

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

March 26, 2010

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 is the Supplemental Main Brief 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,


Tanya J. McCloskey
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50044

cc: Honorable Mark A. Hoyer

00118676.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 :

SUPPLEMENTAL MAIN BRIEF
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: March 26, 2010

TABLE OF CONTENTS

I. INTRODUCTION 1

II. PROCEDURAL HISTORY 7

III. DESCRIPTION OF ALTERNATIVE PLANS..... 9

 A. Introduction..... 9

 B. Allegheny Power’s Proposed Alternative 375,000 and 100,000 Smart Meter
 Deployment Proposals..... 9

 1. Company Alternative Deployment Schedules..... 9

 2. Costs of Deployment 11

 3. Other Proposed Changes To The Company’s Filing..... 11

 C. The OCA Alternative Smart Meter Deployment Proposal 12

IV. SUMMARY OF THE ARGUMENT 14

V. ARGUMENT..... 16

 A. Alternative Plans..... 16

 1. Company Proposal: Neither Of The Company’s Alternative Deployment
 Plans Is A Reasonable Or Cost-Effective Means Of Deploying Smart
 Meter Technology..... 16

 a. The Company’s Proposed 375,000 Meter Alternative Should Not
 Be Adopted 25

 b. The Company’s 100,000 Meter Alternative Should Not Be
 Adopted 27

 2. OCA Proposal: The OCA’s Proposal Provides A Workable Framework
 For Meeting The Requirements Of Act 129 Regarding Smart Meters..... 29

 a. Introduction 29

 b. Geographic Deployment Of 100,000 Smart Meters And
 Accompanying Communications Network That Is Supported By
 Existing Systems..... 32

c.	Components To Address The EE&C/DR Plan Goals	33
d.	Further Filing Requirement To Develop Plans For Completion Of Deployment Within A Ten Year Period	36
e.	The SMT Surcharge Resulting From The OCA Alternative Deployment	37
f.	Conclusion	37
3.	Surcharge and Cost Issues	38
4.	Other issues.....	42
B.	Revenue Requirement	44
1.	Company Proposal.....	44
2.	Rate of Return.....	44
3.	Asset Lives	45
VI.	CONCLUSION	46
APPENDIX A:	Supplemental Proposed Findings of Fact and Conclusions of Law	
APPENDIX B:	Supplemental Proposed Ordering Paragraphs	

TABLE OF AUTHORITIES

Administrative Decisions

Petition of West Penn Power Company d/b/a Allegheny Power for Approval of its Energy Efficiency and Conservation Plan, Docket No. M-2009-2093218, (Order entered October 15, 2009).....21, 22, 23

Smart Meter Procurement and Installation, Docket No. M-2009-2092655 (Order entered June 24, 2009).....2

Statutes

66 Pa.C.S. § 2807(f)(2).....2

I. INTRODUCTION

Throughout this proceeding, the OCA has expressed its strenuous objection to West Penn Power Company d/b/a Allegheny Power's (Allegheny Power or Company) proposed Smart Meter Procurement and Installation Plan (SMIP or Smart Meter Plan). Allegheny Power proposed an extremely aggressive and costly Smart Meter Plan that would have deployed smart meters to all 725,248 of its metered customers by the end of 2014 at an estimated cost of \$580 million to its Pennsylvania ratepayers. Allegheny Power would have imposed a surcharge on its customers to collect this \$580 million. For residential customers, the proposed surcharge would start at \$5.86 per month beginning in February of 2010, increase to \$14.34 per month in June of 2011, and further increase to \$15.57 per month in June of 2012. The surcharge would reach a level of \$15.77 per month by June of 2013. Allegheny Power stood alone among Pennsylvania electric distribution companies (EDCs) in proposing such an aggressive and costly Smart Meter Plan. Allegheny also stood alone in proposing to rest its Energy Efficiency and Demand Response Plan (EE&C/DR Plan) on this smart meter deployment strategy.

In the OCA's Main Brief, in this proceeding, the OCA detailed its position that Allegheny Power's proposed SMIP is not cost-effective or reasonable and should be rejected in its entirety. Allegheny Power's Plan did not follow Act 129 or the Commission's guidance that there be a gradual transition to full deployment of smart meters and that the utility take sufficient time to assess and design their full meter deployment. Act 129 specifically provides:

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

(i) Upon request from a customer that agrees to pay the cost of the smart meter at the time of the request.

(ii) In new building construction.

(iii) In accordance with a depreciation schedule not to exceed 15 years.

66 Pa.C.S. § 2807(f)(2). The Commission, in its Smart Meter Implementation Order, provided a 30-month grace period to the Electric Distribution Companies (EDCs) so that the EDCs could assess, plan, and design their full meter deployment. As the Commission explained:

The Commission agrees that some flexibility must be provided in the design and installation of a smart meter network, as some EDCs face greater logistical challenges than others do. Therefore, the Commission has established a period of up to 30 months for each EDC to assess its needs, select technology, secure vendors, train personnel, install and test support equipment and establish a detailed meter deployment schedule consistent with the statutory requirements. This grace period will commence upon approval of an EDC's smart meter plan. This will afford each EDC more time and flexibility in the design and development process to ensure that it can meet the demands and challenges unique to each service territory.

Smart Meter Procurement and Installation, Docket No. M-2009-2092655, slip op. at 9 (Order entered June 24, 2009)(Smart Meter Implementation Order). Allegheny Power, rather than following the strong guidance by the Commission and the parameters of Act 129, proposed a risky and costly strategy that could tarnish efforts to implement smart meter technology for years to come.

Perhaps recognizing that its initial plan was risky and fraught with potential failure, the Company requested that the Commission reopen its smart meter proceeding before the Administrative Law Judge and allow it to propose an alternative deployment schedule for its Smart Meter Plan. On January 29, 2010, the Company filed Supplemental Direct Testimony describing two possible alternative schedules for deploying smart meters and in-home devices. The first option described by the Company is a proposal to deploy 375,000 meters in a geographic region of high customer density in the service territory by mid-2012. The second

option described by the Company is to deploy 100,000 smart meters to customers requesting a smart meter wherever they are located in the service territory through mid-2012. Under both options, the Company would eliminate the expensive proposal for the universal deployment of in-home devices (IHDs) and would only provide IHDs to customers who request one. The alternative proposals have some positive features, among them being the proposal to eliminate the universal deployment of in-home devices to all customers, a component of the original SMIP that had a cost of nearly \$100 million. The Company also slowed the pace of the smart meter deployment under both alternatives and proposed changes to depreciation lives and the return on equity that would be used in the calculation of the revenue requirement to be collected through the Smart Meter Technology (SMT) surcharge.

Despite these modifications, however, the Company's alternative smart meter deployment plans do not resolve the most significant problems with the Company's original smart meter deployment approach or the extraordinarily high cost of its smart meter deployment plans. Under the revised alternatives, residential customers would actually pay more in the first year of the plan than under the Company's original proposal. Residential customers who do not have a smart meter would pay an SMT surcharge of \$6.21 per month in the first year under one alternative and \$6.37 per month under the second alternative. Customers with a smart meter would pay \$8.56 or \$8.30, respectively. This compares to the original plan surcharge of \$5.86 per month for the first year. While in the subsequent years the surcharge levels would be lower under the alternative deployment schedules, the surcharge associated with the Smart Meter Plan remains extremely high. In the June 2013 to May 2014 time frame, a residential customer with a smart meter would pay \$9.86 to \$10.58 per month, depending on the alternative. While this is less than the original plan surcharge of \$15.77 per month, this level of surcharge still represents a

significant burden on customers from Allegheny Power's proposed smart meter initiative and far exceeds the proposed monthly surcharge of every other Pennsylvania EDC.

