costs (1) through base rates, by deferring such costs to a future base rate case or (2) on a full and current basis through a reconcilable rider under Section 1307. Id.

On June 24, 2009, the Commission entered an order, *inter alia*, detailing the standards and guidelines for implementing the smart meter requirements of Act 129. See gen’ly Re: Smart Meter Procurement and Installation, Docket No. M-2009-2092655, Implementation Order (June 24, 2009) (Implementation Order). In the Implementation Order, the Commission permitted a

thirty-month grace period to give each EDC the opportunity to assess its needs, select technology, secure vendors, train personnel, install and test support equipment and establish a detailed meter deployment schedule consistent with the requirements of Act 129. Implementation Order at 9. The grace period commenced upon approval of the EDC's SMIP filed with the Commission in mid-2009. Id.

Pursuant to Act 129 and the Public Utility Commission's Implementation Order, on August 14, 2009, Metropolitan Edison Company (Met-Ed), Pennsylvania Electric Company (Penelec), and Pennsylvania Power Company (Penn Power) (collectively, FirstEnergy Companies) filed their Joint Smart Meter Implementation Plan (2009 SMIP). By Order entered June 9, 2010, the Commission approved the 2009 SMIP. As part of the Commission's approval of the 2009 SMIP, the Commission noted that the Companies expected to file their full Deployment Plan by April 2012.¹ Also on August 14, 2009, West Penn Power Company (West Penn) separately filed its Smart Meter Implementation Plan (WPP SMIP). On June 30, 2011, the Commission approved the Joint Petition for Settlement of All Issues (WPP Settlement) regarding the WPP SMIP. In the WPP Settlement, West Penn agreed to file its full Deployment Plan as part of its revised WPP SMIP with the Commission no sooner than June 2012.² Subsequently, FirstEnergy and West Penn's corporate parent, Allegheny Energy, Inc. merged, and West Penn is now an operating company of FirstEnergy. Hereinafter, Met-Ed, Penelec, Penn Power and West Penn will be collectively referred to as the FirstEnergy Companies or Companies.

¹ See Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Approval of Smart Meter Technology Procurement and Installation Plan, Docket Nos. M-2009-2123950 *et al.*, Order at 10 (June 9, 2010).

² See Petition of West Penn Power Company for Expedited Approval of its Smart Meter Technology Procurement and Installation Plan, Docket No. M-2009-2123951, Settlement at ¶ 15 (March 9, 2011).

The Implementation Order also required that each EDC file a smart meter deployment plan for Commission approval in 2012. Implementation Order at 14. In developing its deployment plan, each EDC was required to develop a deployment plan that will best meet the needs of its service territory, while at the same time operating in a manner that is both cost and time effective. Id. When seeking approval of its deployment plan, an EDC was required to detail the costs and benefits of its deployment plan. Id. On May 25, 2012, the FirstEnergy Companies jointly filed a request with the Commission to extend the deadline for filing their smart meter deployment plan until the end of 2012. The Commission granted this request by Secretarial Letter dated June 28, 2012. On December 31, 2012, the FirstEnergy Companies filed their Joint Petition and Smart Meter Deployment Plan (Plan) with the Commission for approval.

B. Procedural History.

On December 31, 2012, the FirstEnergy Companies filed their Joint Petition and Plan along with the direct testimony of five witnesses. Notice of the Plan filing was published in the *Pennsylvania Bulletin* on January 19, 2013. See 43 Pa. B. 419-20. Pursuant to the Notice in the *Pennsylvania Bulletin*, the OCA filed its Comments and Answer to the Companies' Joint Petition and Plan on February 8, 2013. The matter was assigned to Administrative Law Judge Elizabeth H. Barnes (ALJ).

On February 19, 2013, a prehearing conference was convened, wherein a litigation schedule was adopted, and the Companies' motion to consolidate was granted. The following parties participated in the prehearing conference: the FirstEnergy Companies; the OCA; the Office of Small Business Advocate (OSBA); Met-Ed Industrial Users Group, Penelec Industrial Customer Alliance, Penn Power Users Group and West Penn Power Industrial Intervenors (collectively the Industrials); and Direct Energy Services, LLC (Direct Energy). Pursuant to the

litigation schedule, the OCA submitted the Direct and Surrebuttal Testimonies of J. Richard Hornby,³ Nancy Brockway⁴ and David J. Effron.⁵ Hearings were held on May 8, 2013, in Harrisburg.

The Office of Consumer Advocate (OCA) submits this Main Brief in accordance with the March 4, 2013, Scheduling Order of ALJ Barnes.

C. Overview of Smart Meter Deployment Plan.

The FirstEnergy Companies' Joint Petition seeks: (1) a finding that the Deployment Plan satisfies the requirements of Act 129, 66 Pa. C.S. § 2807(f)(1)-(f)(3) and the Implementation Order; (2) approval of the Companies' proposed procurement and deployment of approximately 2.1 million smart meters, over 98% of which will be installed by the end of 2019; (3) authorization for the Companies to continue to recover smart meter costs through their Smart Meter Technologies (SMT-C) Riders, including an additional \$5.1 million for previous West Penn Customer Information System (CIS) expenditures; and (4) authorization for the Companies

³ Mr. Hornby is a Senior Consultant at Synapse Energy Economics, Inc., specializing in planning, market structure, ratemaking, and gas supply/fuel procurement in the electric and gas industries for more than 20 years. Mr. Hornby has extensive experience in smart meter deployment plans. He has presented expert testimony on various utility-related topics and provided litigation support in approximately 100 proceedings in over 30 jurisdictions on behalf of state energy offices, consumer advocate offices, marketers and staff of public utility commissions. Mr. Hornby is a former Assistant Deputy Minister of Energy for the Province of Nova Scotia. He has a Master of Science in Energy Technology and Policy from the Massachusetts Institute of Technology (MIT) and a Bachelor of Industrial Engineering from the Technical University of Nova Scotia, now merged with Dalhousie University. Mr. Hornby's curriculum vitae is attached to his Direct Testimony as Exhibit JRH-1.

⁴ Ms. Brockway heads her own consulting firm specializing in the energy and utility industries, with particular attention on the role of regulation in the protection of consumers and the environment. She has over 25 years of experience and is a former Commissioner of the New Hampshire Utilities Commission. She was also formerly a hearing officer and advisor to the Maine Public Utilities Commission and General Counsel of the Massachusetts Department of Public Utilities. Ms. Brockway earned a Juris Doctor degree from Yale Law School and a Bachelor of Arts degree from Smith College. Ms. Brockway's curriculum vitae is attached to her Direct Testimony as Exhibit NB-1.

⁵ Mr. Effron has been a utility regulation consultant for over thirty years, during which he has analyzed numerous electric, gas, telephone and water filings in various jurisdictions. He is a Certified Public Accountant and has a Bachelor degree in Economics (with distinction) from Dartmouth College and a Masters in Business Administration from Columbia University. Mr. Effron's resume is attached to his Direct Testimony as Appendix A.

to create a regulatory asset for their meter stock that will be replaced by smart meters (Legacy Meters). Jt. Petitioners Exh. 1 at 1.

The FirstEnergy Companies' Plan and their accompanying Direct Testimony provide the following:

- A description of the technical aspects of the final Plan including an analysis of:
(a) the current state of meter technology; (b) technology “baselines” for the Companies; and (c) the nature of the Companies' service territories, with respect to the density and terrain.
- A description of the Companies' smart meter deployment timeline.
- A breakdown and explanation of the total Plan costs and anticipated savings.
- A description of the proposal to recover the costs through each of the Companies' respective SMT-C Riders.
- A description of the proposal to recover the costs for the Companies' Legacy Meters including the creation of a regulatory asset for the Legacy Meters.
- A description of the Companies' proposed development of the internal and external communications plan, the change management transition plan, training plan, and the lessons learned from several other utilities in various stages of smart meter deployment.
- A description of the Companies' proposal to develop a cyber-security plan.

These topics and the OCA's recommendations are discussed in more detail in Section III below.

The Companies propose to deploy smart meters in three stages: (1) the Post-Grace Period, which runs from January 1, 2013, until deployment completion; (2) the Solution

Validation Stage, which will begin in late 2013 and end in early 2017; and (3) the Full-Scale Deployment Stage, which is expected to commence in early 2017 and end when the Companies complete installation of all smart meters. See Jt. Petitioners Exh. 1 at 7-8. During the Post-Grace Period, the Companies will deploy smart meters to all new service applicants and to customers that request a smart meter prior to deployment to their neighborhoods. Id. at 7. The Companies will also negotiate the final terms and conditions with their vendors and engage in pre-deployment activities. Id.

