

COMMONWEALTH OF PENNSYLVANIA



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September 25, 2009

James J. McNulty
Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

RE: Joint Petition of Metropolitan Edison
Company, Pennsylvania Electric Company
and Pennsylvania Power Company for
Approval of Smart Meter Technology
Procurement and Installation Plan
Docket No. M-2009-2123950

Dear Secretary McNulty:

Enclosed for filing are the Comments of the Office of Consumer Advocate, in the above-referenced proceeding.

Copies have been served as indicated on the enclosed Certificate of Service.

Respectfully Submitted,


Aron J. Beatty
Assistant Consumer Advocate
PA Attorney I.D. # 86625

Enclosures

cc: Honorable Susan D. Colwell
Office of Special Assistants

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Joint Petition of Metropolitan Edison :
Company, Pennsylvania Electric Company :
and Pennsylvania Power Company for : Docket No. M-2009-2123950
Approval of Smart Meter Technology :
Procurement and Installation Plan :

COMMENTS
OF THE
OFFICE OF CONSUMER ADVOCATE

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Dated: September 25, 2009

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I. INTRODUCTION

The Office of Consumer Advocate (OCA) is filing these Comments in accordance with the Notice in the *Pennsylvania Bulletin* published August 29, 2009. These Comments are in response to the Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Approval of Smart Meter Technology Procurement and Installation Plan (Joint Smart Meter Petition). The OCA submits these Comments as a first step in addressing initial concerns with FirstEnergy's Plan. The OCA will submit expert testimony in accordance with the procedural schedule established for the case further detailing these and other issues. The OCA requests that the Commission review these Comments in conjunction with the OCA's testimony and briefs.

A. Background

On November 14, 2008, Act 129 of 2008 (Act 129) became effective and among other programs, contained a program requiring Electric Distribution Companies (EDCs) with at least 100,000 customers to present a Smart Meter Technology Procurement and Installation Plan (Plan) to the Pennsylvania Public Utility Commission (Commission) for approval. 66 Pa.C.S. § 2807(f). Each Plan must describe the smart meter technologies that the EDC plans to install upon customer request and at the customer's cost or in new building construction and in accordance with a depreciation schedule not to exceed fifteen years. *Id.* Act 129 also requires that, with customer consent, the EDCs make available direct meter access and electronic access to customer meter data to third parties, including Electric Generation Suppliers (EGSs) and providers of conservation and load management services. *Id.* The Act also defines the required smart meter technology capabilities. 66 Pa.C.S. § 2807(g). Finally, the Act established acceptable cost recovery methods. 66 Pa.C.S. § 2807(7).

On March 30, 2009, the Commission issued a Secretarial Letter seeking comments on a draft proposal and additional questions regarding EDC smart meter procurement and installation. Comments were due by April 15, 2009, with reply comments due April 27, 2009. The Commission later extended the Comments deadline to April 20, 2009, and the Reply Comments deadline to April 29, 2009. The OCA participated by submitting Comments on April 20, 2009.

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 Re: Smart Meter Procurement and Installation, Docket No. M-2009-2092655, Implementation Order (June 24, 2009) (Implementation Order). In the Implementation Order, the Commission granted a network development and installation grace period of up to thirty months following plan approval and clarified that the fifteen-year depreciation period should commence upon plan approval (with the thirty month grace period to be treated as part of that timeframe).¹ Id. at 5, 8. The Commission also set forth specific network development and installation milestones and directed each EDC to provide a set schedule for meeting each milestone as well as reporting requirements. Id. at 4-5.

EDCs are also required to detail in their Plans their system-wide deployment strategy, which should be coordinated with new construction smart meter deployment. See Implementation Order at 8.

As to cost recovery, the Commission allowed each EDC to develop a reconcilable adjustment clause tariff mechanism in accordance with 66 Pa.C.S. § 1307. Implementation Order at 31. The Commission did, however, hold that loss of decreased revenues by an EDC due

¹ The Commission specifically removed support for service-limiting and prepaid service as a minimum capability requirement due to their policy implications and determined to resolve these issues in another proceeding prior to requiring such capability in smart meters. See Implementation Order at 18.

to reduced electricity consumption or shifting energy demand cannot be considered a cost of the smart meter technology recoverable under a reconcilable automatic adjustment clause. Id. at 28. As to allocation of costs to customer classes, the Commission required that all measures associated with an EDC's smart metering plan be financed by the customer class that receives the benefits of such measures. Id. at 32.