The Company's alternative plans suffer from the same problem as its original filing—they are costly and provide little in the way of benefits for customers. Critically, the Company continues to include within its smart meter plan the immediate installation of a very expensive back office, customer interface, and management/security systems that are intended for far more functions than to just support an initial, limited number of smart meters. Because the Company will be deploying fewer meters through 2014, but incurring the same costs for these systems, the alternative deployment plans are in some respects even less cost-effective than the Company's original deployment plan. Although the total costs have been reduced by the elimination of the \$100 million of in-home device costs and the fewer meters that will be deployed in the early years, the effective cost to customers of the alternatives on a per meter installed basis is higher than the original deployment. As expressed on a total cost per meter installed basis, Allegheny Power's proposal to deploy 375,000 meters has a cost of \$1,300 per meter installed versus the \$710 per meter installed of its original proposal. Allegheny Power's 100,000 meter option is even more expensive with a cost of \$4,300 per meter installed. OCA St. 1-Supp at 12, Exh. JRH-10.

These extraordinary costs and surcharges to be imposed on ratepayers are not only unreasonable, but raise significant issues regarding customer response to, and acceptance of, the smart meter initiatives called for under Act 129. As OCA witness Brockway explained in her Supplemental Direct Testimony, since these smart meter cases began at the Commission, instances of smart meter problems and adverse customer reactions to smart meter deployment in other states has become ever more present. OCA St. 2-Supp at 2-7. Problems have been

reported in California with over 450 complaints filed with the California Commission regarding Pacific Gas & Electric's (PG&E) smart meter roll out. OCA St. 2-Supp at 3. Utilities in Virginia, Indiana, and New York have scaled back or delayed the timing of smart meter deployment programs due to objections or problems encountered during deployment. OCA St. 2-Supp at 5. After a review of these, and other experiences throughout the Nation, OCA witness Brockway reached the following conclusion:

The importance of a measured and cost-effective approach to smart grid deployment under Act 129 cannot be overemphasized. At each stage of deployment, there will be lessons to be learned that will impact and inform the balance of the plan. It is particularly critical here not to move rapidly ahead with a costly plan at this nascent stage of smart metering deployment. The experience of utilities in other states also emphasizes that, to gain customer acceptance of the major changes brought about by smart metering implementation, utilities need to be able to offer tangible, identifiable benefits to consumers when surcharges begin and equipment is installed. Utilities must provide reliable information and education to consumers to let them understand the new technology. Customer acceptance can be developed over time, as experience and comfort with the technology and rate options is gained.

OCA St. 2-Supp at 7. Allegheny Power's original and alternative plans are neither measured nor cost-effective.

With this in mind, OCA witness J. Richard Hornby presented an alternative deployment strategy that is a more measured and cost-effective approach to deployment under Act 129.¹ Mr. Hornby's proposal allows the necessary time and experience for issues to surface and be resolved, provides for further review by the Commission after initial deployment activity is undertaken, ensures that only costs appropriate for surcharge recovery are included in the

¹ J. Richard Hornby is a Senior Consultant at Synapse Energy Economics, Inc. and has previously presented expert testimony and provided litigation support in approximately 100 proceedings in over thirty jurisdictions in the United States and Canada, including Pennsylvania. Mr. Hornby's work at Synapse specializes in planning, market structure, ratemaking, and gas supply/fuel procurement in the electric and gas industries. His experience in energy efficiency measures and policies began thirty years ago. OCA St. 1 at 1-2; see also, OCA St. 1 at Exhibit JRH-1.

Smart Meter Technology (SMT) surcharge, and moderates the SMT surcharges to customers. In the early years, Mr. Hornby estimated the SMT surcharge of his proposal for residential customers to be around \$2.00 per month. OCA St. 1-Supp at 28, Exh. JRH-14.

The OCA urges the Commission to reject Allegheny Power's original SMIP and its alternative deployment schedules. The Company's Plans have not been shown to be reasonable or cost-effective. Instead, the OCA submits that the alternative approach presented by the OCA in the Supplemental Direct Testimony of Mr. Hornby and this Supplemental Brief should be adopted as the framework for Allegheny Power to meet its requirements under Act 129.

II. PROCEDURAL HISTORY

On August 14, 2009, Allegheny Power filed its Smart Meter Technology Procurement and Installation Plan (SMIP) with the Pennsylvania Public Utility Commission pursuant to the requirements of Act 129 of 2009 (Act 129). The Office of Consumer Advocate (OCA) filed the Direct and Surrebuttal Testimonies of its witnesses J. Richard Hornby and Nancy Brockway regarding the original deployment filing. Hearings were held regarding the original deployment on November 9, 2009, and the record was closed. Main Briefs were filed on December 18, 2009, and Reply Briefs were filed on January 6, 2010. The OCA has discussed more fully the procedural history of the initial phase of this proceeding at pages 6 to 9 of its Main Brief.

The Smart Meter Implementation Order required that the Office of Administrative Law Judge issue a Recommended Decision in each of the Electric Distribution Companies' respective SMIP Plan dockets by no later than January 29, 2010. Prior to the completion of the briefing on the original deployment filing, on December 18, 2009, Allegheny Power filed a Petition to Modify a Prior Commission Order and to Reopen the Evidentiary Record. Allegheny Power requested permission to extend the Recommended Decision due date and to allow for consideration of modifications to its SMIP in the areas of: Smart Meter deployment, In-Home Device (IHD) deployment, asset book lives, return on equity and the SMT surcharge amount. The OCA filed an Answer supporting the Company's request and its efforts to modify its SMIP in a manner that would be beneficial to customers. On January 13, 2010 Allegheny Power's Petition was granted by Secretarial Letter. A further prehearing conference was held on January 26, 2010 in order to establish a procedural schedule for the Supplemental filing.

On January 29, 2010, Allegheny Power submitted the Supplemental Direct Testimony of John Ahr, Edward Miller, and Raymond Valdes. On March 2, 2010, the OCA submitted the Supplemental Direct Testimonies of J. Richard Hornby (OCA St. No. 1-Supp) and Nancy Brockway (OCA St. No. 2-Supp) for the Supplemental phase of this proceeding. The Company submitted Supplemental Rebuttal Testimony on March 12, 2010.

The parties agreed to waive cross examination of all witnesses. A hearing was held on March 16, 2010 for the purposes of moving testimony and exhibits into the record.

III. DESCRIPTION OF ALTERNATIVE PLANS

A. Introduction.

In its January 29, 2010 Supplemental filing, Allegheny Power proposed two alternative smart meter deployment plans -- one with an initial deployment of 375,000 smart meters by mid-2012 and one with an initial deployment of 100,000 smart meters by mid-2012. Under both alternative deployment proposals, the Company will eliminate the universal deployment of In-Home Displays (IHDs); extend book lives of various capital costs; reduce its return on equity; and adjust the Smart Meter Technology (SMT) surcharge to reflect the modified proposals.² In his Supplemental Direct Testimony, OCA witness J. Richard Hornby presented another alternative smart meter deployment schedule for the Commission's consideration based on an initial deployment of 100,000 smart meters in a geographic segment of Allegheny Power's service territory. A brief description of each of these alternative plans follows.

B. Allegheny Power's Proposed Alternative 375,000 and 100,000 Smart Meter Deployment Proposals

1. Company Alternative Deployment Schedules.

In its alternative plans, Allegheny Power has proposed to limit the initial deployment of smart meters through mid-2012 and to remove the feature of its original plan that called for the universal deployment of IHDs. Under all three of the Company's deployment schedules, the original proposal, the 375,000 smart meter option and the 100,000 smart meter option, Allegheny Power proposes to install its entire smart meter solution architecture, including its communication network back office systems, customer information system, customer interfaces, and management/security systems, throughout its service territory by 2014 for which

² The OCA describes Allegheny Power's original deployment proposal at pages 10-12 of its Main Brief.

it would charge all customers via its proposed SMT surcharge. OCA St. 1-Supp at 3-4, Exh. JRH-8.