During the Solution Validation Stage, the Companies will construct network infrastructure and install up to 60,000 smart meters in Penn Power's service territory for evaluation and trouble-shooting. Jt. Petitioners Exh. 1 at 8. During the Full-Scale Deployment Stage, the Companies will install all remaining smart meters. Id. The Companies anticipate installing approximately 98.5% of their smart meters between January 1, 2014, and December 31, 2019. Id.

The OCA's witnesses identified several concerns with the FirstEnergy Companies' Plan and presented recommendations as discussed in this Main Brief.

II. SUMMARY OF ARGUMENT

The OCA submits that the FirstEnergy Companies' Smart Meter Deployment Plan, as filed, does not meet the requirements of Act 129 and the Commission's Implementation Order and may not result in just and reasonable rates. As such, the Commission should direct the Companies:

- To conduct proper cost benchmarking analyses of the Companies' projected costs with those of other companies that have deployed smart meters to determine if the Companies' projected Plan costs are reasonable and prudent. Such analyses should include the seven

cost categories identified by the Companies in their Plan and sub-categories, if available. Also, the Companies should use a much larger sample size of utilities than the Companies used in the analysis presented in their Plan. The Commission should direct the Companies to complete the analyses within 120 days of the Commission's order in this matter and submit a report with the results of such analyses and any Plan changes stemming from such results in an amended Plan.

- To provide a report with their next SMT-C filing that identifies expenditures on all components of their 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. To the extent any system upgrades are currently being utilized by the Companies' sister utilities, the Commission should direct that those costs be properly allocated to the sister utilities.
- To allocate joint Plan costs based on the annual average number of meters per Company as of June 30th for purposes of calculating each Company's annual SMT-C rider.
- To hire an independent consultant with experience in identifying the potential for savings as a result of smart meter deployment to: (1) conduct a comprehensive savings potential investigation of categories of savings achieved by other companies that have deployed smart meters, including the seven categories identified by Nevada Power described in Section III.B.1. below, and (2) prepare and submit a report to the Commission of his or her findings within 120 days of the Commission's order in this matter. Further, the Commission should direct the Companies to file an amended Plan detailing the potential

categories and estimates of savings to be reflected in the SMT-C identified by such consultant.

- To establish baselines for measuring savings from smart meter deployment as the test year revenue requirements upon which their currently effective distribution rates are based. The Companies should be directed to provide this baseline level information with their next annual SMT-C filing so that operational cost savings can be properly recognized in the SMT-C.
- To hold stakeholder meetings by the first quarter of 2014 in order to discuss the final Communications Plan (Comm Plan) and to file the final Comm Plan with the Commission after the stakeholders have sufficiently reviewed and discussed the Comm Plan in the stakeholder meetings.
- To include information in the Comm Plan related to early education for customers about time-varying prices and the functionalities of smart meters.
- To provide to individual consumers educational safety information including, but not be limited to, the following: (1) that installers for FirstEnergy will have redundant identification, i.e. trucks with logo, uniform, identification badges to enable customers to distinguish between genuine FirstEnergy installers and others; (2) that pictures or descriptions of the uniforms for installers for FirstEnergy will be provided, such that a consumer can readily identify the FirstEnergy installers; (3) that such FirstEnergy installers do not need to enter the household in order to install the smart meters; (4) that customers should check the identification of installers if the customer has any doubt; and (5) that the phone number to call to verify any given installer's identification is provided.

- To work with the stakeholder group to develop a stand-alone Customer Privacy Policy specifically related to the protection of smart meter information before any wide scale deployment of smart meters and to modify the Companies' proposed customer privacy principles for clarity.
- To memorialize in the Commission's Order the Companies' proposal that the Companies do not intend to use involuntary remote termination for non-payment as part of their Plan.
- To first work with the stakeholder group and then file any future proposal to pursue involuntary remote termination for non-payment as an amendment to their Plan with the Commission for review and approval.
- To work with the stakeholder group to develop protocols for voluntary remote disconnection for move in/move out situations.
- To continue to discuss and address cyber-security issues with the stakeholder group on a going-forward basis.
- To report to the Commission on a regular basis regarding the status of cyber-security.
- Not to collect \$5.1 million for expenditures related to West Penn's abandoned Customer Information System (CIS) system.
- To charge the incremental cost of removal to the regulatory asset account containing the remaining cost of the retired Legacy Meters and to amortize the cost over the remaining depreciable lives of the metering assets along with the remaining costs of those retired meters. The cost of removal would then be recovered as part of the next base rate revenue requirement for electric distribution service when the regulatory asset is reflect in rates.

III. DISCUSSION

A. Plan Cost Estimates.

1. The Companies Have Not Performed A Proper Benchmarking Analysis Of Plan Costs To Determine If Their Deployment Costs Are Reasonable.

In the Implementation Order, the Commission provided the following guidance on determining the reasonable and prudent costs that an EDC may recover for deployment of smart meter technology:

In order to determine what these costs are, each EDC will document all costs relating to its smart meter deployment and installation plan. These costs will include both capital and expense items relating to all plan elements, equipment and facilities, as well as an analysis of all related administrative costs. More specifically, these costs would include, but not be limited to, capital expenditures for any equipment and facilities that may be required to implement the smart meter plan, as well as depreciation, operating and maintenance expenses, a return component based on the EDC's weighted cost of capital, and taxes. Administrative costs would include, but not be limited to, incremental costs relating to plan development, cost analysis, measurement and verification, and reporting. In addition, the plan should include cost estimates for testing, upgrades, maintenance and personnel training.

Implementation Order at 29. The Commission went on to state that the EDC has the burden to provide sufficient support to demonstrate that all such costs incurred with respect to its smart meter plan are reasonable and prudent. Id. See also 66 Pa. C.S. § 315(a).

The Companies estimate that the total costs of the Plan will be \$1.258 billion, which are comprised of (1) Meter and Local Area Network; (2) Network and Network Management; (3) Information Technology; (4) Program Management; (5) Systems Integration; (6) Change Management; and (7) Business Staffing Requirements. Jt. Petitioners Exh. 1 at 9; Jt. Petitioners Exh. 2 at 51-56. Of the estimated \$1.258 billion in total costs, approximately \$676 million will be capital costs, and approximately \$582 million will be operation and maintenance expenses. Jt. Petitioners Exh. 2 at 52-53.

According to FirstEnergy witness Fitzpatrick, in order to determine the reasonableness of the Companies estimated Plan costs, the Companies performed a benchmark comparison of costs per meter with comparable smart meter installations of other utilities. FE Companies St. 4 at 9. Mr. Fitzpatrick testified that the Companies' all-in cost per meter is approximately \$375, which is reasonable compared to the estimated costs per meter for: (1) Delmarva of \$343 per meter; (2) PEPCO Maryland of \$327 per meter; and (3) Com Ed of \$357 per meter. Id. at 15-16.

In his Direct Testimony, OCA witness Hornby stated that Mr. Fitzpatrick's comparison of meter costs with three other utilities was too limited and too general. OCA St. 1 at 11. Mr. Hornby noted that there are many more than just three utilities that have received approval to deploy smart meters that the Companies could have included in their cost comparison. Id. Additionally, Mr. Hornby testified:

Mr. Fitzpatrick's comparison is limited to the total cost of each company's AMI plan despite the fact that the total cost of the FirstEnergy Companies' Deployment Plan is composed of seven categories of expenditures: Meter & Local Network, Information Technology, Systems Integration, Network & Network Management, Program Management, Business Staffing Requirements and Communications/Change Management. The comparison Mr. Fitzpatrick presents does not provide a comparison of costs for each of these categories, or even for the two largest categories of Meter & Local Network and Information Technology. Exhibit__ (JRH-5) presents the FirstEnergy Companies' Deployment Plan capital costs per installed meter through 2022 for each of those seven categories, as well as its O&M cost per installed meter through that period for the seven categories.