In the Implementation Order, the Commission called for filing of the Plans by August 14, 2009, and the publication of the Plans in the *Pennsylvania Bulletin*. The Commission allowed for the filing of comments on the Plans by September 25, 2009, after which the Plans will be referred to the Office of Administrative Law Judge for proceedings as deemed necessary. Id. at 3. The Commission also directed that at least one technical conference be scheduled for each EDC during October 2009, which shall be transcribed with the transcript becoming part of the record. Id. at 2-3. Further, any necessary evidentiary hearings are to be convened in November 2009.² Id. at 2-3. On or before January 29, 2010, the Administrative Law Judge (ALJ) will issue an initial decision resolving all issues raised in the proceeding. Id. at 4. Thereafter, the parties will be permitted to file exceptions and reply exceptions to the ALJ's initial decision. Id.

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 Petition and Smart Meter Plan for Commission Approval pursuant to Act 129 and the Implementation Order. ALJ Susan D. Colwell has been assigned to this matter.

² The technical conference for this docket has been scheduled for October 20, 2009, and evidentiary hearings are preliminarily scheduled for November 18 and 19, 2009.

The OCA filed an Intervention and Public Statement in this matter on September 1, 2009, and has retained a team of experts to review the FirstEnergy Companies' Smart Meter Plan. The OCA will be fully involved in these proceedings and intends to provide testimony, participate in the technical conference and evidentiary hearings, and submit briefs.

The OCA provides the following preliminary Comments on FirstEnergy's Smart Meter Plan in accordance with the Commission's Implementation Order.

B. Summary of FirstEnergy's Smart Meter Plan

The FirstEnergy Companies have filed a Plan for the implementation and roll-out of a Smart Meter network applicable to all three service territories. The Companies anticipate a thirteen-year full scale deployment of smart metering across their service territories, with such deployment completed no later than March 2022. See ME/PN/PP St.1 at 9. The Companies' Plan involves two distinct periods. For the first 24 months, the Companies propose an "Assessment Period," during which the Companies will assess needs, select technology, secure vendors, train personnel, install and support test equipment, and establish a detailed meter deployment schedule. See Joint Smart Meter Petition at 5. At the end of the Assessment Period, the FirstEnergy Companies intend to submit a "Deployment Plan" for Commission approval. Id.

The Deployment Plan will include the following components: (1) a detailed long-term time line, with key milestones; (2) a smart meter solution; (3) the costs of such solution, along with an assessment of benefits; (4) a network design solution; (5) a communications architecture design solution; (6) a training assessment and proposed curriculum; (7) a cost recovery forecast; (8) a transition plan including communications to employees and customers; and (9) a detailed tiered roll out plan. See Joint Smart Meter Petition at 8. Once approved, the Deployment Plan will establish the framework by which the FirstEnergy Companies install and

operate a fully functional smart metering network. The Deployment Plan is expected to be completed by March 2022. The Companies submit that this deployment schedule is consistent with Act 129's requirement that smart metering be in place for all customers within 15 years. See Joint Smart Meter Petition at 5.

The FirstEnergy Companies have proposed a combined budget of \$29.5 million for costs related to the Assessment Period. See ME/PN/PP St. 2 at 12. Of this amount, the Companies anticipate that \$20.2 million will be spent during the first twelve months of the Assessment Period. Id. at 13. The Companies preliminarily anticipate a total cost for smart meter implementation throughout all three service territories to be at least \$325 million. See ME/PN/PP St. 1 at 12.

In order to recover the costs of the Smart Meter Plan, the Companies propose to implement a "Smart Meter Technologies (SMT-C) Rider for each Company. See ME/PN/PP St. 3 at 3. The Companies have not developed a specific rate at this time. The rates will be calculated when the Companies' Plans have been approved by the Commission and will be effective beginning April 1, 2010, and adjusted annually. Id. at 6, 10.

The OCA is generally supportive of the FirstEnergy Companies' approach to utilize the grace period to study potential smart metering alternatives and thereafter, file a subsequent, more detailed plan for Commission approval. As discussed more below, this multi-step approach will allow time for further technological developments and will allow for the necessary analyses to be developed to support a cost-effective deployment strategy.

II. COMMENTS ON THE PLAN AND ITS PROGRAMS

A. Introduction

Act 129 made several critical changes to the Public Utility Code in an effort to bring reliable, affordable, efficient and environmentally sustainable electric service to Pennsylvania consumers at the least cost over time. In this proceeding, the Commission will consider the provisions of Act 129 that call for the deployment of smart meter technology as one tool to achieve the overall goals of Act 129. The OCA submits that the deployment of smart meter technology throughout the Commonwealth is a challenging initiative with many uncertainties and unknowns at this time. Smart metering technology is in the development stage with many vendors offering a variety of capabilities and functionalities at various costs. Yet, at this stage of development, many of these technologies are not interoperable with one another and many standards for equipment and protocols remain unresolved. Additionally, new technology and possibilities continue to emerge that could threaten to make existing technology obsolete.