Under the 375,000 smart meter deployment option, Allegheny Power proposes to deploy smart meters throughout its service territory at a slower pace than its original deployment schedule, but in the same manner as its original deployment. The Company proposes to deploy 375,000 meters by mid-2012 in selected geographic areas of the service territory, focusing on the areas of highest customer density. All customers within the geographic segment, and new construction within the selected geographic segment, would receive a smart meter. The remainder of the smart meter deployment would be completed by 2017 rather than by 2014 as called for in the original plan. AP St. 1-SDT at 5-6; OCA St. 1-Supp at 4-5. Customers receiving a smart meter would pay a surcharge that includes the costs of the communication network, back office systems, customer interfaces and system management/security (Tier 1 charges) and the cost of the smart meter (Tier 2 charges). Customers without a smart meter would pay only the Tier 1 charges.

Under the 100,000 smart meter deployment option, Allegheny Power proposes to deploy smart meters at a slower pace through mid-2012. AP St. 1-SDT at 6; OCA St. 1-Supp at 5. Through mid-2012, the Company would install meters only in response to a customer request, as needed for participation in one of the smart meter programs or rate offerings, and for new construction. Id. Under this “opt-in” approach, the Company seeks to deploy 100,000 smart meters by mid-2012. Allegheny Power proposes to deploy the remaining smart meters throughout its service territory by 2019 rather than 2014 as in the original SMIP. AP St. 1-SDT at 6-7; OCA St. 1-Supp at 5. Customers receiving a smart meter would pay a surcharge that includes the costs of the communication network, back office systems, customer interfaces and

system management/security (Tier 1 charges) and the cost of the smart meter (Tier 2 charges). Customers without a smart meter would pay only the Tier 1 charges.

Under both the 375,000 and 100,000 smart meter alternative deployment schedules, Allegheny Power would provide IHDs only to those customers who request one or who enroll in one of the Company's EE&C/DR Plan programs or rate offerings for which the Company considers that an In-Home Display is necessary. AP St. 1-SDT at 6-7. Allegheny Power is also proposing to provide programmable communicating thermostats (PCTs) to customers that choose to participate in the PCT demand response program. Id. at 7.

Further descriptive information about each Company alternative is provided in Section V.A.1 where the Company alternatives are discussed.

2. Costs of Deployment.

Under the 375,000 meter and 100,000 meter deployment schedules, the Company proposes two tiers of SMT surcharges plus an additional charge for customers who ask for an IHD.

The first tier of the SMT surcharge would recover the costs of the communications network, back office systems, customer interfaces and system management/security. All Allegheny Power customers would be assessed this charge, regardless of whether they receive a smart meter. OCA St. 1-Supp at 5-6, Exh. JRH-9. A second tier charge would recover the costs of smart meters and would apply only to those customers that receive a smart meter. An additional charge would be assessed for the cost of an IHD on customers who request and receive an In-Home Display and for those customers that receive a PCT under one of the EE&C/DR Plan programs or offerings.

3. Other Proposed Changes To The Company's Filing.

Allegheny Power has also included in its Supplemental Filing several modifications to its original filing regarding the proposed asset book lives and rate of return. Allegheny Power proposed to extend the asset book lives of the In-Home Technologies to ten years; Smart Meters to fifteen years; Software (without the Customer Information System (CIS)) to ten years; and Software (with CIS) to ten years. AP St. 3-SDT at 5. The Company also proposed to use a return on equity of 10.5% instead of its originally proposed 11.5%. AP St. 3-SDT at 7.

C. The OCA Alternative Smart Meter Deployment Proposal.

The OCA has developed an alternative deployment proposal which is described in detail in Section V.A.2. See generally, OCA St. 1-Supp at 23-29. Under the OCA's alternative, the Company would make an initial deployment of approximately 100,000 smart meters and the associated communications network in one of the most densely populated geographic segments of its service territory. OCA St. 1-Supp at 23-24. The Company would use its existing back office and other systems to the greatest extent possible to support this initial deployment. Allegheny Power would target its EE&C/DR programs that require smart meters to customers in this geographic area. The Company would also develop a low cost direct load control program for residential and small commercial customers that can be offered throughout its service territory in advance of the full smart meter deployment. This program would be a key element of the back up plan for its EE&C/DR plan. The technology used for the program should be able to be upgraded to work with a smart meter once it is installed.

Under the OCA's proposal, a uniform SMT charge would apply to all customers within each class to recover the costs of deploying the smart meters and any investment in the communication network. Allegheny Power would calculate a separate additional charge to

recover the costs of In-Home Displays from those customers who choose to receive them. OCA St. 1-Supp at 28. The OCA estimates that the SMT charge for a residential customer would be approximately \$2 per meter per month for residential customers. See, OCA St. 1-Supp at JRH-14.

In the fall of 2011, the Company would submit an assessment of its initial deployment and customer response and include any proposed investments in upgraded or additional back office systems if necessary after the Company's re-assessment. This filing would also include proposed allocations of back office system costs across Allegheny Power's other jurisdictions in Maryland and West Virginia. It would also identify those normal business investments to be recovered in base rates, rather than through the smart meter surcharge. OCA St. 1-Supp at 24-25.

IV. SUMMARY OF THE ARGUMENT

Allegheny Power's proposed Smart Meter Procurement and Installation Plan, both as originally proposed and as modified by the alternatives presented in this supplemental phase of the proceeding, is unreasonable and must be rejected. The modifications that Allegheny Power presented in this supplemental phase of the proceeding, while containing some positive features, do not adequately address the most significant problems with the Company's original deployment approach and continue to result in a Smart Meter deployment that is neither reasonable nor cost-effective. The alternative deployment approaches presented by Allegheny Power are in some respects even less cost-effective than the original deployment plan. The charges to ratepayers under the alternative deployment schedules remain unnecessarily and unreasonably burdensome to ratepayers, particularly to residential ratepayers. Allegheny Power's residential customers will still be charged by far the highest smart meter charge in Pennsylvania.

In this Supplemental Main Brief, the OCA provides an alternative framework for the deployment of smart meters in Allegheny Power's service territory for consideration by the Administrative Law Judge and the Commission. The OCA's framework is built on some of the positive features of Allegheny Power's alternative proposals. The key features of the OCA's recommendation are as follows:

- ◆ Deployment of 100,000 smart meters and the associated communication network in a geographic segment of high customer density in Allegheny Power's service territory during 2010 and 2011, with in-home devices provided only to customers requesting such a device.
- ◆ Support of the 100,000 smart meter with existing back office systems while the Company utilizes the experience gained from the initial deployment to assess its needs and plans for new back office systems, customer interfaces and management/security systems.

- ◆ Targeting of EE&C/DR Plan programs that are dependent on smart meters to customers in the geographic area where smart meters are deployed.
- ◆ Development of a low cost direct load control program, with technology upgradable to use with smart meters, for residential and small commercial customers throughout the service area.
- ◆ A uniform SMT charge for each customer class that collects only the costs of smart meters and the necessary communications network investment.
- ◆ A further filing with the Commission in the Fall of 2010 with an assessment of the initial deployment and development of further proposals regarding investments in back office systems, customer interfaces and management/security systems as well as the completion of the deployment over a ten year period.

The OCA submits the recommendation of the OCA provides a reasonable framework for Allegheny Power to meet its obligations regarding smart meter deployment under Act 129. The recommended alternative plan of the OCA should be adopted.

V. ARGUMENT

A. Alternative Plans.

1. Company Proposal: Neither Of The Company's Alternative Deployment Plans Is A Reasonable Or Cost-Effective Means Of Deploying Smart Meter Technology.