OCA St. 1 at 11-12. Mr. Hornby, therefore, concluded that without a cost comparison by category, the Companies' cost comparison study did not provide the useful information as to the reasonableness of the estimated expenditures that a properly conducted comparison could have provided. Id. at 12. The OCA submits that it is essential that the Companies conduct proper cost benchmarking analyses to investigate the reasonableness of Plan costs before the deployment of smart meters. Further, proper cost benchmarking analyses are required so that the parties and the

Commission can determine whether the Companies' deployment expenditures are on track with the Companies' estimates and similar to the expenditures of other companies for similar deployment costs and activities as deployment continues for the FirstEnergy Companies.

In his Rebuttal Testimony, Companies witness Fitzpatrick testified that Mr. Hornby "overstate[d] the relevance and importance of the cost benchmarking analysis," as most of the Companies' cost estimates were determined from bids received through the RFI/RFP process. FE Companies St. 4-R at 9. Mr. Fitzpatrick concluded that these bids "are a far better validation of costs than any benchmark comparison with other utilities," and comparing costs with other utilities would not provide any further insight than obtained through the cost benchmarking analysis already conducted. *Id.* at 10, 12. Mr. Fitzpatrick further concluded that even if he sought to conduct additional cost benchmarking analyses with more companies, it would be too difficult to obtain the necessary data for the comparisons. *Id.* at 12-13.

In his Surrebuttal Testimony, OCA witness Hornby testified that it is possible to obtain adequate cost information from other utilities for adequate cost benchmarking analyses, and had provided the smart meter plan filings of twelve utilities in response to a Companies' discovery request. OCA St. 1-SR at 4. These twelve utilities reported various categories of costs in their filings, including Meter & Local Area Network, Information Technology, System Integration, Network and Network Management, Program Management, Business Staffing Requirements and Communication Change Management. *Id.* at 4, Table 1.⁶ Specifically, Mr. Hornby testified that a properly conducted cost benchmarking analysis:

[W]ould have helped demonstrate whether the Companies' Deployment Plan costs in each of those categories were, or were not, within the same range as those of other utilities. By using that approach in West Penn's Smart Meter proceeding

⁶ In addition, Mr. Hornby testified that the identification of major categories of costs assist in determining which categories have the most potential to benefit the Companies' sister utilities in other states. OCA St. 1-SR at 5. The topic of cross-jurisdictional allocation of costs is discussed in more detail in Section III.D.2.

at Docket M-2009-2123951, I was able to demonstrate that the projected capital cost of West Penn's proposed Smart Meter Plan was more than twice as high as AMI projects of other utilities primarily due to its costs for Information Technology, in-home devices and Customer Information Service ("CIS").

OCA St. 1-SR at 3.

The OCA submits that without a properly conducted cost benchmarking analysis, the Companies may not be able to meet their burden of proof that the costs they incur for smart meter deployment, as detailed in their annual reconciliation filings, are reasonable and prudent. Given the significant estimated cost of the Companies' Plan, \$1.258 billion, and the fact that the cost/benefit ratio of smart meter deployment is 0.3,⁷ the Companies have a responsibility to adequately investigate the reasonableness of the costs they expect to incur to fully deploy smart meters before the Companies incur such costs. The OCA submits that an adequate investigation would include a properly conducted cost benchmarking analysis, as described by OCA witness Hornby in his Direct and Surrebuttal Testimonies.

As such, the Commission should direct the Companies to conduct a proper cost benchmarking analyses using the seven cost categories identified by the Companies in their Plan and sub-categories, if available, and using a much larger sample size of utilities. The Commission should direct the Companies to submit a report with the results of such analyses and any Plan changes stemming from such results in an amended Plan. The Commission should direct that such proper cost benchmarking analysis be completed within 120 days of the Commission's order in this matter, with a report of the results and an amended Smart Meter Deployment Plan, if necessary.

⁷ Mr. Hornby testified that a cost/benefit ratio in excess of one, indicating the benefits outweigh the costs, would be ideal. Tr. 63. Mr. Hornby acknowledged that Act 129 does not require the Companies to demonstrate in their Plan that benefits exceed costs. Tr. 63. As discussed below in Section III.B., however, the Companies are required to show their Plan is cost effective.

2. The Companies Have Not Appropriately Addressed Cross-Jurisdictional Allocation of Plan Costs Among Their Sister Utilities In Other States.

FirstEnergy Companies witness Dargie testified that the Companies developed their Plan with the goal that it could be expanded to serve other FirstEnergy companies in other states. FE Companies St. 1 at 9. As noted by OCA witness Hornby, however, the Companies do not provide the magnitude to which the Plan could benefit the Companies' sister utilities or the method by which the Companies would seek credit for such benefits to their sister utilities. OCA St. 1 at 13.

OCA witness Hornby testified that the Companies' Plan will require upgrades to two of the major back-office systems the Companies utilize from FirstEnergy Service Company, specifically SAP and Meter Reading/Meter Services. The Companies acknowledge that these upgrades would benefit the Companies' sister utilities in other states when those utilities begin deploying smart meters. OCA St. 1 at 12-13. Additionally, Mr. Hornby testified that indirect costs of the Plan, or those costs not incurred in direct proportion to the number of meters installed, also have the potential to benefit the Companies' sister utilities in other states. OCA St. 1 at 13. Based on the foregoing, Mr. Hornby recommended that:

[T]he Commission require the Companies to prepare a report that identifies expenditures on all components of the Deployment Plan that have the potential to benefit their sister utilities when they begin deploying AMI and that describes the method through which they will receive credit from FirstEnergy Service Company for those expenditures once their sister utilities begin to deploy AMI. The Commission should require the Companies to present this report with its 2014 SMT-C Rider filing and provide intervenors to review and challenge it.

OCA St. 1 at 14.

In his Rebuttal Testimony, Companies witness Valdes opposed OCA witness Hornby's recommendation, testifying that it is premature to speculate about expenditures that might benefit the Companies' sister utilities because at present, none of the Companies' sister utilities have

plans to deploy a significant number of smart meters. FE Companies St. 5-R at 2-3. Mr. Valdes goes on to provide the current status, or lack thereof, of smart meter deployment for the Companies' sister utilities. Id. at 3. Mr. Valdes agrees with Mr. Hornby that if the Companies' sister utilities begin deploying smart meters, the Companies will have to acknowledge allocation of certain costs expended here that also benefit the Companies' sister utilities. FE Companies St. 5-R at 4. Mr. Valdes, however, asserted that submitting an update on sister utilities' deployment of smart meters with the Companies' 2014 SMT-C filing, as recommended by OCA witness Hornby, would be purely speculative and is unnecessary. Id. at 5, 6-7. In the alternative, Mr. Valdes, suggested that the Companies reflect any reallocation of costs to sister utilities in the Companies' annual SMT-C filings, and the Commission and parties would have time to evaluate such reallocation of costs then. Id. at 5, 7.

The OCA submits that FirstEnergy witness Valdes' alternate recommendation that the Companies reflect any reallocation of costs to sister utilities in their annual SMT-C filings has merit. The OCA submits, however, that the Companies should also provide an update on the smart meter deployment activities of their sister utilities, as Mr. Valdes provided in his Rebuttal Testimony on page 3, with the annual SMT-C filings. If and when the Companies' sister utilities begin planning deployment of smart meters, the Companies should provide with their next annual SMT-C filing the report recommended by OCA witness Hornby, wherein expenditures on all components of the Companies' Plan that have the potential to benefit their sister utilities when they begin deploying smart meters are identified, and a description of the method through which the Companies will receive credit from FirstEnergy Service Company for those expenditures is provided.

As such, the Commission should direct the FirstEnergy Companies to provide an update on the smart meter deployment activities of their sister utilities with each annual SMT-C filing. Further, should any of the sister utilities plan to deploy or be directed to deploy smart meters, the Commission should direct that the Companies provide a report with their next SMT-C filing that identifies expenditures on all components of their Plan that have the potential to benefit their sister utilities 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. To the extent any system upgrades are currently being utilized by the Companies' sister utilities, the Commission should direct that those costs be properly allocated now.

3. The Companies Improperly Allocated Joint Plan Costs.

In their Plan, the Companies propose to allocate joint Plan costs by each Company's number of meters as of June of the year prior. *Jt. Petitioners Exh. 2 at 66.* OCA witness Hornby described the background and his concern with using the number of meters as of June of the year prior to allocate joint Plan costs as follows:

In its Orders in prior proceedings for West Penn and for what were then the three FirstEnergy utilities, the Commission approved allocation of each Company's smart meter plan costs among its rate classes according to number of meters. However, the Commission Order in the prior proceeding for what were then the three FirstEnergy utilities is silent regarding the allocation of joint smart meter plan costs among the three utilities. In this proceeding the Companies appear to be proposing to allocate those costs according to each Company's number of meters as of June each year, which is consistent with the allocation of costs within each Company approved by the Commission. I agree that the method of allocating the costs among the four Companies should be consistent with the Commission-approved method of allocating costs within each Company.