There has not yet been significant full scale deployment of smart meters across much of the nation. The 2008 FERC Staff Report on Demand Response and Advanced Metering finds that 6.7 million smart meters are installed across the Nation – a penetration rate of 4.7%.³ Pilot projects throughout the Nation continue, and the OCA anticipates that the next few years will be critical to the development of, and understanding of, the issues and challenges of full scale smart meter deployment.

Based on its preliminary review of the Plans filed by Pennsylvania EDCs, the OCA submits that most of the Pennsylvania EDCs that are faced with this challenge have proposed a generally reasonable approach. The FirstEnergy Companies have proposed a Plan

³ See also, Residential Energy Management: Company, Alliance and Technology Profiles, Parks Associates, available at http://newsroom.parksassociates.com/article_display.cfm?article_id=5168. (July 14, 2009)(Stating that over 8 million smart meters have been installed in the United States at a penetration rate of over 6%).

that will allow them to utilize the 30-month grace period provided in the Commission's Implementation Order to conduct analysis and research, train personnel, secure vendors, select appropriate technology, and install and test support equipment and establish a detailed meter deployment schedule. The OCA generally agrees with this approach that will allow FirstEnergy to take the time to develop a detailed business case that fully considers the goals of the smart metering program, the costs and benefits of the system, as well as the need to integrate technological changes, customer research regarding the potential use and acceptance of the systems and the evaluation of lessons learned.

Such an approach is particularly appropriate given the uncertainties that currently exist and the state of technological development in the industry. Deploying smart meters is not simply a task of replacing hardware that is outside of a home or business and then continuing with business as usual. New or heightened challenges will be faced in many areas. By way of example, the deployment of smart meters provides new challenges regarding security of the system and the privacy of customer information. The identification and design of a secure and protected system will be a major challenge. As the Commission is aware, cybersecurity is a growing concern. With access to data by the utility and third parties, diverse communications systems such as in-home networks, internet connections, radio communications and the utility backbone communication infrastructure, the potential for unauthorized access of critical systems and information is a major concern. Standards and systems that provide a secure platform are still under development nationwide, but firm and comprehensive solutions have not been fully developed or deployed in a large scale.

The privacy of customer information will also present a new challenge to the EDCs and the Commission. With smart metering, electricity data at a granular level that has

never before been available will now be collected on each and every customer. While such data may be able to provide benefits for some customers, the potential for pitfalls and unintended consequences now exists at a level never before contemplated by the Commission, the stakeholders or the EDCs. It will be critical to both the acceptance of the smart meters by customers and to the proper implementation of the smart meter initiative that these issues be fully considered and necessary protections be developed during the early stages of the Plans.

Other consumer protection issues are also likely to be presented by the move to smart metering. For example, the Commission has required in its Implementation Order that each EDC include a capability to remotely disconnect and reconnect service, subject to a cost/benefit analysis. Implementation Order at 18, 30-31. While the Commission cautions that the EDC will have to follow all applicable provisions of the Public Utility Code, it will also be important for the Commission to consider additional procedures to ensure that if the capability is included and utilized that the health and safety of the public is not put in jeopardy. One example of the issues to be addressed can be seen in situations where tenants often move in and out of multi-family buildings. Procedures will need to be established to assure that the property is indeed vacant and that the property will not be damaged. Disconnecting a property from electric service, sight unseen, is a different proposition than the current procedures typically followed when a customer is terminated or moves out of a residence.

In the OCA's view, the Smart Meter plan filed by FirstEnergy represents only the starting point for much of the work that must be done as Pennsylvania changes the way in which the EDC can interact with customers and the way in which customers can interact with (or impact) the electric grid as a whole. Some of these critical issues can be anticipated and throughout the course of this proceeding, the OCA will seek to identify and begin discussion of

these issues. But many of these issues will be developed through the evaluation, testing and pilot phases of the smart meter plans that have been proposed.