On January 29, 2010, Allegheny Power filed Supplemental Direct Testimony proposing two alternative deployment schedules to its original SMIP Plan. The Company stated that it was presenting these alternative deployment schedules to: (1) respond to concerns regarding the cost and pace of deployment raised by parties to the proceeding and (2) provide the Commission with the less rapid deployment of smart meters that the Commission requested in the Company's EE&C/DR Plan Order. AP St. 1-SDT at 3. Under the alternative deployment schedules, the Company is proposing to deploy either 375,000 meters by mid-2012 in geographic segments of its service territory or 100,000 meters by mid-2012 in response to customer requests and new construction anywhere in its service territory. Under both alternatives, the Company will continue with its plans to fully deploy four of the six components of its SMIP—the back office systems, customer interfaces, system management/security and communication network—by 2014. The primary difference from the Company's original deployment plan is in the method of the deployment of in-home devices (IHDs) and the pace and method of deployment of the smart meters themselves through the service territory. OCA St. 1-Supp at 4-5. The Company is proposing to eliminate the universal deployment of IHDs which had a cost of about \$100 million. Instead, the Company will deploy IHDs only to those customers that request an IHD.

In addition to the change in the deployment schedule, the Company also proposed longer depreciation lives for the capital costs of most components of the SMIP and to use a lower return on equity of 10.5% to calculate the SMIP related revenue requirement. These proposed

changes have the effect of mitigating somewhat the needed revenue requirement to be collected through the SMT surcharge on an annual basis. OCA St. 1-Supp at 8.

The OCA submits that Allegheny Power's two alternative deployment approaches are not cost-effective and are not a reasonable and prudent method of moving forward with a smart meter plan. The Allegheny Power deployment alternatives do not resolve the fundamental concerns raised by the OCA with Allegheny Power's SMIP regarding the costs included in the surcharge and the method or pace of deployment. OCA St. 1 at 8. Nor do the deployment alternatives adequately address the issues raised by the OCA and the Commission with the Company's heavy reliance on smart meters to meet its EE&C/DR Plan goals. The OCA submits that as with the original SMIP, the two deployment alternatives proposed by Allegheny Power must be rejected.

In that there are common problems to both alternatives, the OCA will first address these common problems. The OCA will then address some specific concerns with each of the Company's deployment alternatives. Finally, the OCA will present its own alternative prepared by OCA witness Hornby that should be adopted as a framework for meeting the smart meter requirements of Act 129 by Allegheny Power.

While the Company's proposed alternative deployment schedules call for a slower roll out of the smart meters, both alternatives have a fundamental flaw that is shared with the original SMIP. The Company's alternative deployment plans continue to be based upon the full installation of expensive back office systems which are not related solely to its smart meter plan and that certainly do not belong in its smart meter surcharge. OCA witness Hornby described this fundamental problem:

[T]hose alternative deployment schedules, like the original deployment schedule, are based upon the immediate installation of a very expensive back office system that has far more capacity than is needed to just support an initial, limited number of smart meters. Because the Company will be deploying fewer meters through 2014 under its two deployment alternatives, but incurring the same capital costs for its back office systems and other components except smart meters and IHDs, customers will be receiving even fewer benefits per meter installed than under the original deployment schedule.

OCA St. 1-Supp at 9. The Company's alternative plan still seeks to recover all of these back office system costs through the Smart Meter Technology (SMT) surcharge and does not allocate any of the costs of the back office, customer interface, and management/security systems, other than the Customer Information System (CIS), to its affiliates in other states. OCA St. 1-Supp at 9. The Company proposes no scale back or slow down of these expensive back office systems. The Company also continues its request to include the costs of these systems in the SMT surcharge. As discussed in the OCA's Main Brief and Reply Brief, however, many of these costs are associated with systems used for the Company's normal distribution system business and recovery of these costs should be sought through distribution base rates. OCA M.B. at 48-51; R.B. at 30-32.

Under the Company's approach proposed here, the OCA submits that when the alternative deployment schedules are analyzed for cost-effectiveness, it becomes apparent that in certain respects the alternative deployment schedules proposed by the Company are even less cost effective than the original deployment schedule. OCA witness Hornby analyzed the Company's two alternatives and concluded that while the absolute costs of the 375,000 and 100,000 meter deployment schedules through 2014 are lower than the original deployment schedule, the effective total cost to customers on a per meter installed basis of each of these

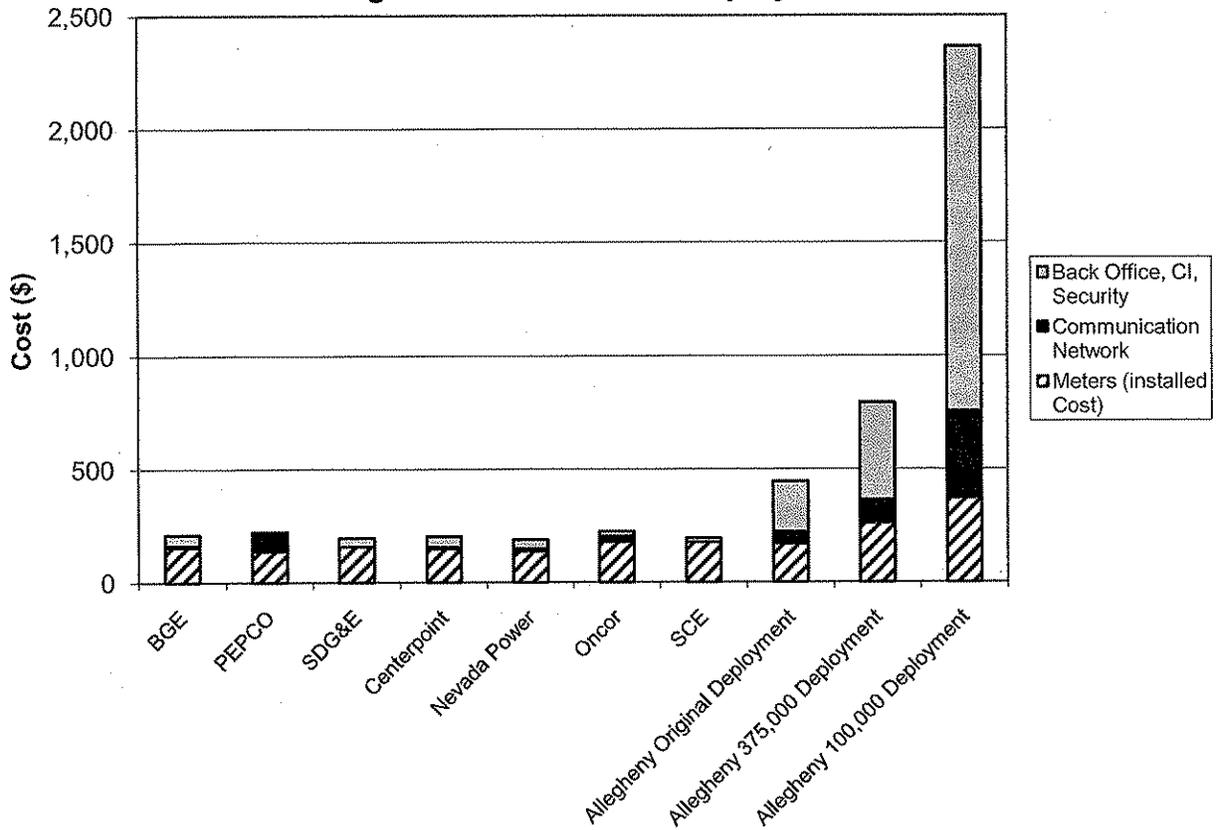
alternative deployment schedules through 2014 is dramatically higher than the original deployment. OCA St. 1 at 11-2, Exh. JRH-10. Mr. Hornby summarized:

The higher effective cost to customers can best be seen by comparing each alternative on the basis of its total cost and the corresponding number of meters actually installed under each schedule. That comparison, expressed as the total cost per meter installed, indicates that the 375,000 meter option is twice as expensive as the Original Deployment schedule, at \$1,300 per meter installed versus \$710 per meter installed. The 100,000 meter option is even more expensive at \$4,300 per meter installed. Those simple total unit costs per meter installed are presented on page 2 of Exhibit ___ (JRH-10).

