

COMMONWEALTH OF PENNSYLVANIA



OFFICE OF CONSUMER ADVOCATE

555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
800-684-6560 (in PA only)

FAX (717) 783-7152
consumer@paoca.org

IRWINA. POPOWSKY
Consumer Advocate

September 25, 2009

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

RE: Petition of West Penn Power Company
d/b/a Allegheny Power for Expedited
Approval of its Smart Meter Technology
Procurement and Installation Plan
Docket No. M-2009-2123951

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,

A handwritten signature in black ink that reads "Christy M. Appleby".

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824

Enclosures

cc: Honorable Mark A. Hoyer
Office of Special Assistants

00118061.docx

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of West Penn Power Company :
d/b/a Allegheny Power for Expedited : Docket No. M-2009-2123951
Approval of its Smart Meter Technology :
Procurement and Installation Plan :

COMMENTS
OF THE
OFFICE OF CONSUMER ADVOCATE

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org
Tanya J. McCloskey
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50044
E-Mail: TMcCloskey@paoca.org

Counsel for:
Irwin A. Popowsky
Consumer Advocate

Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

Dated: September 25, 2009

TABLE OF CONTENTS

I. INTRODUCTION1

 A. Background/Act 129 History.....3

 B. Summary of Company Plan and Request.....7

II. COMMENTS.....9

 A. Introduction9

 1. Allegheny Power Must Demonstrate That The Plan Is Reasonable And Will Produce Just And Reasonable Rates..... 13

 2. In-Home Displays.....15

 3. A More Detailed Plan For Consumer Education To Foster Customer Understanding Of The Smart Meter Technology Should Be Developed..16

 4. An On-Going Process For Review Of The Decisions, Milestones And Tasks Is Necessary.....17

III. COMMENTS ON COST RECOVERY18

 A. Allegheny Power’s Cost Recovery Proposal.....18

 B. Preliminary Cost Recovery Issues19

 1. Rate of Return.....20

 2. Asset Lives21

 3. Stranded Costs21

 4. PUC Assessment Fee.....22

 5. Cost Allocation22

 6. Rate Design.....23

 7. Return to Normal Ratemaking.....24

IV. THE COMMISSION SHOULD DENY THE COMPANY’S REQUEST FOR EXPEDITED TREATMENT25

V. CONCLUSION28

I. INTRODUCTION

The Office of Consumer Advocate (OCA) is filing these Comments in accordance with the Smart Meter Procurement and Installation Implementation Order at Docket No. M-2009-2092655. Smart Meter Procurement and Installation Implementation Order at 6 (Order entered June 24, 2009)(Smart Meter Implementation Order.) These Comments are in response Allegheny Power's Smart Meter Procurement and Installation Plan (SMIP or Plan) that was filed on August 14, 2009, pursuant to Section 2807(f) of the Public Utility Code and the Implementation Order entered by the Pennsylvania Public Utility Commission (Commission) on June 24, 2009 at Docket No. M-2009-2092655. Petition at 1; see also, 66 Pa.C.S. § 2807(f). Section 2807(f) of Act 129 required all Pennsylvania electric distribution companies (EDCs) serving more than 100,000 customers to file such a Plan. Id. Allegheny Power requests that the Commission approve the Company's SMIP on an expedited basis, including full and current recovery via reconcilable surcharge of reasonable and prudent costs regarding the Plan. Petition at 1.

The OCA has significant concerns regarding Allegheny Power's proposed SMIP, the overall costs of the proposed program, and the impact on ratepayers. The OCA submits that Allegheny Power is proposing an aggressive and expedited Smart Meter deployment with insufficient analysis of the cost-effectiveness of the Plan, the technological challenges of the Plan, the policy implications of the Plan or the rate impacts of the Plan. Allegheny Power takes this approach because, alone among Pennsylvania EDCs, it has elected to rely on the deployment of Smart Meters to meet the near-term (2011-2013) demand reduction requirements of Act 129. Allegheny Power pursued this design of its Energy Efficiency and Conservation (EE&C) Plan under Act 129 without adequate consideration of the significant costs and significant challenges

of an aggressive Smart Meter deployment and without consideration of whether its EE&C Plan meets the Total Resource Cost test required by Act 129 under this design. As the OCA detailed in its Comments, Testimony and Briefs in Allegheny Power's EE&C case at Docket No. M-2009-2093218, Allegheny Power's approach was unreasonable. Allegheny Power's SMIP reinforces this point.

Allegheny Power estimates that the total cost of its Plan for development, deployment, and operation and maintenance, including the stranded costs of existing meters and the off-set of system CIS and Smart Meter& Infrastructure benefits, will be \$580 million. Allegheny Power St. 4 at 4; See, SMIP Plan, Table 4.1, at 94.¹ For residential customers, the Company is proposing an estimated additional monthly surcharge that would start at \$5.86 per month in February 2010, and would reach \$14.34 per month by June 2011, just five months after those customers are hit with the expiration of the Allegheny Power generation rate caps. The estimated surcharge would increase to \$15.57 per month in June 2012 and \$15.77 in June 2013. SMIP Plan at 98. Over the four year and four month period identified in the Company's filing, every Allegheny Power residential customer would pay a total of \$571 just to cover the proposed Smart Meter surcharge. SMIP Plan at 98. Again, these increases will be in addition to the generation rate increase that will occur in 2011 when the rate cap expires.