For these reasons, the OCA submits that the Commission should consider these Plans as the first step in the process of procuring and deploying smart meters and related infrastructure in Pennsylvania. The Commission has already correctly allowed for a 30-month grace period where each EDC can continue its assessment of needs and technological solutions, complete its selection of technologies and vendors, establish its network designs, establish its plans for training, establish plans for testing and installation of the necessary equipment and software, establish plans to design, test and clarify the EDI transactions, and establish plans for the installation of meters. As will be detailed more in the OCA's testimony in this proceeding, the Commission should ensure that during each task and leading up to each milestone, FirstEnergy collects the necessary information and conducts the necessary evaluations to inform each decision point. As these decision points are reached and decisions made, the OCA submits that FirstEnergy should return to the Commission with a filing for Commission approval before proceeding to the next step. In this way, the Commission can ensure that as each new step approaches, that the decisions are fully supported, that the tasks for the next step are properly established and that the necessary policy issues have been addressed.

In the remainder of these Comments, the OCA will briefly address some issues presented by the FirstEnergy Companies' Plan and some preliminary issues identified regarding the proposed cost recovery mechanism. The OCA anticipates that as discovery continues, its expert witnesses continue their review, and the technical conferences are held, additional issues will be identified and addressed through the OCA Testimony and Briefs. The OCA only seeks to highlight in these comments some preliminary issues identified through its initial review.

B. The FirstEnergy Companies Must Demonstrate That Their Plan Is Reasonable And Will Produce Just And Reasonable Rates.

Act 129 requires each affected EDC to file a Plan for smart meter technology procurement and installation and provides for the recovery of reasonable and prudent costs associated with the approved Plan. 66 Pa.C.S. §2807(f)(7). As a matter of sound public policy and ratemaking policy, the OCA submits that the Commission must ensure that each EDC provides substantial evidence that its Plan is cost-effective and reasonable, and that any rate increase that must be borne by customers are just and reasonable. This burden rests with the utility and the cornerstone of this determination will be sound cost/benefit analysis of the technology, the capabilities, and the deployment strategy.

Act 129 establishes important goals for Pennsylvania in ensuring the availability of reliable, affordable, efficient and environmentally stable electric service at the least cost. The OCA fully supports these goals and recognizes the importance of smart meter deployment as one tool in helping to meet these goals. The cost estimates contained in the EDC Plans suggest that the costs of these efforts will be significant. The estimated cost of Smart Meter Plans for these seven major EDCs is around \$1.5 billion, all of which will be collected from ratepayers. For the combined FirstEnergy Companies, the estimated cost of full deployment ranges from \$330 Million to \$400 Million, not including operating and maintenance expenses.

The OCA submits that there are many different approaches to designing a plan for the selection and deployment of smart meters. The FirstEnergy Companies must bear the burden of demonstrating that the particular design of their Smart Meter Plan is the most cost effective and reasonable approach out of the range of available alternatives. While the FirstEnergy Companies have estimated the costs of the Smart Meter Plan that they have proposed, the filing provides only limited information as to the specific benefits anticipated from the smart meter

deployment. For those EDCs that already have automated meter reading such as PPL Electric, PECO Energy and Duquesne Light Company, a large share of the benefits in distribution operation savings, such as through the reduction of meter reading costs, have been achieved. FirstEnergy, however, has not yet moved to automated meter reading so there may be distribution operation savings that will need to be identified, calculated, and properly reflected in customer rates.

Beyond these distribution operation savings, the benefits of smart meter deployment that have mostly been shown are in the area of enabling demand response. Demand response benefits may be difficult to quantify at this early stage. One source of uncertainty is the magnitude of residential customer reductions in peak demand. These projections rely upon a number of assumptions, including participation rates and average reductions for residential customers, for which Pennsylvania has limited experience. As Pennsylvania gains more experience with its Energy Efficiency and Demand Response Programs initiated under Act 129 between now and 2013, it is possible that more certainty regarding these benefits will be developed. Another source of uncertainty concerns the value, in \$/KW of the demand reductions. This value rests on assumptions regarding the long term outlook for capacity prices in PJM. Given the volatility in these prices that has been seen through the RPM auction process, this value remains uncertain at this time.

While difficult to estimate, the OCA submits that a rigorous cost/benefit analysis is a key task that must be undertaken to determine whether the rates resulting from the Plan are just and reasonable. As mentioned, there are many different technologies that can be adopted, functionalities that can be included, and strategies that can be used for deployment of smart meters. A rigorous cost/benefit analysis that seeks to determine not only the costs, but the actual

benefits, how those benefits are achieved, and how those benefits will be realized by customers is a necessary task to determine whether the alternative being selected is the most cost-effective and reasonable. In its Implementation Order, the Commission recognized the importance of this type of analysis when it directed that the EDCs obtain the necessary cost and savings information to evaluate certain smart meter capabilities so that the Commission can determine whether the additional capabilities, beyond the statutorily required capabilities, are cost-effective. Implementation Order at 30-31.