. . . In this proceeding, the Companies are proposing to use the number of meters as of June each year. Rather than relying on the number of meters for only one month, I recommend the each Company use its annual average number of meters for the year ending June 30.

OCA St. 1 at 20.

In Rebuttal, Companies witness Valdes explained that the Companies use the number of meters as of June 30th because that is the most recent number of meters available prior to the Companies' annual SMT-C filing due August 1st. FE Companies St. 5-R at 13-14. Mr. Valdes did not oppose OCA witness Hornby's recommendation to use the annual average number of meters for the year ending June 30th in allocating joint Plan costs. Id. Mr. Valdes, however, requested that if Mr. Hornby's recommendation is accepted by the Commission that it be on a prospective basis. Id. at 14.

The OCA submits that Mr. Hornby's recommendation to allocate joint Plan costs based on the annual average number of meters per Company as of June 30th is consistent with how the Companies allocate costs within the Companies. As such, the Companies should be directed to allocate joint Plan costs based on the annual average number of meters per Company as of June 30th.

B. Plan Savings Estimates.

1. The Companies Have Not Adequately Identified Potential Savings From Smart Meter Deployment.

In its Implementation Order, the Commission identified some of the savings that EDCs should expect to enjoy with the deployment of smart meters. Specifically, the Commission stated:

Smart meters have the ability to support maintenance and repair functions, theft detection, system security, consumer assistance programs, customer-generator net metering, and other programs that increase an EDC's efficiencies and reduce operating costs.

Implementation Order at 16.

The Companies estimated that potential operational cost savings over the Plan period would be approximately \$406 million on a nominal cost basis. FE Companies St. 4 at 17.

Companies witness Fitzpatrick identified four categories of operational cost savings: (1) meter reading; (2) meter services; (3) back-office; and (4) contact center. FE Companies Exh. GLF-4.

OCA witness Hornby calculated the Companies' cost/benefit ratio to be 0.3, which is less than the 0.5 or higher cost/benefit ratio of other smart meter deployment plans. OCA St. 1 at 15-16. Mr. Hornby testified that other utilities and industry studies on this issue included areas of savings from deployment of smart meters in addition to those identified by the Companies. Id. at 17. For instance, other utilities have identified potential savings in theft reduction, revenue enhancement, avoided capital costs and distribution operations. Id. The Companies did not compare their projected Plan savings to those of other utilities. Id. at 18.

Further, Mr. Hornby noted that as part of the WPP Settlement, West Penn was required to conduct an analysis of potential savings similar to that conducted by Nevada Power at Nevada Docket No. 09-07003. As Mr. Hornby described:

Nevada Power projected potential savings in seven areas of its operations – meter reading, revenue protection, load research, distribution planning, credit & collections, billing, and meter operations. Under its settlement, West Penn was required to prepare a similar analysis to identify its potential savings from deployment of a smart meter system. In this proceeding, the Companies have projected potential savings in four areas corresponding to the Nevada Power estimates, specifically meter reading, meter services, back-office systems and contact center. However, the Companies have not projected potential savings in other areas examined by Nevada Power, particularly revenue protection. In addition, the Companies have not included potential savings from improved cash flow within their estimate of back office savings. Nor have they estimated savings from avoided capital costs, such as future purchases of traditional meters. For example, the Companies current rates are recovering revenue requirements for routine capital investments in new traditional meters. Once the Companies start installing smart meters, they will be avoiding capacity investments in new traditional meters.

OCA St. 1 at 16-17. (Internal footnote omitted).

Based on the foregoing, OCA witness Hornby concluded that the Companies did not develop a reasonable projection of potential savings associated with their Plan. OCA St. 1 at 18.

Mr. Hornby recommended that the Companies be directed to retain an independent consultant with experience in identifying savings associated with smart meter deployment to prepare a comprehensive report assessing the potential savings the Companies will achieve from deploying smart meters. Id. The OCA submits that a proper savings analysis is crucial to complying with Act 129's requirement to offset the costs of smart meter deployment with all savings realized from the installation and use of smart meter technology. See 66 Pa. C.S. § 2807(f)(7).

In his Rebuttal Testimony, Companies witness Valdes testified that while he did not agree with OCA witness Hornby that the Companies should have estimated potential savings in other areas, the four categories identified in the Companies' Plan were not necessarily an exhaustive list. FE Companies St. 5-R at 8. Mr. Valdes went on to state that if savings occur in areas not identified in the Plan, the Companies will reflect such savings in their annual SMT-C filings. Id. Mr. Valdes pointed to these annual reconciliation filings as the proper time to address actual measurable savings and noted that parties would have an opportunity to evaluation potentials for savings after the Solution Validation Phase.⁸ Id. at 9. In his Rebuttal Testimony, Companies witness Fitzpatrick echoed Mr. Valdes' testimony. See FE Companies St. 4-R at 14-16.

The OCA submits that it is unclear how the Companies will know if there are savings in categories other than the four they have identified in the Plan if the Companies do not properly analyze all potential categories of savings now. As OCA witness Hornby testified:

If the Companies do not develop an approach for estimating the potential for savings in these other areas now, in this proceeding, it is reasonable to conclude that they will not find any savings to report and to credit to ratepayers.

⁸ It is assumed that parties' opportunity to challenge potentials for savings would be in an annual reconciliation filing after the Solution Validation Stage, as there does not appear to be an updated Plan filing contemplated after the Solution Validation Stage.

OCA St. 1-SR at 9. As such, the OCA submits that the Commission should direct the Companies to hire an independent consultant with experience in identifying the potential for savings as a result of smart meter deployment to: (1) conduct a comprehensive savings potential investigation of categories of savings achieved by other companies that have deployed smart meters, including the seven categories identified by Nevada Power described above, and (2) prepare and submit a report to the Commission of his or her findings within 90 days of the Commission's order in this matter. Further, the Commission should direct the Companies to file an amended Plan detailing the potential categories and estimates of savings identified by such consultant within 30 days thereafter.

2. The Companies Have Proposed Improper Baselines for Calculating Savings.

Act 129 permits EDCs to recover the costs of smart meter deployment either through base rates or on a full and current basis through a § 1307 rider. See 66 Pa. C.S. § 2807(f)(7). If an EDC chooses recovery of costs through a rider mechanism, the EDC must also offset costs achieved from the deployment of smart meters through the rider. Id. In order to determine the amount of savings achieved, the EDC must establish accurate baseline levels upon which to measure savings achieved from the deployment of smart meters. OCA witness Hornby explained the importance of establishing proper baseline levels for measuring savings as follows:

Given the magnitude of the Deployment Plan costs the Companies are seeking to collect, it is particularly critical that the Companies establish a method for measuring the savings accurately and for crediting the actual savings against the actual costs of their Deployment Plan each year. The actual savings that the Companies report each year should be included as credits in the calculation of their respective SMT-C rates each year. Under the statute, and to ensure just and reasonable rates, it is essential that the Companies measure all savings accurately each year and report those measured savings.

OCA St. 1 at 21. The OCA submits that in order to properly reflect all offsetting savings in the rider mechanism, the Companies must properly identify the categories where savings will occur, as discussed above, and properly identify what the Companies' current rates are based on. This will ensure that moving these costs and savings to a rider mechanism will achieve revenue neutrality.

In their Plan, the Companies propose to establish the baseline employee levels, costs and other metric levels as of the date on which deployment begins, December 31, 2013. FE Companies St. 4 at 17. The Companies intend to adjust for anomalies in the 2013 baseline levels. Id.

Mr. Hornby testified that the Companies' proposal to use their cost levels as of December 31, 2013, may not produce just and reasonable rates because these costs are not the revenue requirements upon which the Companies' currently effective rates are based. Id. at 22. Met-Ed's and Penelec's currently effective rates are based on test year revenue requirements from their most recent 2006 base rate case. Id. Penn Power's and West Penn's currently effective distribution rates are based on the test year revenue requirements from 1996 used during their restructuring cases, where their distribution rates were unbundled. Id.