In calculating its projected rate increases, Allegheny Power estimates off-setting Smart Metering and Infrastructure benefits of \$30 million and Allegheny Power Customer Information System (CIS) benefits of \$13.2 million, or a total of \$43.2 million. SMIP Plan, Table 4.1, at 94. The Company has not projected specific offsetting reductions in the electricity supply cost component of customer bills.

¹ Allegheny Power witness Valdes clarifies that the Pennsylvania costs for the program are \$580 million, while Table 4.1 includes the total Allegheny Power systemwide costs of \$620 million. Allegheny Power St. 4 at 4.

The OCA submits that in both its EE&C Plan to meet the requirements of energy efficiency and demand response reductions in Act 129 and in this Smart Meter Plan filing, Allegheny Power has pursued a strategy that differs radically from other EDCs in Pennsylvania. Alone among Pennsylvania EDCs, Allegheny Power has declined to utilize the 30-month grace period provided by the Commission to study and develop a more reasonable long-term approach to this complex undertaking. Allegheny Power has pursued a Plan that is challenging to deploy, and presents significant public policy and cost concerns. Allegheny Power has proposed this aggressive and costly Smart Meter Plan without adequate consideration of the impacts on its customers. The OCA submits that the Allegheny Power's Smart Meter Plan cannot be approved. Rather, Allegheny Power should be directed to conduct all necessary analyses and evaluations during the 30-month grace period and return to the Commission with a properly structured, multi-step approach to widescale Smart Meter deployment.

A. Background/Act 129 History

Act 129 was signed into law by Governor Rendell on October 15, 2008 and became effective on November 14, 2008. The Act provides for Energy Efficiency and Conservation Programs; Amending the Duties of Electric Distribution Companies' (EDCs) Obligation to Serve; Providing for Smart Meter Technology and Time of Use Rates; Providing Additional Market Power Remediation for Market Misconduct; Providing Additional Alternative Energy Sources; and Providing a Carbon Dioxide Sequestration Network. The Act makes a number of specific amendments to the Pennsylvania Public Utility Code, many of which will have a direct impact on the rates and service of customers of Pennsylvania's EDCs.

Of particular relevance here, Act 129 establishes an obligation for each EDC with 100,000 or more customers to file a Smart Meter Technology and Installation Plan with the

Commission. 66 Pa.C.S. §2807(f). Section 2807(f)(2) requires that EDCs 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 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). Further, EDCs shall, “with customer consent,” make available direct meter access and electronic meter access to customer meter data to third parties, including electric generation suppliers and providers of conservation and load management services.” 66 Pa. C.S. § 2807(f)(3).

Finally, Section 2807(f)(7) also provides for cost recovery for the Smart Meter Implementation Plan as follows:

(7) An Electric Distribution Company may recover reasonable and prudent costs of providing Smart Meter technology under Paragraph (2)(ii) and (iii), as determined by the Commission. This paragraph includes depreciation and capital costs over the life of the Smart Meter technology and the cost of any system upgrades that the Electric Distribution Company may require to enable the use of Smart Meter technology which are incurred after the effective date of this paragraph less operating and capital cost savings realized by the Electric Distribution Company from the installation and use of the Smart Meter technology. Smart Meter technology shall be deemed to be a new service offered for the first time under Section 2804(4)(vi). An Electric Distribution Company may recover Smart Meter technology costs:

- (i) Through base rates, including a deferral for future base rate recovery of current basis with carrying charge as determined by the Commission; or
- (ii) On a full and current basis through a reconcilable automatic adjustment clause under Section 1307.

66 Pa.C.S. § 2807(f)(7). Section 2807(f)(4) provides that lost revenues may not be included in the cost recovery mechanism as a recoverable cost “except that decreased revenues and reduced

energy consumption may be reflected in the revenue and sales data used to calculate rates in a distribution rate base rate proceeding filed under Section 1308 (relating to voluntary change in rates).” 66 Pa.C.S. §2807(f)(4).

The Smart Meter Implementation Order provides that all Electric Distribution Companies with 100,000 or more customers are required to file Smart Meter Plans on or before August 14, 2009, and that Comments on the Plans are to be filed on or before September 25, 2009. Smart Meter Implementation Order at 6. A technical conference will be held in this proceeding on October 5, 2009 pursuant to the Smart Meter Implementation Order requirement. Further, the Smart Meter Implementation Order provides that technical evidentiary hearings may be held in November 2009, and an Initial Decision is to be issued on or before January 29, 2010. Smart Meter Implementation Order at 6.