OCA St. 1-Supp at 12.

The costs of the Company's proposed deployment schedules also do not compare favorably to other smart meter deployments across the Nation. As OCA witness Hornby testified, the costs of Allegheny Power's original deployment schedule and its alternative deployment schedules are higher than the smart meter plans of other utilities primarily because the back office system component of the Company's plan is several times higher than those of smart meter plans by other utilities. OCA St. 1-Supp at 14, Exh. JRH-11. The following graph shows the disparity:

Unit Capital Costs (\$ per Meter Installed) of Smart Meter Projects of Various Utilities and of Allegheny Power through 2014 under Original and Alternative Deployment Schedules



OCA St. 1-Supp, Exh. JRH-11, pg. 1.

In essence, the alternative deployment schedules proposed by the Company continue to rely on expensive back office systems whose costs do not vary based on the number of meters installed. Deploying and paying through a surcharge for these expensive back office and communication systems while installing fewer meters actually provides less service to customers for their money over the five year period until 2014. As OCA witness Hornby testified:

On a per customer served basis customers will receive even less service for their money in the initial years of each alternative deployment schedules than under the original deployment schedule. This is particularly troublesome because the service the Company proposed under its original deployment schedule is not

cost-effective to start with, as I explained in my Direct and Surrebuttal Testimony.

Under each of its three deployment schedules the Company is proposing to charge all customers, either implicitly or explicitly, an SMT Tier I charge for its back office system, customer interface, system management and communication network. However, under the two alternative deployment schedules fewer customers will have access to smart meters supported by those components through 2014 than under the original deployment. The relative numbers of customers who will be paying the SMT Tier I charge but who will not receive direct smart meter related benefit from it is shown in the bar chart in Exhibit ___ (JRH-12).

OCA St. 1-Supp at 16-17.

As the OCA discussed in its Main Brief, and will discuss below, many of these back office, customer interface, and management/security systems are costs that the Company would incur in the normal course of its business and should not be part of special cost recovery mechanisms through the Smart Meter Plan. Moreover, the Company has not justified the scale or scope of these expenditures or the proposal to move forward with these expenditures if there is a more limited deployment of smart meters. OCA St. 1 at 18. The Company's alternative deployment schedules do not address this fundamental problem, and indeed, make matters worse.

The second problem with the alternative deployment plans proposed by the Company is that they do not address the Commission's concerns regarding Allegheny Power's heavy reliance on smart meter deployment for its Energy Efficiency and Conservation (EE&C) Plan. In the Commission's October 15, 2009 Order approving the Company's EE&C Plan, the Commission stated:

We again note that this Commission agrees with the OCA that Allegheny's reliance on the rapid deployment of smart meters and the associated network infrastructure does add an element of increased risk to its Plan. As Allegheny bears the sole risk of

significant penalties if it fails to meet the mandated targets, we will not direct Allegheny to eliminate the proposed programs that rely on smart meter deployment, except where otherwise directed in this Opinion and Order. In recognizing this increased risk, the Commission strongly encourages Allegheny to develop an alternate “back-up” plan that is less reliant on smart meter deployment. Such an alternate plan would be a readily available option that can be implemented on short notice, after Commission approval, should any unforeseen circumstances delay or disrupt Allegheny’s smart meter deployment. The Commission will closely monitor this element of Allegheny’s Plan during the annual plan reviews and its review and monitoring of Allegheny’s Smart Meter Procurement and Installation Plan.

Petition of West Penn Power Company d/b/a Allegheny Power for Approval of its Energy Efficiency and Conservation Plan, Docket No. M-2009-2093218, *slip op.* at 21 (Order entered October 15, 2009).

The Commission has continued to express its concern regarding Allegheny Power’s reliance on smart meters and the need for Allegheny Power to develop a back up plan in the event that its smart meter deployment was delayed. In a Motion presented at the Commission’s February 11, 2010 Public Meeting considering Allegheny Power’s revised EE&C Plan, Chairman Cawley noted:

As we noted in our original order, the Commission agreed with the OCA that Allegheny’s reliance on the rapid deployment of smart meters and the associated network infrastructure does add an element of increased risk to its Plan. In that Order, the Commission stated that it would closely monitor this element of Allegheny’s Plan during the annual plan reviews and its review and monitoring of Allegheny’s Smart Meter Procurement and Installation Plan. Allegheny’s Revised Plan acknowledges a revised smart metering implementation schedule, but fails to clearly denote which EE&C programs and measures are dependent upon implementation of its smart metering plan. Allegheny should therefore provide a chart clarifying its kWh and kW reductions for each of its programs that would be achieved if its smart metering plan is not implemented within the established timeline of its EE&C Plan.

* * *

To the extent the revised chart indicates that Allegheny will fall short of its minimum EE&C requirements if its smart metering plan is not implemented during its initial EE&C plan period, the Commission once again strongly encourages Allegheny to develop an alternate “back-up” plan that is less reliant on smart meter deployment. Such an alternate plan would be a readily available option that can be implemented on short notice, after Commission approval, should any unforeseen circumstances delay or disrupt Allegheny’s smart meter deployment.

Petition of West Penn Power Company d/b/a Allegheny Power for Approval of its Energy Efficiency and Conservation Plan, Docket No. M-2009-2093218, (Motion of Chairman James A. Cawley dated February 11, 2010).

Rather than provide a plan that is less dependent upon smart meters, however, the Company continues to rely on its smart meter deployment to achieve its immediate EE&C Plan goals. The Company continues to target the same level of program participation – 60,000 participants – under its alternative deployment schedules as in its original Plan. AP St. 2-SDT at 6. Under the alternative deployment schedules, however, the Company has acknowledged that it will face more difficulty in achieving the EE&C Plan targets than under its original SMIP. AP St. 2-SDT at 6-8; OCA St. 1-Supp at 20. Under the Company’s alternative deployment approaches, customers will have to pay additional voluntary charges in order to participate in the EE&C/DR programs. OCA witness Hornby explained why the “value proposition” of participating in the programs is greatly reduced under the Company’s alternative approaches through an example using the Programmable Controllable Thermostat (PCT)

Program:

According to its EE&C Plan, the “value proposition” that the Company is offering to attract customers to enroll in the PCT program consists of a one-time enrollment incentive of \$50, the installation of a PCT at no incremental charge and the prospect of

future savings from the operation of the PCT. Under the 375,000 meter deployment schedule that value proposition is reduced by the fact that the participant will apparently have to pay an incremental charge of approximately \$4 per month for the PCT. That \$48 per year reduces the value proposition. Under the 100,000 meter deployment schedule that value proposition is reduced even further by the addition of the second Tier SMT surcharge of \$2.35 per month for the smart meter. Combined, the IHD and second Tier SMT charges reduce the value proposition by about \$76 per year.

OCA St. 1-Supp at 22.

Rather than support back up plans for the EE&C/DR Plan that are less reliant on smart meter deployment, the Company remains just as reliant on smart meters for its EE&C/DR Plan but has provided alternative deployment schedules that will present additional difficulties in achieving the goals. OCA St. 1-Supp at 12-16.