In his Rebuttal Testimony, Companies witness Valdes testified that it is unrealistic to assume that the costs the Companies incur for a particular utility function in 2013 are the same as the test year costs presented in the Companies' last base rate cases. FE Companies St. 5-R at 12.

The OCA submits that Companies witness Valdes is improperly focused on the costs the Companies incur for certain expenses; instead, the focus should be on the revenue requirements used to establish the rates customers are currently paying. These rates were developed in rate cases using test year revenue requirements based on the Companies' then existing costs and

expenses. The costs and expenses the Companies currently incur do not change the distribution base rates that customers pay each month. By way of example, Companies witness Fitzpatrick notes in his Rebuttal Testimony that Met-Ed, Penelec and West Penn currently read meters bi-monthly, which culminates in \$164 million less in savings⁹ to flow through the SMT-C riders to offset Plan costs than if the Companies read meters monthly. See FE Companies St. 4-R at 17. The OCA submits, however, that Met-Ed, Penelec and West Penn ratepayers are currently paying rates that include expenses for monthly meter reading. In Mr. Fitzpatrick's scenario, the Companies are keeping the \$164 million for their own use (assuming they do not file a base rate case) because the Companies' current rates reflect monthly meter reading expense.¹⁰ Indeed, if the Companies reflected the additional \$164 million in savings in their SMT-C riders, the cost/benefit ratio of the Plan would increase from 0.3 to 0.45 on a 20-year life cycle basis. FE Companies St. 4-R at 17.

The OCA submits that permitting EDCs to select a random date to set baseline levels for measuring savings does not carry forward the intent of Act 129. In order to avoid circumventing the requirements of Act 129, the OCA submits that the Commission should direct the FirstEnergy Companies to establish their baselines for measuring savings from smart meter deployment as the test year revenue requirements upon which their currently effective distribution rates are based. The Companies should be directed to provide this baseline level information with their next annual SMT-C filing.

⁹ \$570 million (total Plan savings if assume that meters are read monthly) - \$406 million (total Plan savings if assume that meters are read every other month) = \$164 million. FE Companies St. 4-R at 17.

¹⁰ The OCA submits that its position is not intended to create inefficiency in determining savings to flow through the SMT-C riders. However, the FirstEnergy Companies chose to utilize a § 1307 rider to collect costs on a full and current basis rather than in a later base rate case, where all of the Companies' costs and revenues would be trued up. Ratemaking principles require that the expense savings flowed through a rider be based on the current level that ratepayers are paying in their rates for that expense. It just happens that the Companies' current rates are based on expense levels from many years ago because the Companies have not filed base rate cases in many years.

C. Communications Plan.

1. Overview.

The Communications Plan (Comm Plan) is a plan designed to coordinate the Companies' internal and external communications regarding its Smart Meter Deployment Plan. The Comm Plan will encompass the several different areas, including the Change Management Plan (including four phases (i) strategy development; (ii) planning; (iii) pre-deployment; and (iv) deployment) and the training plan in which the "organizational readiness team will partner with appropriate work streams and business units to facilitate the flow of information to all audiences impacted by the implementation of the Deployment Plan." Jt. Petitioners Exh. 1 at ¶¶ 25-29.

The Companies set forth the primary goals of the Comm Plan as follows:

- (i) keep customers, city officials and employees updated on Deployment Plan progress;
- (ii) manage expectations, both as to installation and potential for customer savings;
- (iii) alleviate concerns regarding privacy, access to customer information and other smart meter related issues.

Jt. Petitioners Exh. 1 at ¶ 26; OCA St. 2 at 9. The Comm Plan remains under development.

OCA witness Brockway reviewed the Companies' Petition and testimonies regarding the Comm Plan. OCA witness Brockway first testified:

The Companies' Communication Plan has not yet been approved by senior management, and has not been submitted to stakeholders or the Commission for review; for this reason, it is not yet possible to analyze the Comm Plan. The Company has committed to share the draft Comm Plan with stakeholders and obtain input before it is filed with the Commission.

OCA St. 2 at 3. While the Comm Plan was not yet complete, Ms. Brockway was able to make several recommendations regarding areas that should be included in the Plan to assure that communications more fully inform and educate consumers. The OCA will discuss these recommendations herein.

Initially, it should be noted that OCA witness Brockway and Companies' witness Fitzpatrick agree that the Comm Plan will need to remain flexible as time goes by because the scope and nature of customer educational issues may change. FE Companies St. 4-R at 4; OCA St. 2-SR at 4. As OCA witness Brockway testified:

As time goes on, it will be necessary to expand the scope of education, to include information on a number of issues. These include how to decide if a program or rate would be helpful to the customer, how to take advantage of the program or rate, techniques for safely and conveniently reducing electricity requirements, and the ties between smart metering programs and rates and other demand management programs offered by the Companies or by the retail market, among other topics.

OCA St. 2 at 9-10. As such, OCA witness Brockway recommended that the FirstEnergy Companies continue their regular stakeholder meetings regarding their smart meter deployment and specifically discuss the Comm Plan at these meetings. The Companies have also stated that they intend to seek the input of stakeholders before deploying their final Comm Plan with the Commission. *Id.* at 12. The OCA supports this approach and intends to participate in the stakeholder meetings.

The OCA submits it will be important for the stakeholders to have the opportunity to review the final Comm Plan and to provide input into the final Comm Plan before it is filed with the Commission. The Companies anticipate completion of the Comm Plan "before the beginning of the Solution Validation Stage, which currently is anticipated to start during the fourth quarter of 2013." OCA St. 2 at 9. The OCA recommends that the Companies commence holding stakeholder meetings on a quarterly basis by the first quarter of 2014 in order to discuss the final Comm Plan. As the Comm Plan is an essential part of the Smart Deployment Plan, the OCA recommends that the Comm Plan be filed with the Commission after the stakeholders have sufficiently reviewed and discussed the Comm Plan in the stakeholder meetings.

As discussed below, OCA witness Brockway identified several areas of the Comm Plan that required additional attention and made recommendations in these areas. The OCA submits that the FirstEnergy Companies should be directed to work with their stakeholders to develop these areas of the Comm Plan in accordance with the recommendations of OCA witness Brockway.

2. Early Education About The New Functionalities of Smart Meters.

OCA witness Brockway recommended that the Companies broaden the scope of their education planning. OCA St. 2 at 23. Specifically, the OCA submits that the Companies should begin educating customers about the new functionalities of smart meters early in the process even before customers have access to the smart meters or programs enabled by the meters. Customers should understand the options that they will have and how to exercise them even before large numbers of meters are deployed. This early education will pave the way for the later introduction of specific time-varying rates and programs by helping customers to understand early the capabilities of the new smart meters. Id. at 10.

Early education is important for customers so that the groundwork is laid for the capabilities of smart meters prior to and in the early days of their installation.¹¹ OCA witness Brockway testified about the importance of this education:

Early education will help first-adopters become familiar with the capabilities of the new meters and networks in time for them to play their societal role of breaking new ground and being able to explain the technologies to others more risk-averse. In addition, adult learners require a variety of methods of education, and exposure to the information from a number of perspectives, in order to make best use of it. There are also groups of customers who will require concerted

¹¹ The FirstEnergy Companies will be making time-of-use programs available to any customer with a smart meter beginning June 1, 2013, in compliance with its Default Service Plan. Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company For Approval of Their Default Service Programs, Docket Nos. P-2011-2273650, P-2011-2273668, P-2011-2273669, and P-2011-2273670 (Orders Entered August 16, 2012 and February 15, 2013); OCA St. 2-SR at 5. Smart meters have already begun to be rolled out, and Penn Power will begin installing up to 60,000 meters later this year.

communications efforts tailored to their situations, such as those who have little formal education, those for whom English is a second language, those with special needs (e.g. those with a medical need to maintain a certain temperature in their dwelling, or preserve medications through constant refrigeration), and other groups who would benefit from tailoring the messages and the message delivery. The Companies likely will also make usage information available to the customers via third-party products and services before it offers rates or programs. Even before the EDC provides its own tools for customers to access their usage information, energy generation suppliers and others (such as “third-party load management providers”) will want to arrange customers’ access to their interval usage data, through customer- or third-party-provided devices connected to the meter.

OCA St. 2 at 10-11.