The Smart Meter Implementation Order authorized a 30 month grace for EDCs to develop their smart meter network following Plan approval. Id. at 7. Specifically the Smart Meter Implementation Order required:

All covered EDCs to include in their smart meter procurement and installation plan filing a proposal for meeting specific milestones within this 30 month grace period. Each covered EDC must include a justification and its plan for meeting the following milestones:

- Assessment of needs and technological solutions.
- Selection of technologies and vendors.
- Establishment of network designs.
- Establishment of plans for training personnel.
- Establishment of plans for installation, testing and rollout of support equipment and software.
- Installation, testing and rollout of support equipment and software.
- Establishment of plans to design, test and certify EDI transaction capability consistent with this order.
- Establishment of plans for installation of meters consistent with the rollout requirements described below.

Each plan must include a schedule to meet each of these milestones, as well as specific reporting deadlines when the EDC will provide this Commission with reports on the status of its plan.

Smart Meter Implementation Order at 7-8.

Further, the Smart Meter Implementation Order provides that the cost recovery mechanism “shall be designed to recover on a full and current basis from each customer class, all prudent and reasonable smart meter costs less operating and capital cost savings realized by the EDC from the installation and use of smart meter technology.” Smart Meter Implementation Order at 31. The mechanism will be subject to an annual review and reconciliation pursuant to Section 1307(e) and shall coincide with the submission of the Company’s annual Smart Meter Progress Report. 66 Pa.C.S. §1307(e); Smart Meter Implementation Order at 31.

The Commission also requires that “all measures associated with an EDC’s smart metering plan shall be financed by the customer class that receives the benefit of such measures.” Smart Meter Implementation Order at 32. Those costs which clearly benefit solely one class shall be allocated wholly to that class, and those that provide benefit across multiple classes should be allocated among the appropriate classes using “reasonable cost of service practices.” Id.

The OCA has hired a team of experts to assist the OCA in its review of Allegheny Power’s SMIP. After all outstanding discovery requests have been received and reviewed, the OCA plans to file the recommendations of its experts in the form of Direct Testimony in this case. The OCA also plans to participate in the October 5, 2009, technical conference and to participate in the technical evidentiary hearings in this proceeding.

The OCA provides the following preliminary Comments on Allegheny Power’s Smart Meter Plan in accordance with the Commission’s Smart Meter Implementation Order.

B. Summary of Company Plan and Request

In its Smart Meter Installation Plan, Allegheny Power proposes to replace its existing, functioning meters over a five year period from 2010 through 2014 with Smart Meters and associated infrastructure. At the same time, the Company proposes to install In-Home Displays in every residential premise in its service territory. The Company proposes an infrastructure consisting of six components including: (a) Home Area Network and In Home Devices to connect and control appliances, thermostats, hybrid vehicles, home generation, etc; (2) Smart Meters which will connect the Home Area Network to the electric system using standard wireless communications and a multi-supplier standard; (3) A Network which connects the Smart Meters to the utility “core systems” using secure collectors, microwave and fiber communications; (4) Core Systems which will collect, store, process and manage information generated by users, the Home Area Networks and Smart Meters and also calculate and issue customer bills; (5) The Customer Interface which provides the ability for customers and authorized third parties to interact and better manage electric usage via In Home Devices, an Interactive Voice Response System, or a web portal; and (6) Security which will encompass a set of systems, protocols and processes to allow Allegheny Power to provide secure advanced meter technology. SMIP Plan at 12; Petition at ¶ 8.

Allegheny Power estimates that the total cost for development, deployment, and operation and maintenance, including the stranded costs of existing meters and net of Customer Information System (CIS) and Smart Meter & Infrastructure benefits, will be \$580 million. Allegheny Power St. 4 at 4; See, SMIP Plan, Table 4.1, at 94; See benefit calculation at, SMIP Plan at 14 and Table 4.1 at 94. The Company states that additional benefits of the Smart Meter infrastructure will include an increase in utility energy efficiency and demand response

participation, but it has not quantified these benefits. Petition at ¶ 10. The Company states that its proposed Plan will provide customers with “direct access to pricing and consumption information, enabling time-of-use and real-time price programs, and remote programming capability” and will include bi-directional communications capability; remote disconnection and reconnection; ability to provide 15-minute or shorter interval data to customers; minimum of hourly reads delivered once per day; and the ability to upgrade the minimum capabilities. Id. at ¶ 14.²

Allegheny Power is proposing to recover the revenue requirements associated with this investment through a fully reconcilable automatic adjustment Smart Meter Technology (SMT) surcharge under Section 1307(f) that will be applied in a separate line-item as a monthly customer or meter charge on the bill. Allegheny Power St. 4 at 8. For residential customers, the Company is proposing an additional monthly charge of \$5.86/month in the first year (2010), \$14.34 in the second year and rising to \$15.77 per month in the fourth year (2013). SMIP Plan at 98. In comparison, the Company’s existing residential customer charge is \$5 per month. See, West Penn Power Co. Tariff, Supplement No. 188, Electric Pa.P.U.C. No. 39, Twelfth Revised Page No. 6-1, Domestic Service Schedule 10. These proposed residential surcharges would increase the annual bills of residential customers by \$70 in the first year (2010) and by \$189 in the fourth year. Over the course of the four year and four month deployment plan, every residential customer would pay a total of \$571 for this initiative. See, SMIP Plan at 98. The Company has reflected total off-setting benefits of \$43 million during this period in distribution

² The OCA notes that Allegheny Power has relied upon the proposed Smart Meter infrastructure for nine of its Energy Efficiency and Conservation Plan programs filed in Docket No. M-2009-2093218. The OCA has opposed the implementation of these nine programs in that filing due to the Company’s failure to show these programs are cost-effective under the Total Resource Cost test as required by Act 129. A final Commission Order has not yet been issued in that docket.

system operations but has not projected any further offsetting reductions in the electricity supply cost component of customer bills.