The OCA submits that the two alternative proposals made by Allegheny Power do not address the concerns raised by the parties in the initial phase of the proceeding, do not address the Commission's concern with the heavy reliance of the EE&C/DR Plan on smart meter deployment, and do not provide a reasonable means forward. OCA witness Hornby provides a fourth alternative for consideration by the ALJ and the Commission. The OCA urges the Commission to reject the Company's original SMIP as well as its two alternative deployment schedules. The OCA submits that the Commission should adopt the framework presented by OCA witness Hornby for Allegheny Power's smart meter deployment.

In the sections below, the OCA will discuss its further concerns with each of the Company's alternative deployment plans and present the alternative framework recommended by OCA witness Hornby.

a. The Company's Proposed 375,000 Meter Alternative Should Not Be Adopted.

The first option presented by the Company was its proposal to deploy approximately 375,000 smart meters by mid-2012. AP St. 1-SDT at 5. The 375,000 meters would be deployed to customers on a geographic basis. All customers within a geographic region would receive the smart meter. AP St. 1-SDT at 5; OCA St. 1-Supp. at 5. The Company would then target the deployment of about 60,000 in-home displays to customers with a smart meter who request an IHD or request to participate in one of the EE&C/DR Plan programs. Id. This plan also targets a deployment of approximately 30,000 programmable controllable thermostats (PCTs) to those customers participating in the PCT demand response program. AP St. 1-SDT at 6. This alternative plan calls for deployment beginning in 2010 and continuing through 2017 when full meter deployment to all customers is achieved. AP St. 1-SDT at 5. The other tasks and milestones of the original SMIP, including the full deployment of the communications network and back office systems installation would be completed as originally proposed in the SMIP. AP St. 1-SDT at 12.

Under the 375,000 alternative deployment option, for the time period between June 2010 and May 2011, a residential customer without a smart meter would pay a surcharge of \$6.37 per month and a residential customer in a geographic region receiving a smart meter would pay an SMT surcharge of \$8.30 per month. To participate in an EE&C/DR Plan program that uses an IHD, the residential customer with a smart meter would pay an additional charge of \$3.96 per month, bringing the total SMT surcharge for an EE&C Plan participant to \$12.26. AP St. 3-SDT, Exh. REV-1, pg. 3. For the period June 2013 to May 2014, a customer receiving a smart meter would pay a monthly surcharge of \$9.86 while a customer without a smart meter

would pay a surcharge of \$7.93 per month. OCA St. 1-Supp; Exh. JRH-9; AP St. 3-SDT, Exh. REV-1, pg. 3. To participate in an EE&C/DR Plan program using an IHD, the monthly surcharge would increase to \$13.82. AP St. 3-SDT, Exh. REV-1. This compares to the SMT surcharge for residential customers of \$15.77 per month under the original SMIP.

On a total cost per meter installed basis, the 375,000 meter alternative is twice as expensive as the original deployment schedule through 2014. OCA St. 1-Supp at 12, Exh. JRH-10. The cost of the 375,000 meter alternative is \$1,300 per meter installed versus \$710 per meter installed for the original deployment schedule. Id. As compared to other utilities in the Nation that have proceeded with smart meter installation, Allegheny Power's 375,000 meter alternative is far more costly. Other utilities that have deployed smart meters have an installed cost per meter of \$250 as compared to the \$1,300 per meter installed for Allegheny Power's 375,000 alternative. OCA St. 1-Supp at 13, Exh. JRH-11.

While the OCA submits that a more limited, geographic approach to deployment has merit, the Company's proposal is not cost-effective or reasonable. First, as OCA witness Hornby explained, the 375,000 meter alternative remains higher in cost per meter installed than other utilities primarily because of the back office systems, customer interface and system management/security components of the Company's Plan. The Company has not proposed a method that would allow for meter deployment without continuing the full scale Company-wide deployment of these systems. In addition, the Company plans to continue with the system wide deployment of its communication network even though it is limiting its smart meter deployment to a geographic region. AP St. 1-SDT at 12. Such a proposal does not result in a reasonable deployment of the smart meters or the smart meter infrastructure.

Further, the OCA submits that Allegheny Power's proposal for a two tiered SMT surcharge that would charge customers receiving a smart meter an additional monthly fee is not reasonable or appropriate under this 375,000 geographic deployment approach. The smart meters in this approach are being deployed to the customer whether they requested one or not in support of the entire smart meter initiative. There is no basis to create two separate tiers of smart meter charges in this circumstance.

The OCA submits that Allegheny Power's 375,000 meter deployment alternative does not provide a sound or reasonable basis for Allegheny Power to meet the requirements of Act 129. The OCA submits that the Commission should reject this alternative.

b. The Company's 100,000 Meter Alternative Should Not Be Adopted.

The Company also proposed a 100,000 meter alternative deployment schedule. Under this approach, the Company would deploy smart meters to individual residential, small commercial and industrial, and large commercial and industrial customers across the service territory but only upon customer request through 2014. The Company would deploy smart meters upon customer request until 2014, with a target deployment of 100,000 meters by mid-2012 to support the EE&C/DR Plan. AP St. 1-SDT at 6. For a second five year period, ending in 2019, the Company would deploy the remaining smart meters on a planned basis in the service territory and to all new construction. AP St. 1-SDT at 6-7. Other tasks and milestones of the original SMIP would be completed as set forth in the original SMIP. Under this approach, the Company must fully deploy the communications network since a customer requesting a meter could be located anywhere in the service territory. AP St. 1-SDT at 12. To support the EE&C/DR Plan, the 100,000 smart meter alternative targets 100,000 in-home displays for those

customers requesting an IHD or where the installation of the IHD is essential to participation in the EE&C/DR plan. AP St. 1-SDT at 7. This alternative also targets 30,000 Programmable Controllable Thermostats (PCTs) being deployed. AP St. 1-SDT at 7.

Under the 100,000 alternative deployment option, for the time period between June 2010 and May 2011, a residential customer without a smart meter would pay a surcharge of \$6.21 per month and a residential customer who requests a smart meter would pay an SMT surcharge of \$8.56 per month. To participate in an EE&C/DR Plan program that uses an IHD, the residential customer with a smart meter would pay an additional charge of \$3.86 per month, bringing the total SMT surcharge for an EE&C Plan participant to \$12.42. AP St. 3-SDT, Exh. REV-1, pg. 2. For the period June 2013 to May 2014, a customer receiving a smart meter would pay a monthly surcharge of \$10.58 while a customer without a smart meter would pay a surcharge of \$8.23 per month. OCA St. 1-Supp; Exh. JRH-9; AP St. 3-SDT, Exh. REV-1, pg. 2. To participate in an EE&C/DR Plan program using an IHD, the monthly surcharge would increase to \$14.44. AP St. 3-SDT, Exh. REV-1, pg. 2.

On a total cost per meter installed basis, the 100,000 meter alternative is extraordinarily expensive. OCA St. 1-Supp at 12, Exh. JRH-10. The cost of the 100,000 meter alternative is \$4,300 per meter installed versus \$710 per meter installed for the original deployment schedule. Id. As compared to other utilities, with an installed cost per meter of \$250, the 100,000 meter alternative as proposed by the Company is clearly unreasonable. OCA St. 1-Supp at 13, Exh. JRH-11.

Again, Allegheny Power continues to pursue the exact same expenditures on communications networks, back office systems, customer interfaces systems, and system management/security as in its original proposal. With this massive investment in these systems,

the 100,000 meter option cannot be sustained. Moreover, as the Company acknowledges, this option introduces considerable risk in meeting its EE&C/DR Plan goals. AP St. 2-SDT at 6-7; OCA St. 1-Supp at 21.

The OCA submits that the 100,000 meter option proposed by the Company must be rejected. The effective cost of this approach is high, the benefits low, and the risk to the EE&C/DR Plan is considerable. This approach should not be pursued by the Commission or the Company.