Further, not only will this early education benefit customers, but it will also benefit the Companies. As OCA witness Brockway testified, this early education will help the Companies to better design the rates and programs that will eventually be offered through smart meter technology. Ms. Brockway stated:

It will be helpful to determine if a given program or rate design will present difficulties from a customer education or acceptance perspective. The design of the specific rates and programs is symbiotic with the design of the communications necessary to assure a successful launch of such rates and programs.

Id. at 12.

The OCA recommends that the FirstEnergy Companies “broaden the scope of their education planning before customers gain access to a larger set of programs and rates made possible through smart metering” and include information in the Comm Plan related to early education for customers about time-varying prices and the functionalities of smart meters. Id. at 3, 9-12.

3. Safety Educational Materials.

The FirstEnergy Companies and Direct Energy entered into a Joint Stipulation of Position (Joint Stipulation) at the hearings which provided that the Comm Plan:

will also include information regarding the smart meter deployment schedule indicating that the communities scheduled for installation of fully functional smart meters will be identified on a website available to the public sixty days in advance of installation. The information provided regarding communities scheduled for installation will not include specific addresses or neighborhoods where the smart meters are to be deployed and will not include dates more specific than “within the next sixty days.” The information will be limited to identification of the Borough, Township, or City where deployment is scheduled within the next sixty days. In addition, the Companies will update the aforementioned website to confirm that a community’s deployment has been completed and that smart meters capable of transmitting usage data on an hourly basis to third parties have been installed.

Joint Stipulation of Position at ¶ 1.

The OCA submits that the proposed Joint Stipulation, while addressing general information about deployment schedules in the Comm Plan, does not address a related, and critical aspect of such communications. The OCA submits that if installation zones are to be publically identified to a wide audience, safety educational information must be provided to each individual customer in the deployment area in order to avoid the risk of fraudulent individuals attempting to gain access to homes during the smart meter deployment period. OCA witness Brockway testified:

On the question of disclosing installation zones, in addition to the risk of fraud cited by Mr. Fitzpatrick, I would add the need to protect the safety of customers from entry by unauthorized persons purporting to represent the utility. Redundant identification by installers (e.g. badges, uniforms, truck logos, etc.) will help to enable customers to distinguish between genuine FirstEnergy installers and others. If and to the extent FirstEnergy uses contractors to perform installation, it should likewise ensure that the contractors have multiple forms of identification, making it harder for unauthorized persons to present themselves as FirstEnergy

representatives. In the education materials for Maryland utilities rolling out smart meters, for example, customers are shown pictures of the uniforms and truck logos of contractors, to provide one level of security against unauthorized personnel gaining entry. Customers are also given explicit advice to check the identification of installers if they have any doubt, and given a number to call to verify any given installer's identification, which provides a further defense against safety risks and fraud.

OCA St. 2-SR at 2-3. On cross-examination, the Companies witness Fitzpatrick agreed that each of these recommendations was generally a good idea. Tr. 122-124. Mr. Fitzpatrick specifically stated: "I think generally the companies are going to be very cautious to make sure the contractors that are installing meters have the right identification that's sufficient and redundant." Tr. 123.

In order to ensure the safety of consumers against potential fraudulent individuals or thieves, the OCA recommends that the Companies provide safety-related educational materials to individual consumers at the same time as their public website announcement of the areas where smart meters are to be deployed. The education information should include, but not be limited to, the following: (1) that installers for the FirstEnergy Companies will have redundant identification, i.e. trucks with logo, uniform, identification badges to enable customers to distinguish between genuine FirstEnergy installers and others; (2) that pictures or descriptions of the uniforms for installers for the FirstEnergy Companies will be provided, such that a consumer can readily identify the FirstEnergy installers; (3) that such FirstEnergy Companies installers do not need to enter the household in order to install the smart meters; (4) that customer should check the identification of installers if the customer has any doubt; and (5) that the phone to call to verify any given installer's identification is provided. See OCA St. 2-SR at 2-3.

4. Customer Privacy.

i. Introduction.

Smart meters have the capacity to provide information about a customer's interval usage on a very granular level. This information can provide a great deal of information about a customer's life and habits or about a business operation. The OCA submits that the protection of customers' granular interval usage data is a critical component of the Smart Meter Deployment Plan. Currently, the Companies do not have a specific privacy policy in place that relates to how this data will be protected. The Companies provide only a general Privacy and Legal Statement and a Know Your Rights booklet which includes a page called the "Right to Restrict Your Personal Information." OCA St. 2 at 18-19; OCA St. 2 at Exh. NB-3 and NB-4. These statements do not address the unique challenges of customer privacy resulting from the deployment of smart meters.

In light of the proposed deployment, customer privacy needs must be considered before wide scale deployment is initiated. OCA witness Brockway testified:

Privacy should be built into the design of its smart grid implementation. The Companies should not go forward with the creation and collection of such granular data until a fully-developed privacy policy is in place.

Id. at 20-21. These privacy concerns were highlighted in the recent survey work conducted by the Companies to better understand customers' awareness of and attitudes towards smart meters.

OCA witness Brockway testified:

The survey firm asked respondents whether they would want their data to be provided to various entities without their consent. See Attachment E to OCA I-2, page 31. The respondents to the survey were asked the following question: "Who do you believe should be authorized to access your detailed electricity usage besides yourself?" The customers could pick more than one of the options. Exhibit NB-4 is a reproduction of the page from the FirstEnergy presentation sharing the survey results with stakeholders. Less than 5% of respondents agreed

that third-party vendors of electricity or electricity-related goods and services should be authorized to access their detailed electricity usage besides themselves. The only entity that received less support for access to customer usage information was the government, at less than 2%. Almost half the respondents answered that no one other than themselves should have access to this information, not even the utility billing system or utility customer service agents.

Id. at 20. The Companies' Comm Plan will need to further address these privacy concerns as they specifically relate to the smart meter deployment.

OCA witness Brockway proposed that the companies have both appropriate principles and protocols in place to protect the privacy of customers' usage and other personally-identifying information before installing data-creating technologies that might be subject to unauthorized access. OCA St. 2 at 24. The OCA recommends that the Companies work with the stakeholder group to develop a stand-alone Customer Privacy Policy specifically related to the protection of smart meter information before any wide scale deployment of smart meters.

ii. Principles for Release of Smart Meter Information.

The Companies have identified and acknowledged privacy concerns and developed principles for release of smart meter information. Mr. Fitzpatrick stated that the Companies' policies will be guided by the following principles:

- (i) any information released must be in compliance with all Commission regulations and directives, and Federal and Pennsylvania law;
- (ii) except as authorized by the Commission or a Federal or Pennsylvania law, the Companies will not release any individual customer information without the express written consent of the customer;
- (iii) any advance public notice of the smart meter installation "zones" must be weighed against the potential for fraud by imposters, armed with this scheduling information, posing as utility workers; and
- (iv) electric generation suppliers, such as Direct Energy should have access to information in a time frame that allows them reasonable time to develop marketing plans.

FE Companies St. 4-R at 8. The OCA agrees with the concepts that Mr. Fitzpatrick proposed.

OCA witness Brockway was in general agreement with these broad principles, but recommended a specific edit to the Companies' language regarding the second principle. Mr. Fitzpatrick stated in his second principle that private data would not be released "except as authorized by the Commission or a Federal or Pennsylvania law...without the express written consent of the customer." OCA St. 2-SR at 3. OCA witness Brockway found this principle to be too vague which would "impede the achievement of the purposes of the principles: customer choice about release of customer information." OCA St. 2-SR at 3. OCA witness Brockway expressed concern that the formulation of the principle, particularly the use of the phrase "except as authorized" reduces the principle to one in which the discretion to release or not release private information is given to the Companies, and their interpretation of the law. OCA St. 2-SR at 3. In other words, the principle as written allows the Companies to determine what is authorized and even whether to seek such authorization. OCA witness Brockway recommended that:

One way to clarify the second principle would be to remove the initial clause, that now reads "except as authorized by the Commission or a Federal or Pennsylvania law." What remains is a simple statement of the Companies' assurance to customers that they can control the information gathered about their usage by smart meters.

Id. at 3-4.

For the reasons discussed above, the OCA recommends that the language "except as authorized by the Commission or a Federal or Pennsylvania law" be removed from the principles.