Allegheny Power states that it does not require the 30-month grace period that is provided for in the Smart Meter Implementation Order. Petition at ¶ 13; see also, Smart Meter Implementation Order at 7. Rather, the Company has requested that the Commission expedite the approval for the Smart Meter Plan and the activities and expenditures proposed for the initial phase of the Plan, so that it can fully deploy its Smart Meters by 2013. Petition at ¶¶ 20-23.

As noted above, the OCA has significant concerns with Allegheny Power's proposed Smart Meter deployment Plan. Of particular concern, Allegheny Power's Plan aggressively deploys Smart Meters but is devoid of the underlying cost-effectiveness analysis necessary to determine a reasonable means of complying with Act 129. The Company needs to utilize the 30-month grace period provided by the Commission to develop a comprehensive business case and cost/benefit analysis that can be used to better guide decisions regarding Smart Meter procurement installation. Only in this way can the most cost-effective and reasonable procurement and installation approach be determined.

II. COMMENTS

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 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 multi-step approach that will use the 30-month grace period to collect additional data, resolve technological issues, train personnel, test equipment and address policy issues before the full-scale deployment. Allegheny Power, however, has not proposed such an approach in its filing. Allegheny Power intends to fully deploy its meters (including In-Home Displays) and associated infrastructure by 2013 at a cost of \$580 million.

The OCA submits that an approach which uses the 30-month grace period is necessary and will allow Allegheny Power to take the time needed to develop a detailed business case that fully considers the goals of the smart metering program, the costs and benefits of the system, as

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%).

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 a multi-step 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 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 on a large scale.

The privacy of customer information will also present a new challenge to Allegheny Power 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. 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 30-month grace period.

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. Smart Meter 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 by a service disconnection. 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 initial Smart Meter plan should represent 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. Allegheny Power's Plan, however, seeks to rush to the end point, at enormous cost, skipping all of the work and analysis that must be done.

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, not the end point. The Commission has properly 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.

Allegheny Power should use this 30-month grace period to complete the necessary milestone tasks, collect the necessary information, and conduct the necessary evaluations to inform decisions on a reasonable Smart Meter procurement and installation strategy. The OCA submits that Allegheny Power should return to the Commission with a filing for Commission approval of a reasonable and cost-effective deployment strategy once a comprehensive analysis has been completed.

1. Allegheny Power Must Demonstrate That The 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 increases 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 and the development of a sound business case in support of the 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 the seven major EDCs is around \$1.5 billion, all of which will be collected from ratepayers. For Allegheny Power, the estimated cost of full deployment is \$580 million, including CIS costs.

Allegheny Power St. 4 at 4. Allegheny Power has only identified off-setting operational benefits of \$43 million in the initial four years and four months of the Plan.

The OCA submits that there are many different approaches to designing a plan for the selection and deployment of smart meters. Allegheny Power bears the burden of demonstrating that the particular design of its Smart Meter Plan is the most cost effective and reasonable approach out of the range of available alternatives. It is important to note that Act 129 allows for the recovery of “reasonable and prudent” costs of providing Smart Meter technology. The OCA submits that a rigorous cost/benefit analysis is a key task that must be undertaken to determine whether the costs are reasonable and prudent, and 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 benefits, how those benefits are achieved, and how those benefits will be realized by customers is a necessary task to determine whether the alternative selected is the most cost-effective and reasonable approach. In its Smart Meter 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. Smart Meter Implementation Order at 30-31.

The OCA submits that the Commission must require Allegheny Power to conduct fully developed and rigorous cost/benefit analyses as a key task in the initial phase of a reasonable Smart Meter Plan. These analyses must be conducted before any technological 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.

2. In-Home Displays

As part of its Smart Meter deployment, Allegheny Power has proposed to provide and install an In-Home Display for every residential customer unless the customer “opts out.” SMIP Plan at 44. Allegheny Power proposes in the SMIP to use an installation contractor to install the displays. It is not specified in the SMIP whether this In-Home Display installation will be done at the same time as the meter installation. It appears, though, that Allegheny Power will need access to each home to perform this installation. Allegheny Power has included the cost of these In-Home Displays, and the installation, as a cost of its Plan to be borne by all residential ratepayers.