2. OCA Proposal: The OCA's Proposal Provides A Workable Framework For Meeting The Requirements Of Act 129 Regarding Smart Meters.

a. Introduction.

While the Company's two alternative deployment schedules do not resolve the critical objections to the Company's planned deployment of smart meters, the OCA submits that the alternative deployment proposals do contain some features that represent improvements over the original deployment schedule and provided a foundation for the development of a more reasonable deployment strategy. OCA witness Hornby described the features of the Company's alternatives that represented improvements over the original proposal. Mr. Hornby testified:

First, limiting deployment of, and charges for, in-home displays to only those customers who request them is an improvement that better matches costs to benefits. Under this approach customers would be allowed to acquire an in-home display on a competitive basis. Second, slowing the pace of system-wide deployment of smart meters is an improvement that should reduce the financial risk of the SMIP. Third, the Company's proposal to depreciate the capital costs of most components of the SMIP over longer lives is an improvement that will help somewhat mitigate its rate impact. Finally, the Company's proposal to use a return on equity of 10.5 percent to calculate its SMIP related revenue requirements is also an improvement relative to its original deployment schedule, however I continue to support a return of 10.1 percent for the reasons presented in my Direct Testimony.

OCA St. 1-Supp at 8.

Using these features as a starting point, Mr. Hornby developed a fourth alternative deployment schedule for consideration by the Company and the Commission. Mr. Hornby recommended that the Company make an initial deployment of approximately 100,000 smart meters in one of the most populous geographic segments of its service territory using its existing back office and other systems to the greatest extent possible. OCA St. 1-Supp at 23. The deployment of any new communications network would also be focused in that geographic area. The key features of Mr. Hornby's recommended alternative are as follows:

- Smart meters and communication network: The Company would deploy 100,000 smart meters and the communication network in the geographic segment of its service territory with the highest customer densities in 2010 and 2011. All customers in that geographic area would receive a smart meter. The Company would continue to conduct field testing of smart meters and communications networks.
- Back Office Systems, Customer Interface and System Management: The Company would support the deployment of the 100,000 meters with its existing back office systems and would reassess its plans for new back office systems, customer interfaces and system management/security and submit revised plans based on its experience in 2010 and early 2011.
- In Home Displays: IHDs would only be provided to customers who request one and the Company would recover the costs of the IHDs from the customer who requests to receive one.
- Completion of full deployment over service territory: Subject to the review of the 2010 results, full deployment could be accomplished over a 10 year time frame.
- New Low Cost Direct Load Control Program: A new low cost direct load control program would be developed and offered to residential and small commercial customers throughout the service territory in advance of full deployment of smart meters. This new low cost direct load control program would be a key element in the "back up" plan for Allegheny Power's EE&C/DR Plan and would allow participation in the EE&C/DR programs of customers who do not yet have a smart meter.
- EE&C Plan Programs for customers with smart meters (Programmable Controllable Thermostat (PCT) program and TOU rates): The Company would target its efforts to enroll customers in the geographic region with smart meters and place primary

emphasis on enrolling participants into its Programmable Controllable Thermostat (PCT) program with cost recovery for the installed PCTs through the EE&C Plan charge. The Company should also file a proposal for pilot time of use and dynamic pricing programs for customer with smart meters.

- SMT: The SMT charge would apply to all customers to recover the costs of deploying smart meters and any necessary investment in the communications network. A uniform SMT charge would be assessed to all customers within each class. The projected cost for a residential customer (who does not choose an IHD) under this deployment plan is \$1.84 per month in the first year reaching a high of \$2.42 per month.
- Review of 2010 deployment and customer response: In the Fall of 2011, the Company would submit an assessment of its initial deployment and customer response through a filing with the Commission that would include, among other things, a proposal regarding further investments in upgraded or additional back office systems, identification of systems that should be recovered in base rates and those that should be allocated to its sister companies, and a full deployment plan.

OCA St. 1-Supp at 24-29.

The OCA submits that this alternative deployment provides numerous benefits and advantages over any of the Company's proposed deployment approaches. OCA witness Hornby summarized the advantages of this approach:

This approach would provide the Company the opportunity to gain value direct experience before incurring major investments in new and upgraded back office systems and other components. This experience would include first hand experience with smart meters on its system as well with the reaction of its customers to programs and rate offerings designed to meet their specific loads and costs. In addition, under this alternative the Company would place a priority on developing and implementing a low cost direct load control (DLC) program that it could offer to residential and small commercial customers throughout its service territory in advance of the full deployment of smart meters and SMI. This DLC program would be a key element of the "back up plan" that the Commission requested the Company to provide.

OCA St. 1-Supp at 23-24.

The OCA will discuss the key elements of the OCA's proposed alternative below. The OCA submit that the alternative deployment plan recommended by OCA witness Hornby

provides a reasonable and more cost-effective means to begin the deployment of smart meters in Allegheny Power's service territory.

b. Geographic Deployment Of 100,000 Smart Meters And Accompanying Communications Network That Is Supported By Existing Systems.

The key element of the OCA's proposed alternative deployment plan is that the Company utilize a geographic deployment approach, similar to the approach proposed by the Company for its 375,000 meter deployment, but that it limit the initial number of meters installed in 2010 and 2011 to 100,000 meters. Under this approach, the Company would select a geographic segment of its service territory with high customer density for the initial deployment of smart meters and the communication network. OCA St. 1-Supp at 24. All customers within the geographic segment would receive a smart meter and the Company would be able to target energy efficiency and demand response programs that depend on such meters within this geographic segment. OCA St. 1-Supp at 25.

Of particular importance, this initial deployment of smart meters would not necessitate extensive investment in new or upgraded back office systems. OCA St. 1-Supp at 25. Allegheny Power is capable of supporting this limited number of smart meters with its existing system. OCA St. 1-Supp at 25; Exh. JRH-15, pg. 2. Allegheny Power's proposed extensive investment in new back office systems, customer interfaces and system management/security systems, and its proposal to include the costs of these systems in its Smart Meter Technology surcharge, are prime drivers of the high cost of all of Allegheny Power's proposed plans. By limiting the initial deployment to a number of meters that can be handled within the existing systems, the cost of the initial deployment is more reasonable and the Company can gain direct

experience upon which to base the design of, and justification for, major investments in new and upgraded back office systems and other components. OCA St. 1-Supp at 25.

Mr. Hornby's alternative will also allow for a more limited deployment of the communication system as an initial matter. Rather than deploy a communications system throughout Allegheny Power's service territory that would only be used by a limited number of customer smart meters, the alternative proposed by Mr. Hornby would call for the communication system to be deployed in the more limited geographic area as an initial matter. During this time, the Company would continue with its field testing of both meters and communications technology (as it proposes for its 375,000 meter deployment alternative) but the wide scale deployment of a communications network throughout the service territory would be undertaken after this initial deployment. OCA St. 1-Supp at 24. The OCA submits that this approach will allow for the proper assessment of the communication technologies before an expensive installation is undertaken.

c. Components To Address The EE&C/DR Plan Goals.

Mr. Hornby's alternative approach is also designed to allow the Company to meet its energy efficiency and demand reduction goals under Act 129 and to provide the "back up plan" that the Commission encouraged the Company to file. The EE&C Plan programs that are most affected by this alternative deployment schedule would be the PCT program and the rate offerings targeted to residential customers. OCA St. 1-Supp at 27. The PCT program is the program under which participating customers would allow the Company to control (or would control themselves) the operation of their central air conditioning during a number of critical peak periods each summer. OCA witness Hornby explained the impact of his alternative deployment schedule on these programs:

Under this alternative deployment schedule the Company would place primary emphasis on enrolling as many eligible participants as possible into this program. Since the Company has to install a PCT at the premises of each participant, it makes sense to install a smart meter at the same time to minimize installation costs (assuming the same technician can install both). In order to have a sufficiently large pool of eligible customers the Company may have to deploy a new communication network in the same sequence as proposed in its 375,000 meter deployment schedule through 2012. If so, the Company should justify that deployment. Smart meters installed outside these segments as part of the PCT Program would not be counted as part of the approximate 100,000 smart meter limit. The costs of the PCT installed under the PCT program should be recovered from the EE&C Plan charge.