The OCA submits that the Commission must require more fully developed and rigorous cost/benefit analyses as a key task in the initial phase of the FirstEnergy Companies' Smart Meter Plan before any technology capabilities are finally selected and before a final deployment plan or schedule is determined. This cost/benefit analysis should also be used to inform the cost recovery so that the benefits and costs of smart meter deployment can be closely matched.

C. Potential for Cross-Subsidization Among FirstEnergy Companies

The FirstEnergy Companies have proposed an initial estimate of \$29.5 million for costs related to the Assessment Period. See ME/PN/PP St. 2 at 12; Joint Smart Meter Petition at 9. This initial estimate includes test lab costs, equipment costs, computer hardware and software, professional consulting fees and other labor and expenses. See Joint Smart Meter Petition at 9. Of this amount, the Companies anticipate that \$20.2 million will be spent during the first twelve months of the Assessment Period. See ME/PN/PP St. 2 at 13. The Companies propose to allocate these Assessment Period costs based on the existing metered customers of each FirstEnergy Company. See Joint Smart Meter Petition at 9. In their Joint Smart Meter Petition,

the FirstEnergy Companies are seeking approval of their total projected Assessment Period costs of \$29.5 million.

The Companies preliminarily anticipate a total cost for smart meter implementation throughout all three service territories to be at least \$325 million. See ME/PN/PP St. 1 at 12. Based on the Companies' preliminary research using a benchmark of \$250 per installed smart meter, the Companies estimate a total deployment cost range of between \$330 million and \$400 million for all three Companies. See Joint Smart Meter Plan at 20. This estimate does not include Operation and Maintenance (O&M) costs, but the FirstEnergy Companies will update their estimates once more specific data is gathered during the Assessment Period. Id.

The OCA submits that the FirstEnergy Companies should be directed to determine the Assessment Period costs, and later the implementation costs, on a Company-by-Company basis. The FirstEnergy Companies' service territories differ greatly in terms of density and geography. Therefore, the costs incurred for test labs, equipment, computer hardware and software, professional consulting fees and other labor and expenses, and later deployment of smart meters, are likely to differ due to the unique circumstances that each service territory presents in the planning and later deployment of smart meters on a basis other than number of customers. The OCA submits that the Companies should develop accounting and allocation protocols to avoid any cross-subsidization across the Companies.

D. Offsets

The major potential benefits of a smart metering system and the Demand Response (DR) programs and rate offerings it could enable are avoided distribution service costs and avoided electricity supply costs. Avoided distribution service costs include reductions in

operating and maintenance costs as well as deferred /avoided local transmission and/or distribution (T&D) capacity costs. Electricity supply costs that can be avoided include generation capacity costs, electric energy costs, generation market ancillary service costs, the reduction in market price of generation capacity, and the reduction in market price of electric energy.

As with cost recovery discussed above, the OCA submits that the FirstEnergy Companies be directed to determine the savings that smart meters will create on a Company-by-Company basis and ensure that these savings are offset against the costs of implementing the smart meters in determining the surcharge. Act 129 allows the EDCs to collect the costs of planning and implementation of smart meters from their customers, and therefore, the customers should also reap the savings benefits from the implementation and deployment of smart meters.

E. A More Detailed Plan For Consumer Education To Foster Customer Understanding Of The Smart Meter Technology Should Be Developed.

For the major benefits of smart meter deployment to be realized on both a system basis and a customer basis, customers must understand and accept the smart meter as well as be educated in utilizing the capabilities of the smart meter. Undoubtedly, for some customers, the smart meter will only be used as a billing meter as those customers will not choose to participate in the voluntary rate programs that may be implemented. The OCA submits, however, that a smooth conversion to smart metering is vital to realizing the benefits, and a smooth transition to this metering system will require adequate and effective consumer education for all customers.

At this time, efforts have, understandably, been directed toward analysis of the technology and systems that will be required, and the specific steps necessary to procure and deploy the Smart Meters. As the FirstEnergy Companies' Plan develops and milestones are achieved, however, the Companies must also begin the process of articulating the purpose and

goals of the smart meter initiative to customers and communicating information to customers about the Smart Meter Plan. The FirstEnergy Companies must also clearly communicate to their customers, among other things, what the smart meter is, what it does, how it can be used to the benefit of the customer, what changes in rules, rights or procedures may take place, and what protections are in place for the data that is now being collected. Without this education, many of the benefits of smart meters could be lost.