The OCA submits that the reasonableness of installing In-Home Displays in every residential customer home at this time has not been established. This type of wide scale deployment of electric utility equipment behind the meter and in a customer’s home has never before been proposed or undertaken in Pennsylvania. The installation of equipment behind the meter at the customer’s premise raises significant issues of both cost and policy that must be thoroughly evaluated. In particular, the benefit of such an installation in all homes has not been established or quantified. There is no information or analysis that shows that providing In-Home Displays to customers who are not participating in a defined program with adequate customer education is reasonable or beneficial. Additionally, the challenges of accessing every home and educating everyone in the home can be daunting, but have not been addressed.

The OCA submits that Allegheny Power’s proposed approach of providing In-Home Displays to all customers should not be adopted at this time. This proposal could significantly

increase the cost and complexity of Smart Meter installation at the individual residences without a clear corresponding benefit.

3. 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.⁴

At this time, efforts have, understandably, been directed toward preparation of the Smart Meter Plan. As Allegheny Power's Plan develops, however, the Company 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. Allegheny Power must also clearly communicate to its 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, what protections are in place for the data that is now being collected and what the rate impacts will be. Without this education, many of the benefits of smart meters could be lost.

⁴ The OCA would note that it will be critical to education and acceptance that the Smart Meter deployment is reasonable, that the costs are reasonable, and that the benefits are captured for consumers.

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

As noted above, Allegheny Power's Plan establishes various milestones. According to the OCA's review of Allegheny Power's Plan, however, Allegheny Power does not appear to expect to return to the Commission with additional filings to seek approval of decisions that have been made and the next steps that will be undertaken. Rather, Allegheny Power has requested expedited Commission approval of its initial phase SMIP activities and has separated out this portion of the filing for initial approval but intends to proceed with its full Plan after a Commission Order without further review. SMIP Plan at 39. Allegheny Power proposes in its initial phase through the end of 2009 and January 2010 to do the following: (1) plan and begin construction of test meter and LAN field trials and smart meter lab; (2) back office applications including the requirements definition, selection and design activities for the Enterprise Service Bus and Meter Data Management System and the Customer Information System (CIS) modernization planning, business process blueprinting and design; (3) security operations including requirements definition and the selection and design activities for the Identity Management System; and (4) Program Management including selection and procurement of the CIS Systems integrator, Act 129 planning and filing preparation; selection and procurement of the Smart Meter Systems Integrator, Smart Meter Program Management and Systems Integration and SMIP Plan business process redesign for a total of \$33.8 million. SMIP Plan at 39.

After final Commission review of the existing Allegheny Power Plan, other than the Company's annual 1307 surcharge mechanism review and the Smart Meter Progress Reports, the Company does not appear to seek additional review from the Commission on its Plan. The OCA submits that Allegheny Power's Plan requires significant modification. As part of this modification, the Commission should establish specific milestones and require Allegheny Power

to return to the Commission with additional filings, information, and analyses when the milestones are achieved. The Commission should then review and approve decisions and the next tasks. 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 of action and so that issues regarding the next phase can be addressed.

III. COMMENTS ON COST RECOVERY

A. Allegheny Power's Cost Recovery Proposal

Allegheny Power has proposed a Section 1307 mechanism to recover the smart meter technology costs on a full and current basis. SMIP Plan at 93. The Company proposes recovery through a reconcilable automatic adjustment clause that will be reviewed on an annual basis and will reconcile prior period revenues and costs. Allegheny Power St. 4 at 7-8. The Smart Meter Technology (SMT) surcharge will be calculated separately for each rate class and will appear as a non-bypassable line item on the bill. SMIP Plan at 95-96; Allegheny Power St. 4 at 8.

Similar to a traditional base rate calculation, Allegheny Power's proposed calculation of recoverable costs includes the following components: (1) return of and on capital costs, based on the Company's pre-tax cost of capital; (2) forecasted incremental operation and maintenance (O&M) costs as incurred, which are offset by forecasted savings associated with deployment of the Company's proposed SMIP Plan; and (3) costs associated with the depreciation of Allegheny Power's existing meters. Allegheny Power St. 4 at 8. Allegheny Power proposes that the SMT will reflect any adjustment associated with the annual reconciliation mechanism, and forecasted capital costs will be depreciated/amortized over the estimated useful book lives of the investment. Id. Changes to the SMT rates will be based "upon a forecasted revenue requirement for the twelve-month period of the upcoming June and running through May of the following

year, along with an annual reconciliation mechanism for prior year revenues and costs.”

Allegheny Power St. 4 at 12-13. As further explained by Allegheny Power witness Valdes:

The forecasted revenue requirement will include a return of and on capital investments, and the net of incremental O&M costs and savings associated with deployment of the Company’s SMIP, as adjusted for gross receipts tax and the Commission assessment fee. The annual reconciliation mechanism for prior year revenues and costs will include: (1) actual revenues billed through December of the prior year, as adjusted for removal of gross receipts tax and the Commission assessment fee; (2) actual costs incurred through December of the prior year, which will include actual O&M costs and a corrected capital revenue requirement to reflect actual capital costs, the most recently available pre-tax cost of capital from the prior year, and any changes/updates to depreciation and accumulated deferred income taxes; and (3) the difference between the above two amounts, as adjusted for gross receipts tax and the Commission assessment fee. The exception to the annual reconciliation mechanism will occur for the filing due by January 30, 2011 since this filing will include 2009 costs along with 2010 costs, with capital cost recovery reflective of the pre-tax cost of capital of the corresponding year.