D. Remote Disconnection.

1. Introduction.

One of the functionalities of smart meters will be the ability to use remote disconnection either as a voluntary disconnection tool, such as at the customer request for a move-in or move-out, or as an involuntary remote termination tool, to incent payment of past-due bills. OCA St. 2 at 14. The Companies have clearly stated that they intend at this time to utilize smart meters for remote voluntary disconnection for move-in/move-out situations. Id. at 15. The OCA agrees with this determination but submits that the Companies must develop protocols to ensure the safety of the property and residents.

In the event that the Companies seek to implement an involuntary termination program at some point in the future, the OCA recommends that that the Companies work with the stakeholder group to develop protocols and then file an amended plan with the Commission for review and approval.

2. Voluntary Remote Disconnection For Move-In/Move-Out.

The OCA notes that the Companies have acknowledged the possibility of using the voluntary remote disconnections for move-ins or move-outs. OCA witness Brockway testified that there are potential customer risks to the use of voluntary remote disconnection even at a customer's request:

Remote disconnection can be done at the customer's request, or without the customer's agreement as a tool to incent payment of past-due bills. In the case of disconnection at the customer's request, property damage could occur following a service disconnection. In the event of extreme weather or due to loss of electronically-wired fire protection equipment, the dwelling may be at risk. A customer may also be subject to a malicious fraudulent termination request, or an incident related to landlord-tenant disputes.

OCA St. 2 at 14.

Before the Companies use voluntary remote disconnection at the customer's request, the OCA submits that the Companies should work with the stakeholder group to develop protocols to prevent property damage and unsafe conditions that could result from remote disconnection. The Companies should also work with the stakeholders to develop protocols to prevent mistaken or unintended disconnection.

3. Involuntary Termination For Non-Payment.

The Companies have left open the possibility that they could seek to use remote termination for non-payment in the future. OCA witness Brockway testified about her concerns with the potential harms from remote involuntary termination for non-payment:

Remote involuntary disconnection could, if conducted without sufficient protocols, put customers at risk of disconnection in situations where termination could have been avoided. In addition, it causes dislocation and potentially danger to the customer. Disconnection of customers during the winter months (especially for customer who heat with electricity, or whose heating system requires electricity to run), or in summer months when air conditioning is necessary for health and safety, and any time when the customer requires electricity for health and safety reasons, could produce adverse effects for customers.

OCA St. 2 at 14.

The Companies stated that they will engage in the stakeholder process if the Companies propose to develop policies with regard to involuntary remote termination for non-payment as was set forth in WPP Settlement. Id. at 15. Under the terms of that agreement, West Penn will not seek to use the remote disconnect feature for involuntary terminations for non-payment and will work with the interested parties "to address compliance with Chapter 14 and Chapter 56 and to address the issues presented by use of the technology for remote disconnection." Id. at 15-16. The OCA commends the Companies' willingness to not use this feature at this time and to engage with stakeholders to address further identified issues in the event that the Companies

decide to pursue involuntary remote termination for non-payment in the future. As OCA witness Brockway testified:

The safe and effective use of remote disconnection capability requires the kind of thoughtful and collaborative approach to which the Companies agree. Such an approach can produce a better understanding of the costs and benefits of using this smart meter functionality for non-payment disconnections. It also provides a means to develop useful protocols to protect households from unnecessary and imprudent disconnections.

Id. at 16.

The OCA recommends that the Order to this proceeding memorialize that the Companies' do not intend to use remote termination for non-payment as part of their Plan. The Commission should also direct that the Companies be required to bring any future proposal to pursue remote involuntary remote termination for non-payment to the stakeholder group for further discussion. Further, the OCA recommends that due to the potential implications of Chapter 56 and Chapter 14, that any proposal to pursue involuntary remote termination for non-payment in the future should be considered an amendment to the instant Plan and should be filed with the Commission for review and approval.

E. Cyber-Security.

OCA witness Nancy Brockway reviewed the Companies' cyber-security program in this proceeding. OCA St. 2 at 4-8. The OCA asked a series of discovery questions that were based on the National Association of Regulatory Utility Commissioners' recommended questions to ask utilities engaged in smart grid deployment. Id. at 4. As OCA witness Brockway testified, the Companies have an extensive cyber-security program under senior management that is reported to the Board and is audited annually. Id. at 3. While no system is ironclad, OCA witness Brockway found that "the Companies recognize the importance of cyber-security and are

working towards maximizing security.” *Id.* at 6. The OCA recommends that this issue continue to be regularly monitored, that the Companies should be aware of emerging issues, and that these issues should be addressed, as needed, at the state level. *Id.* at 8. OCA witness Brockway recommended that the FirstEnergy Companies develop sufficient policies and practices for application by the Companies as they implement smart metering. OCA St. 1-SR at 2.

Additionally, OCA witness Brockway recommended that the Companies have a Chief Security Officer with a corresponding set of responsibilities covering both the operational and information technology (IT) systems who reports to the Board. OCA witness Brockway testified:

In the view of some cyber-experts, it would be the better practice to place responsibility for all security issues, including both IT and operations management, and responsibility for both physical and electronic security, in one organization within the firm. The Companies do however have senior corporate security and IT officers reporting up to the Board through one executive vice president, whose responsibility covers both areas IT and operations cyber-security. OCA I-13. The Companies expressly recognize the risks associated with logical and physical connections between interconnected parts of their networks, so they are aware of the risks caused when firms allow the various cyber-security approaches to be cut off from one another in their own silos. OCA I-17(iv).

OCA St. 2 at 7-8.

The OCA recommends that the Companies continue to discuss and address cyber-security issues with the stakeholder group on a going-forward basis. The OCA also recommends that the Companies report to the Commission on a regular basis regarding the status of cyber-security at the Companies.

F. West Penn CIS Costs.

As part of its SMIP filing at Docket No. M-2009-2123951, West Penn included approximately \$45.1 million for costs related to smart meter activities, including amounts for

modernizing West Penn's Customer Information System (CIS). OCA St. 1 at 23. The parties to the proceeding ultimately entered an Amended Joint Petition for Settlement (WPP Settlement) in that proceeding, which stated:

The Joint Petitioners recognize that the Company made expenditures between 2009 and 2010 in support of the development of a smart meter deployment plan. These costs are related to activities defined as Phase 1 and Phase 2 activities in the accompanying Appendix A. To date, the Company has expended \$45.1 million, of which the parties agree that \$40 million can be recovered in the smart meter surcharge...The additional \$5.1 million represents certain costs related to the CIS system that the Joint Petitioners dispute should be recovered through the smart meter surcharge. The Company may file for recovery of these disputed amounts in its next distribution base rate case and/or as part of the smart meter surcharge in connection with its Revised SMIP filing. All parties reserve all rights to continue to dispute the reasonableness of recovery of the \$5.1 million in disputed charges and to oppose any recovery of those costs.

WPP Settlement at ¶ 19. West Penn seeks recovery of the remaining \$5.1 million in this proceeding. OCA St. 1 at 23-25.

In West Penn's prior SMIP proceeding, OCA witness Hornby opposed the inclusion of the CIS costs because the investment was one that a utility would typically make in its normal course of business. In this proceeding, OCA witness Hornby recounted his position as follows:

My position in that proceeding was based upon, and supported by, various admissions made by West Penn. First, West Penn stated that the CIS, which is its billing system, was installed in the 1970s and that prior to the Company's 2009 modernization investment, the Company had not made any major investments to upgrade that system since 1999. West Penn also acknowledged that the CIS was used by all of its parent corporation's distribution operating companies, including West Penn's sister companies operating in Maryland and West Virginia. West Penn further acknowledged that 52 percent of the CIS costs would be allocated to its sister companies in Maryland and West Virginia, and those sister companies would seek to collect those allocated costs through distribution base rate proceeding in their respective states.

In rebuttal, West Penn witnesses Heasley and Arthur each stated that the Company needs to modernize its CIS in order to support the deployment of smart

meter technology and the rate offerings enabled by that technology. However, neither Mr. Heasley nor Mr. Arthur explicitly denied that modernizing the CIS was an investment that West Penn would make in its normal course of business. Instead, both Company witnesses simply stated that they understood Act 129 to allow recovery of those capital costs as part of the implementation of smart meter technology.

OCA St. 1 at 23-24.