The OCA submits that the FirstEnergy Companies should include milestones and tasks in its Plan related to educating consumers and gaining consumer acceptance of the smart meter initiative.

F. An On-Going Process For Review Of The Decisions, Milestones And Tasks Is Necessary.

As noted above, the FirstEnergy Companies' Plan establishes various milestones with the expectation that the Companies will return to the Commission with an additional filing seeking approval of decisions that have been made and the next steps that will be undertaken. The FirstEnergy Companies propose to make a single, comprehensive filing for the full implementation of its smart meter plan at the conclusion of the first 24 months of the grace period (or at the end of what the Companies termed the "Assessment Period").

The OCA submits that the Commission should make clear that approval of the Plan at this time is approval of this process and not of individual decisions that may be made along the way. It will be critical for the Companies to return to the Commission with additional filings, information, and analyses as milestones are achieved, decisions are ready to be made, and the next tasks are to be determined. The current Plan was developed with much information still to be developed and many decisions still to be made. Each of these decision points can have a significant impact on both customers and the Company. The OCA submits that it is reasonable

for the Company to make the necessary additional filings so that all input can be provided as to the proper course.

The OCA submits that the Commission should determine the milestones, or points in the Plan development, that require further filings with the Commission. In this case, the Companies propose to make a single filing after 24 months. In addition, the Companies propose to file an annual Smart Meter Progress Report. The OCA submits that it may be appropriate to require the Companies to provide additional filings and allow for the participation of other parties as the Plan unfolds. For example, it may be appropriate to allow parties to comment on the development of the Plan after the first sizeable deployment of 5,000 to 10,000 smart meters occurs in 2013. The OCA submits that the Commission and other parties should be afforded the opportunity to provide valuable input into the Plan throughout the implementation period.

III. COMMENTS ON COST RECOVERY

A. FirstEnergy's Cost Recovery Proposal

In order to recover the costs of the Smart Meter Plan, the FirstEnergy Companies propose to implement a "Smart Meter Technologies" (SMT-C) Rider for each Company. See ME/PN/PP St. 3 at 3. The Companies have not developed a specific rate at this time. The rates will be calculated when the Companies' Plans have been approved by the Commission and will be effective beginning April 1, 2010, and adjusted annually. See Joint Smart Meter Petition at 6, 10. The FirstEnergy Companies reserve the right to request Commission approval of interim revisions to the SMT-C rates if they anticipate a material over- or under-collection of recoverable costs. Id. at 10.

The costs related to the smart meter program will be collected through the SMT-C rates proposed by Companies' witness Raymond Parrish. The SMT-C rates will contain two

components. The first component is the SMTc “current cost.” The second is the reconciliation component, or the “E” factor. ME/PN/PP St. 3 at 7. The SMTc “current cost” will collect the following costs:

A projection of costs to be incurred associated with the Customer Class specific Smart Meter Technology Procurement and Installation Plan (“Plan”) as approved by the Commission for the SMT-C Computation Year by Customer Class including carrying charges on capital costs, depreciation expense, and operational and maintenance expenses. These costs would also include an allocated portion of any projected indirect costs to be incurred benefiting all Customer Classes of the Company’s Plan for the SMT-C Computational Year.

ME/PN/PP Exhibit RIP-1-RIP-3. In addition, the SMT-C rate will include an allocated portion of administrative start-up costs incurred by the Companies through March 31, 2010. The Companies provide examples of these costs that include consultant costs, legal fees, and other direct and indirect costs associated with the development of the Companies’ Plan. ME/PN/PP St. 3 at 8. The Companies plan to amortize these start-up costs over a 12-month period, with interest. Id.

The Companies propose to allocate all initial start up costs, and the costs incurred during the estimated \$29.5 Million Assessment Period budget, on a per meter basis. For the costs that will be incurred under the Implementation Plan, the Companies have proposed to allocate directly to each customer class those costs that the Companies believe are associated with that specific class. The Companies have not specifically identified those costs, nor have they reflected any expected cost savings realized by the Companies’ as a result of installing smart meters. In addition to those costs that the Companies directly allocate to a particular class, the Companies’ Plan provides that an “allocated portion of any projected indirect costs that

benefit all the respective Companies' Customer Classes during this same period" will be included in each classes SMT-C rate. ME/PN/PP St. 3 at 7.