Allegheny Power St. 4 at 12-13.

Once this calculation of recoverable costs is made, Allegheny Power will utilize a non-bypassable charge to collect the costs. The non-bypassable charge would appear as a separate line-item on customer bills. Allegheny Power St. 4 at 8. According to Allegheny Power witness Valdes, the revenue requirement will be calculated for the SMIP costs and then allocated to customer classes “based upon costs specific to a customer class and general costs that are allocated across multiple customer classes.” Allegheny Power St. 4 at 10.

B. Preliminary Cost Recovery Issues

Pursuant to its initial review, the OCA has several concerns about Allegheny Power’s cost recovery proposal. Specifically, the OCA will discuss its concerns with the rate of return, asset lives, and cost allocation and rate design aspects of the Plan. As the OCA’s expert

witnesses review the Company's Plan and outstanding discovery responses, the OCA may identify additional concerns which it will present in its testimony and briefs.

The OCA's preliminary concerns are as follows.

1. Rate of Return

Allegheny Power has proposed to utilize the equity cost rate determined in its last base rate case prior to each annual update filing and its actual capital structure and debt cost at the time of each annual filing. In this proceeding, Allegheny Power has proposed that it utilize the 11.5% return determined in its last base rate case in 1994 at Docket No. R-942986. Allegheny Power St. 4 at 9. 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, but only if that proceeding was within the last few years. It has been almost 15 years since Allegheny Power's last base rate case, so the ROE resulting from that case should not be used in this calculation. The OCA submits that the current cost of equity for Electric Distribution Companies is not the 11.5% proposed by Allegheny Power. The most recent litigated cases for Electric Distribution Companies were in 2006 and resulted in Commission-determined ROEs of 10.1%. Pa.P.U.C. v. Met-Ed Co., Docket No. R-00061366 and Pa.P.U.C. v. Penelec, Docket No. R-00061367 (Orders entered January 11, 2007). If the EDC's last base rate proceeding was not sufficiently recent, as is the case with Allegheny Power, it is the OCA's position that the EDC's current capital structure and senior capital cost rates, if reasonable, could be utilized along with a properly updated ROE. One method to reflect any necessary change to ROE would be to utilize the most recent Bureau of Fixed Utility Report on Quarterly Earning to establish the necessary adjustment.

2. Asset Lives

Allegheny Power has proposed to utilize a ten year book life for its smart meters and a shorter asset life (5 to 7 years) for its other Smart Meter system hardware and software investment. Allegheny Power proposes a five year book life for its In-Home Display technologies. SMIP Plan at 94; Allegheny Power St. 4 at 9-10. The OCA submits that the asset lives proposed by Allegheny Power are too short and impose an undue burden on ratepayers. It is important to note that Act 129 references depreciation over a fifteen year period. The OCA submits that the asset lives proposed by Allegheny Power will need to be modified.

3. Stranded Costs

Allegheny has proposed to include in its Plan \$24.6 million of “stranded costs”⁵ under its Plan for the accelerated depreciation of existing meters. Allegheny Power is proposing to accelerate the depreciation of its existing meters so that all existing meters are fully depreciated by the end of the deployment period which is within five years. Allegheny Power St. 4 at 9-10. The OCA is concerned with this proposal to depreciate all existing meters and recover substantially all new smart meter costs in such a short period. Additionally, the OCA is concerned that the accelerated depreciation requested by Allegheny Power will result in an increase in accumulated depreciation and a reduction in rate base that is not reflected in current base rates. If that is indeed the case, the OCA submits that the allowance of stranded cost recovery, if permitted, must be reduced each year to account for the increased buildup of accumulated depreciation.

⁵ The OCA notes that the term “stranded costs” is not referenced as a recoverable cost in the Act. The OCA is evaluating the Company’s claim from a factual, ratemaking and legal perspective.

4. PUC Assessment Fee

Allegheny Power has proposed to include the costs related to the PUC assessment fee in its SMT surcharge. Allegheny Power St. 4 at 13; SMIP Plan at 98. The OCA opposes the inclusion of the PUC assessment fee in the SMT surcharge. Recovery of the PUC assessment fee as part of the Section 1307 cost recovery mechanism should not be permitted by the Commission. These costs are normal operating expenses that are recovered in base rates, and the PUC assessment fee is not a cost which is incurred in the SMIP Plan.

Section 2807(f)(7) allows that:

An Electric Distribution Company may recover reasonable and prudent costs of providing Smart Meter Technology under Paragraph 2(ii) and (iii), as determined by the Commission. This paragraph includes annual depreciation and capital costs over the life of the smart meter technology and the cost of any system upgrades that the Electric Distribution Company may require to enable the use of the smart meter technology which are incurred after the effective date of this paragraph less operating and capital cost savings realized from the installation and use of smart meter technology...