The Company was seeking to recover these CIS costs through its SMT-C Rider when the Company had not updated its CIS system for over thirty years. While the Company has argued that the system was “a home-grown, customized system that was specifically tailored to meet the needs of West Penn,” most every other Pennsylvania utility had made modernization investments to upgrade their customer information systems between 1970 and 2008 as part of the normal course of business. FE Companies St. 5-R at 16. As OCA witness Hornby testified, those costs are typically incurred in the normal course of business and are recovered through a base rate proceeding. OCA St. 1 at 23. In fact, as Mr. Hornby testified, this was exactly how West Penn Power’s sister companies recovered it. Id. at 24.

The OCA submits that the record establishes that the West Penn CIS upgrade was a normal business expense and was not solely for the purposes of Act 129. Importantly, the Company allocated 52 percent of the costs of that system to its sister utilities Potomac Edison Company in Maryland and Monongahela Power in West Virginia. OCA St. 1 at 24; Tr. 52. Neither of the two sister utilities had a requirement to deploy smart meters or AMI, nor were either engaged in any smart meter deployment. OCA St. 2 at 24; Tr. 53. Both of these companies chose to include the cost recovery for the customer information system in distribution base rates and not through surcharges. OCA St. 1 at 24.

Since the initial WPP SMIP, much has also changed. FirstEnergy acquired West Penn's parent Company in 2011. Joint Application of West Penn Power Company d/b/a Allegheny Power, Trans-Allegheny Interstate Line Company and FirstEnergy Corp. for a Certificate of Public Convenience under Section 1102(a)(3) of the Public Utility Code approving a Change of Control of West Penn Power Company and Trans-Allegheny Interstate Line Company, Docket Nos. A-2010-2176520, A-2010-2176732, Order (March 8, 2011). West Penn has now "retired" its CIS system and transitioned to using the CIS system of the FirstEnergy Companies. Companies' witness Valdes testified "[s]o even though the merger occurred, yes, the merger occurred, therefore the CIS system merged with FirstEnergy's billing system." Tr. 53. West Penn is no longer using the system for which it expended the \$5.1 million. Tr. 53.

The timeline for this case is particularly compelling. West Penn filed its initial plan for approval of its SMIP on August 14, 2009. Companies witness Valdes stated in cross-examination that due to the Energy Efficiency and Conservation Plan, West Penn planned to roll-out smart meters in 2010 and "because of that, West Penn needed to proceed with its smart metering plan which includes the CIS upgrades during 2009 prior to actually formally receiving Commission approval." Tr. 42. On May 14, 2010, FirstEnergy filed for its proposed merger with West Penn's parent company, Allegheny Power. The merger was subsequently consummated on March 8, 2011. West Penn expended the \$5.1 million for a CIS system, which was ultimately abandoned and is not used or useful to ratepayers for smart metering purposes. See Barasch v. Pa. PUC, 516 Pa. 142, 532 A.2d 325 (1987), aff'd Duquesne Light Co. v. Barasch, 488 U.S. 299 (1989).

The OCA submits that the Companies' proposal to recover \$5.1 million for expenditures related to West Penn's abandoned CIS system must be denied.

G. Legacy Meters.

The FirstEnergy Companies have requested regulatory asset treatment for their unrecovered investment in their meters currently in place (also referred to as the Legacy Meters) that will be replaced by smart meters. OCA witness David Effron explained the Companies' proposal:

The Companies are seeking authorization to create regulatory assets for the Legacy Meters being retired. The regulatory assets would then be amortized over the remaining depreciable lives of the meters, with recovery of that depreciation expense continuing through base rates (Met-Ed/Penelec/Penn Power/West Penn Statement No. 5, page 17).

Any salvage value realized from the disposition of the Legacy Meters will be credited to the regulatory asset. The Companies are proposing to treat the cost of removal for Legacy Meters as operation and maintenance ("O&M") expense and to recover that cost as a component of the Smart Grid rider.

OCA St. 3 at 3. The Companies propose to separately account for the cost of removal of the meters and the salvage value of the meters.

OCA witness David Effron recommended that the Companies' proposed treatment of the cost of removal should be modified such that the cost of removal of the meters and the salvage value of the meters are handled together as a part of the regulatory asset. The Companies have historically dealt with the cost of removal and/or salvage value of Legacy Meters through its base rates and the existing base rates have costs of removal and salvage value embedded in them. Mr. Effron testified how West Penn, Penelec, Met-Ed and Penn Power have historically handled this issue:

In response to OCA Interrogatory IV-6, the Companies explained that Met-Ed, Penelec, and West Penn presently treat the cost of removal as O&M expense, with Penn Power accruing for the cost of removal as part of its depreciation rate. (The Companies subsequently clarified that Met-Ed, Penelec, and West Penn actually charge the cost of removal to Account 403, which is depreciation expense, not

technically an O&M account; however, the cost of removal for those companies is treated as if it were an O&M expense, that is to say as a cash expense.)

If Met-Ed, Penelec, and West Penn have historically treated the cost of removal of meters as O&M and that cost is being recovered in base rates, then inclusion of the cost of removal of the Legacy Meters as a current O&M expense in the Smart Grid rider would constitute a double recovery. That is, the Companies would be recovering the cost of removal in base rates and also recovering that cost of removal in the Smart Grid rider. Therefore, Met-Ed, Penelec and West Penn should be allowed to recover the cost of removal of Legacy Meters only to the extent that such costs exceed the cost of removal presently being recovered as O&M in base rates. (Alternatively, the cost of removal being recovered as O&M in base rates by those companies could be credited directly to the regulatory asset account.)

For Penn Power, the cost of removal of the Legacy Meters does not present the same double recovery problem because the full amount of the depreciation expense (including any implicit cost of removal allowance) will, in effect, be treated as an ongoing credit to the regulatory asset.

OCA St. 3 at 4-5.

Mr. Effron recommended the following modification to the Companies' proposed accounting for the cost of removal of the Legacy Meters in order to prevent this double-recovery through base rates and through the SMT-C:

I recommend that rather than being treated as O&M and being recovered as a current component of the Smart Grid rider, the cost of removal incurred by Penn Power and the incremental cost of removal incurred by Met-Ed, Penelec, and West Penn should be charged to the regulatory asset account containing the remaining cost of the retired Legacy Meters and be amortized over the remaining depreciable lives of the metering assets along with the remaining costs of those meters. This will result in the cost of removal being treated symmetrically with salvage value. In addition, charging the cost of removal to the regulatory asset and amortizing those costs accordingly will tend to smooth year-to-year variations in those costs.

OCA St. 3 at 5.

The Commission addressed how these costs should be handled in its Implementation Order. The Implementation Order stated:

The Commission believes the EDCs should install smart meters in a manner that coincides with the full depreciation of existing meters, so as to minimize the stranded costs. However, in the event that there are stranded costs that need to be recovered the Commission agrees with EA, PECO and Duquesne that EDCs should be allowed to seek recovery of those costs through an accelerated depreciation schedule, to be included in the EDC's cost recovery plan.

Implementation Order at 33. The OCA submits that the Commission's language anticipates that the stranded costs will be minimized to the extent possible and coincide with the Companies' proposed depreciation schedule. Separating out the cost of removal from the salvage value and depreciation does not minimize the cost to consumers. The cost of removal and the salvage value are two halves of the same whole. Customers should not have the delayed impact of the credit for the salvage value recovered through the regulatory asset and the cost of removal of the Legacy Meters charged immediately through the SMT-C riders.

The OCA recommends that the incremental cost of removal be charged to the regulatory asset account containing the remaining cost of the retired Legacy Meters and be amortized over the remaining depreciable lives of the metering assets along with the remaining costs of those retired meters. The cost of removal would then be recovered as part of the next base rate revenue requirement for electric distribution service when the regulatory asset is reflected in base rates.

IV. CONCLUSION

The Office of Consumer Advocate respectfully requests that the Commission reject the FirstEnergy Companies' Smart Meter Deployment Plan as filed and direct the FirstEnergy Companies to submit an amended Smart Meter Deployment Plan with the modifications described in this Main Brief.

Respectfully Submitted,



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DATE: May 24, 2013
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CERTIFICATE OF SERVICE

Joint Petition of Metropolitan Edison Company :
Pennsylvania Electric Company, Pennsylvania : Docket Nos. M-2013-2341990
Power Company, and West Penn Power Company : M-2013-2341991
For Approval of their Smart Meter Deployment : M-2013-2341993
Plan : M-2013-2341994
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I hereby certify that I have this day served a true copy of the foregoing, the Office of Consumer Advocate's Main Brief, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code Section 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 24th day of May 2013.

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