The Companies propose to combine the directly allocated costs, plus the "allocated portion" of indirect costs, and divide that total costs by the "Average Customer Class Count." ME/PN/PP Exhibit RIP-1, RIP-2, RIP-3. Once those combined costs have been divided evenly over all of the customers in the Customer Class, gross receipts tax will be added in order to develop the final, fixed, per customer rate. Id. The Companies propose that the SMT-C rates be calculated and stated separately for residential, commercial, and industrial customer classes. Id. The Companies' witness Parrish testified that the SMT-C rates will be "expressed as a monthly customer charge and will be billed on that basis to all metered customer accounts." Id. at 3. Based on this testimony, it appears that each customer will see a separate smart meter charge on their monthly bill.

B. Preliminary Identification of Issues

i. Rate of Return

One of the key components of the Companies' proposed cost recovery is the rate of return that will be allowed. The Companies proposed return on capital expenditures would incorporate a 51% long term debt and 49% common equity capital structure for all three companies in order to determine the overall cost of capital needed to build the smart meter network. The Companies have selected this capital structure because it was approved by the Commission in Met-Ed and Penelec's most recent base rate proceeding. The Companies propose utilizing a 10.1% common equity rate. ME/PN/PP St. 3 at 9. The Companies selected this rate because it was the allowed return on common equity specified by the Commission for Met-Ed and Penelec in their 2006 base rate proceeding. Pa. PUC v. Met Ed, et al., Docket No. R-

00061366 (Order entered January 11, 2007); Pa. PUC v. Penelec, et al., Docket No. R-00061367 (Order entered January 11, 2007).⁴ The Companies propose to adjust their long term debt rate on an annual basis, based on their most recent calendar year weighted rate presented by the Companies in their quarterly Financial Reports filed under 52 Pa. Code §§71.1-71.9. Id.

The OCA agrees that the allowed return for each EDC should be based on the most recent Commission-approved capital structure and capital cost rates if that proceeding was within the last few years. If the EDC's last base rate proceeding was not sufficiently recent, it is the OCA's view that the EDC's current capital structure and senior capital cost rates, if reasonable, could be utilized, along with a properly adjusted ROE. One method to reflect any necessary change to the ROE would be to utilize the most recent Bureau of Fixed Utilities Report on Quarterly Earnings to establish the necessary adjustment.

ii. Cost Allocation

The Companies' Smart Meter Plan outlines how the costs of the Plan will be allocated to the customer classes during the initial 24 month Assessment Period, and then during the full roll out of smart meters under its future Implementation Plan. During the Assessment Period, the Companies propose to allocate all Plan costs to each customer class based on the number of metered customers. ME/PN/PP Petition at 11. For the estimated \$330 Million to \$400 Million costs incurred during the Implementation Plan, the Companies will allocate the total costs in two ways. First, the Companies will allocate customer class costs directly to the benefiting class on a customer count basis (*e.g.*, the cost of meters). ME/PN/PP St. 3 at 7. Second, the Companies will allocate to the different classes a "portion of any projected indirect

⁴ Penn Power has not had a base rate proceeding in over 20 years. FirstEnergy proposes to utilize the Met-Ed and Penelec base rate determinations from 2006 for Penn Power.

costs that benefit all the respective Companies' Customer Classes during this same period.” ME/PN/PP St. 3 at 7. The method for the allocation of the indirect costs was not specified.

The OCA agrees that the directly identifiable meter costs should be allocated on the basis of meter investment for each class. The OCA does not agree, however, with the Companies' proposal to recover all of the start up costs and Assessment Period costs incurred by the Companies on a per meter basis. The OCA submits that development of the Implementation Plan during the Assessment Period will benefit all customers. An allocation reflecting these benefits must be developed.

As noted above, the Companies' Plan provides that during the Implementation Plan an “allocated portion of any projected indirect costs that benefit all the respective Companies' Customer Classes during this same period” will also be allocated on this basis. ME/PN/PP St. 3 at 7. The OCA submits that the allocation of indirect and common costs, such as infrastructure and computer system costs, should reflect the benefits each class receives from the incurrence of those costs. It is expected that the costs that will fall into this category could be substantial. For example, the Companies note in their testimony that they will require the “build out of the necessary communication and other distribution infrastructure” needed to install a smart meter system. See ME/PN/PP St. 2 at 11. The Companies anticipate that, given the expanse of their service territories, this build out will take approximately three years. *Id.* The OCA submits that the development of the underlying smart meter infrastructure is an example of a significant cost that must be properly allocated as the Companies proceed with their Implementation Plan.