66 Pa.C.S. § 2807(f)(7). Section 2807(f)(7) clearly does not contemplate the recovery of the PUC assessment fee through the SMT surcharge.

The OCA submits that the PUC assessment fee is traditionally recovered through the Company's base rates. The PUC assessments are not directly attributable to Act 129 and are influenced by many factors outside of Act 129. As such, any claim for the PUC assessment fee must be removed from the SMT surcharge.

5. Cost Allocation

Allegheny Power has proposed to directly assign meter-related costs to customer classes and to allocate other non-meter investment and administrative expenses such as the network, infrastructure and computer upgrades based on the number of meters and customer connections.

Allegheny Power St. 4 at 11. The Smart Meter 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. Smart Meter Implementation Order at 32. The OCA agrees that the cost of the meters themselves should be allocated based on meter investment, but submits that it is inappropriate to allocate the other smart meter system costs, such as the meter data management system, the network, and administrative costs, based on the number of meters and customer connections. As indicated in the Smart Meter Implementation Order, smart meter plan costs are appropriately allocated to those customer classes who derive benefit from such costs. Smart Meter Implementation Order at 32. The number of meters is neither a measure of the benefits derived from the smart meter system nor the causation of non-meter system costs. The benefits derived from the smart meter system are not directly correlated to the number of meters. 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 system costs (other than the meters themselves). Allocating these costs on the basis of electricity usage recognizes that larger customers (in terms of usage) will derive greater benefits from the smart meter system and its technological capabilities.

6. Rate Design

Allegheny Power proposed to collect costs from the residential class using a fixed customer charge. The OCA submits that Smart Meter costs can be recovered from customers in

three ways: (1) on a per kWh basis; (2) through a fixed customer charge; or (3) through a combination of customer charge and a per kWh charge. Allegheny Power has elected to recover all of the costs through a customer charge. The OCA submits that such a method is not appropriate.

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); 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 recovery of the indirect component of smart meter costs on a per kWh basis would be more reflective of the greater benefits that residential customers with greater usage stand to realize from smart meter capabilities. Further, the OCA submits that Allegheny Power’s proposal to recover all costs via a fixed charge per meter may have an adverse impact on customers who cannot shift their load. Finally, because Allegheny Power will be allowed to fully reconcile Smart Meter costs and revenues, the Company bears no risk of under-recovery if actual sales are less than projected. The OCA submits that Allegheny Power’s proposed rate design should be further examined as the instant proceeding moves forward.

7. Return to Normal Ratemaking

The OCA submits that the proposed surcharge should only be collected until compliance with Act 129 has been achieved. Although Allegheny Power’s SMIP proposes to continue the surcharge beyond 2014, Allegheny Power should be required to roll Smart Meter program costs into base rates when the full deployment is complete. SMIP Plan at 97. Once the implementation period ends, the Companies should eliminate the rider and return to normal

ratemaking with regard to the collection of the metering costs. Once the 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 the base rates, consistent with the Commission's past treatment of the cost of existing meters.

IV. THE COMMISSION SHOULD DENY THE COMPANY'S REQUEST FOR EXPEDITED TREATMENT

In its Petition, Allegheny Power has requested expedited treatment of the initial phase of its SMIP. Petition at ¶ 20. As the Company's Petition notes, the Commission's Smart Meter Implementation Order provides that Initial Decisions regarding the Smart Meter Implementation Plans are to be issued on or before January 29, 2010, with a Commission Final Order to follow approximately two months later. *Id.* Instead, the Company requests that the Final Commission Order be issued by January 29, 2010. *Id.* The Company states that "[t]he reason for the request is that the Company will be making substantial expenditures for smart meter implementation in the fourth quarter of 2009 and the first quarter of 2010. Such expenditure will precede Commission approval." *Id.* Further, the Company argues that if the Smart Meter Plan is not approved in this timeframe, it will impact the Company's proposed EE&C Plan implementation. *Id.* The Company requests cost recovery in the amount of \$33.8 million for these initial phase expenditures including the following: meter testing and field trials; back office applications; security and program management. *Id.* at ¶ 21-22; SMIP Plan at 39.

The OCA has significant concerns with the Company's proposal to rush consideration of this matter and the proposed immediate cost recovery for these items. The Smart Meter Implementation Order provides for a 30 month grace period for implementation of Smart Meters due to the complexities involved with such an endeavor. The Act and the Smart Meter Implementation Order also recognize that the EDCs will roll out Smart Meters over a period of

time, perhaps as long as fifteen years. The Commission's Smart Meter Implementation Order specifically addresses this issue and states that:

As EDCs will need time to develop and install the entire smart meter network, the Commission is granting a network development and installation grace period of up to 30 months following plan approval. During this grace period the Commission will not require EDCs to install a smart meter at a customer's premises. However, during this grace period, the Commission will require EDCs to provide interval data capable meters, if the existing meter is not capable of providing interval data, and direct access to the customer's interval data to third-parties, such as EGSs or CSPs, upon customer request.

Smart Meter Implementation Order at 7 (emphasis added). The OCA submits that smart meter implementation is a major undertaking with hundreds of millions of dollars of costs being imposed on ratepayers. With the number of major changes for both the Company and customers, the Smart Meter implementation must ensure that all processes and procedures are in place and operating properly, that the technology is operating and supporting essential utility service, and that customers have been adequately educated. This will take more time than proposed by Allegheny Power.

The OCA submits that planning, analysis, development, field testing and implementation should not be rushed. Currently, Allegheny Power has 720,000 customer meters in place, including approximately 619,088 residential meters. SMIP Plan at 10; Allegheny Power St. 3 at 4. Some of the Company's commercial or industrial customers already have Smart Meters, but the vast majority of residential customers do not. The transition to Smart Meters will require significant efforts by the Company. Inevitably with such a large-scale project and as the implementation develops, there will be additional issues that may need to be addressed regarding the proposed implementation of the Smart Meters. For example, the Company acknowledges in its SMIP Plan that the relatively small number of customers concentrated in urban/suburban areas

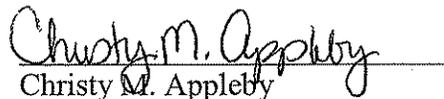
and the “large areas of low density customer base will increase the difficulties and costs of establishing a reliable telecommunications network to communicate with each Smart Meter.” SMIP Plan at 32. This is just one example of a potential challenge that Allegheny Power may run into with the Smart Meter deployment.

The Commission’s procedural schedule established in the Smart Meter Implementation Order is already aggressive, but is designed to provide a reasoned consideration of the key issues and challenges. Accelerating this schedule further would serve no useful purpose and would constrain the necessary review. The OCA respectfully requests that the Allegheny Power’s request to expedite the initial phase implementation and the deployment of Smart Meters be denied.

V. CONCLUSION

The OCA submits that Allegheny Power's Smart Meter Implementation Plan is not reasonably designed and must be rejected. The OCA will present expert testimony and briefs to further develop the issues with Allegheny Power's Plan. Allegheny Power should be required to file a modified Plan that complies with the requirements of Act 129 in a manner that is more reasoned and less burdensome on consumers.

Respectfully submitted,



Christy M. Appleby

Assistant Consumer Advocate

PA Attorney I.D. # 85824

E-Mail: CAppleby@paoca.org

Darryl Lawrence

Assistant Consumer Advocate

PA Attorney I.D. # 93682

E-Mail: DLawrence@paoca.org

Tanya J. McCloskey

Senior Assistant Consumer Advocate

PA Attorney I.D. # 50044

E-Mail: TMcCloskey@paoca.org

Counsel for:

Irwin A. Popowsky

Consumer Advocate

Office of Consumer Advocate
5th Floor, Forum Place
555 Walnut Street
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

DATE: September 25, 2009

00118073.docx

CERTIFICATE OF SERVICE

Petition of West Penn Power Company :
d/b/a Allegheny Power for Expedited : Docket No. M-2009-2123951
Approval of its 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 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.

SERVICE BY E-MAIL and INTEROFFICE MAIL

Richard A. Kanaskie, Esquire
Adeoulu Bakare, Esquire
Office of Trial Staff
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
Counsel for: *Office of Trial Staff*

SERVICE BY E-MAIL and FIRST CLASS MAIL

John L. Munsch, Esquire
Allegheny Energy
800 Cabin Hill Drive
Greensburg, PA 15601-1689
Counsel for: *Allegheny Power Company*

John Povilaitis, Esquire
Ryan Russell Ogden & Seltzer
800 N. Third Street, Suite 101
Harrisburg, PA 17102
Counsel for: *Allegheny Power Company*

Adam L. Benshoff, Esquire
Shelby Linton-Keddie, Esquire
McNees Wallace & Nurick, LLC
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108-1166
Counsel for: *West Penn Power Industrial
Intervenors*

Lauren Lepkoski
Assistant Small Business Advocate
Office of Small Business Advocate
Commerce Building, Suite 1102
300 North Second Street
Harrisburg, PA 17101
Counsel for: *Office of Small Business Advocate*

Scott Perry, Assistant Counsel
Aspassia V. Staevska, Assistant Counsel
Commonwealth of Pennsylvania
RCSOB, 9th Floor
400 Market Street
Harrisburg, PA 17101
Counsel for: *Department of Environmental
Protection*

George Jugovic, Assistant Counsel
Commonwealth of Pennsylvania
Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Counsel for: *Department of Environmental*

Harry Geller, Esquire
John Gerhard, Esquire
PA Utility Law Project
118 Locust Street
Harrisburg, PA 17101
Counsel for: *Pennsylvania Association of
Community Organizations for Reform Now*


Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org
Tanya J. McCloskey
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50044
E-Mail: TMcCloskey@paoca.org
Counsel for
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
00116999.docx