The Implementation Order calls for the direct assignment of costs associated with an EDC's Plan to the customer class that received the benefit of such measures. Implementation

Order at 32. The OCA agrees that the cost of the meters themselves should be allocated on a customer basis, but submits that it is inappropriate to allocate all other smart meter system costs and administrative expenses based on the number of customers/meters. As indicated in the Implementation Order, smart meter plan costs are appropriately allocated to those customer classes who derive benefit from such costs. Implementation Order at 32. The number of customers/meters is neither a measure of the benefits derived from the smart meter system nor the causation of non-meter system costs. For example, a single large customer that cannot shift usage off of summer peak hours (*e.g.*, a supermarket refrigerating food during a hot summer afternoon) will benefit from the installation of a smart meter network that allows residential customers to shift usage and drive down peak prices. The OCA submits that costs must be allocated to properly reflect the benefits derived from the smart meter network.

The OCA submits that the Commission must consider a more appropriate usage based- allocation of smart meter systems costs (other than the meters themselves). Electricity usage recognizes that larger customers (in terms of usage) will derive greater benefits from the smart meter system and its technological capabilities.

iii. Rate Design

The Companies proposed to recover costs allocated to each class using a fixed customer charge. The OCA submits that the Companies' smart meter costs can be recovered from customers in three ways: (1) on a per kWh, or usage, basis; (2) through a fixed customer charge; or (3) through a combination of usage and fixed charges. The Companies' proposal to collect all smart meter costs through fixed customer charges is not consistent with the Commission's ratemaking standards.

Utilizing traditional ratemaking principles, the Commission has limited the costs that can be included for recovery in the customer charge to “basic customer costs” necessary to customer service. See e.g., Pa.P.U.C. v. West Penn Power Co., 69 PUR4th 470, 521 (1985)(West Penn); Pa.P.U.C. v. West Penn Power Co., 1994 Pa. PUC LEXIS 144, 154 (1994). The Commission has defined “basic customer costs” to include the costs for the meter and service drop, meter reading and billings. West Penn at 521. The OCA submits that a proper recognition of basic customer costs will result in a cost recovery scheme that collects indirect smart meter network costs through a usage based charge.

In addition to these traditional ratemaking principles regarding customer charges, the collection of all smart metering costs through a fixed charge is antithetical to the guiding principles of Act 129. A major purpose of Act 129 is the reduction of energy consumption, both on an annual basis and with regard to peak energy usage. As the Commission is well aware, the use of fixed charges for the recovery of a utility’s costs reduces customers’ incentives to decrease usage. If all of the smart meter costs are collected through a fixed customer charge, the incentive to reduce usage will decrease to the detriment of the energy efficiency goals of Act 129.

The OCA submits that recovery of at least the indirect component of smart meter costs on a per kWh basis is reflective of the greater benefits that residential customers with greater usage stand to realize from smart meter capabilities. Finally, because the FirstEnergy Companies will be allowed to fully reconcile smart meter costs and revenues, the Companies bear no risk of under-recovery if actual sales are less than projected.

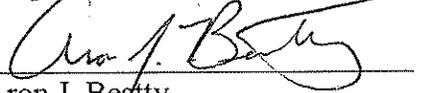
iv. Return to Normal Ratemaking

The FirstEnergy Companies' cost recovery mechanism would continue through the full implementation of smart meter technology to all customers. Once the implementation period ends, the Companies should eliminate the rider and return to normal ratemaking with regard to the collection of their metering costs. Once smart metering is fully implemented, the operation of that system and the collection of costs should be part of the normal, ongoing cost of running the utilities. Such costs are properly reflected in base rates, consistent with the Commission's past treatment of the cost of existing meters.

IV. CONCLUSION

The OCA appreciates this opportunity to provide Comments on this important topic. The OCA generally supports the FirstEnergy Companies' approach to the installation of a Smart Meter Network. The OCA submits these Comments as a first step in addressing its initial concerns with the FirstEnergy Companies' Plan and will submit testimony, in accordance with the Procedural Schedule, further detailing these and other issues relating to the Plan. The OCA requests that the Commission review these Comments in conjunction with the OCA's testimony and briefs.

Respectfully Submitted,



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Dated: September 25, 2009

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CERTIFICATE OF SERVICE

Joint Petition of Metropolitan Edison :
Company, Pennsylvania Electric Company :
and Pennsylvania Power Company for : Docket No. M-2009-2123950
Approval of Smart Meter Technology :
Procurement and Installation Plan :

I hereby certify that I have this day served a true copy of the foregoing document, the Comments of the Office of Consumer Advocate, 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 25th day of September, 2009.

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