OCA St. 1-Supp at 27. For the residential rate offerings associated with the EE&C Plan, Mr. Hornby recommended that the Company make pilot offerings of these programs that it can enable with its existing back office systems. These pilot programs will then allow the Company to gather empirical data on the design of the rate offerings and the design of back office systems that may be needed to support such rate offerings. OCA St. 1-Supp at 28. This approach would minimize the capital investment risk associated with the back office systems by ensuring that the components are designed in accordance with the types of programs that customers will support.

In that the alternative deployment schedule recommended by OCA witness Hornby calls for a more limited deployment of smart meters, with full deployment over a ten year time frame, Mr. Hornby also provided a "back up" plan that would allow the Company to meet its EE&C/DR Plan goals. Mr. Hornby recommended that the Company pursue a new, low cost direct load control program that it could offer to residential and small commercial customers throughout its service territory in advance of full deployment of smart meters. OCA St. 1-Supp at 26. Such an approach has been incorporated into the EE&C Plans of other Pennsylvania utilities and approved by the Commission. OCA St. 1-Supp at 26. Under this approach, a low cost direct load control program using hardware and software that could be upgraded to work

with the smart meter once the smart meter was installed in the customer's home would be developed. This program would allow all of Allegheny Power's customers to participate in the EE&C/DR Plan program even if they were not scheduled for the installation of a smart meter until near the end of the 10 year deployment period.

As OCA witness Brockway also testified, this direct load control approach has been used in New Jersey by three of its electric utilities. In 2007, three electric utilities in New Jersey published a report prepared for them on direct load control options available in New Jersey, and their cost-effectiveness, based on the possibility of the near term introduction of smart grid technology and smart meters. OCA St. 2-Supp at 13. The report reviewed a number of deployment scenarios and technologies, some assuming that smart meters had been installed and some assuming that they had not been installed. Id. The report found that even when the near term installation of smart meters was assumed, such programs were cost-effective. Id. The report recommended the adoption of direct load control programs whose hardware and software could be upgraded to be used with the smart meters once the smart meters were deployed. Id. Three of the four electric utilities have amended their Direct Load Control Programs to include technology that leaves open the possibility of using the smart meter system to run the program once it is in place. OCA St. 2-Supp at 14. As Ms. Brockway testified, the New Jersey companies and their customers are receiving the benefit of the demand reduction program even before the smart meter deployment is completed.

The New Jersey experience is particularly instructive here. OCA witness Brockway explained:

Even for a utility that is anticipating the implementation of an advanced metering infrastructure, it makes economic and policy sense to continue or implement a Direct Load Control program for

residential customers that does not depend on smart metering availability.

OCA St. 2-Supp at 14. The Commission has encouraged the Company to develop and back-up EE&C/DR plan that is not as reliant on the deployment of smart meters. The New Jersey experience, and the OCA's recommendation of a low cost direct load control program will allow Allegheny Power to offer an EE&C/DR program to a broader customer base, thus further encouraging participation, and allow the Company to meet its EE&C/DR Plan goals in a manner that is not dependent on rapid smart meter deployment.

d. Further Filing Requirement To Develop Plans For Completion Of Deployment Within A Ten Year Period.

Mr. Hornby's recommendation allows for further Commission review of the Plan, based on the experiences gained, and the completion of the deployment within 10 years. Under the OCA's proposal, the Company would be required to submit a filing in the Fall of 2011 based on its experience to date. This filing would include: (1) an assessment of the initial deployment and customer response; (2) a reassessment of plans for upgraded or additional back office systems, and a revised plan for these components, including costs, if justified; (3) proposed allocations of back office system costs among its jurisdictions; (4) identification of the normal back office system business investments to be recovered in base rates; and (5) recommendation for the completion of full deployment within ten years based on the results of its experience to date. OCA St. 1-Supp at 25-26. The filing should be presented to the Commission for review and approval.

The OCA submits that this review will allow for the development of a smart meter strategy and investment that is based on experience gained in the initial deployment and

lessons learned. Such a method will allow the Company to gain valuable direct experience before incurring such major investments.

e. The SMT Surcharge Resulting From The OCA Alternative Deployment.

The OCA submits that the alternative deployment plan it has outlined is a more reasonable framework for the deployment of smart meters under Act 129 in Allegheny Power's service territory. Under the OCA's proposal, there would be a single Smart Meter Technology (SMT) charge for each customer class to recover the costs of the smart meters and any necessary investment in the communication network. The back office systems, customer interface systems, and system management/security functions that are part of the Company's normal business operations would not be included in the SMT surcharge. OCA witness Hornby prepared some order of magnitude estimates of the costs and rate and bill impacts of this recommended deployment schedule. As shown on Exhibit JRH-14, the cost of this deployment alternative would result in a surcharge in the near term for residential customers of \$1.84 per month, escalating to \$2.42 per month in 2012. OCA St. 1-Supp, Exh. JRH-14. Similar surcharge levels can be seen for the commercial and industrial classes.³ For the residential class, the surcharge amount is consistent with the bill impact for the EE&C/DR Plan charge. OCA St. 1-Supp at 29. The OCA submits that an SMT surcharge in this range is far more reasonable and supportable than those under the Company's original SMIP or its alternative approaches.

f. Conclusion.

³ As clarified in the OCA Supplemental Hearing Exhibits 5 and 6, the surcharge amounts calculated by Mr. Hornby were based on the Company's cost estimates and were provided for comparison purposes to the Company's presentation.

The OCA submits that the alternative framework presented by OCA witness Hornby and detailed above presents a more reasonable means of meeting the smart meter requirements of Act 129 for Allegheny Power. The OCA's alternative calls for a measured deployment of 100,000 smart meters, and the accompanying communications network to support those meters, in a geographic segment of Allegheny Power's service territory that has a high customer density. This approach will allow Allegheny Power to gain experience with smart meters and customer reactions, target its EE&C/DR efforts, and gain experience as to what back office and customer interface systems should be deployed and over what time frame. The OCA's proposal also allows for a further filing so that the Commission can also better assess the wide scale deployment of smart meters throughout Allegheny Power's service territory. The OCA submits that Allegheny Power should be directed to implement the OCA's alternative approach.

3. Surcharge and Cost Issues.

Under the original SMIP, the Company proposed a Smart Meter Technology (SMT) surcharge that would apply to all customers. Under its two alternative deployment schedules, however, the Company is proposing a two tiered approach to the SMT charges plus an additional charge for customers with an IHD. Under the Company's alternative proposal, customers would pay a different surcharge based on whether or not they have a smart meter. For a customer that has a smart meter and chose to participate in an EE&C/DR Plan program that used an IHD, that customer would pay an additional charge. OCA witness Hornby explained the different tiers of the SMT charges as follows:

- The first Tier SMT charge is set to recover the costs of the communication network, back office systems, customer interfaces and system management/security. The Company proposes to apply the first Tier charge to all customers.

- The second Tier SMT charge is set to recover the cost of smart meters. The Company proposes to apply the second Tier charge only to customers who receive a smart meter.
- A charge separate from the SMT charge has been proposed to recover the cost of an in-home display. The Company proposes to apply this separate charge only to customers to whom it provides an in-home display and, apparently, a PCT under one of its EE&C Plan programs or rate offerings. (The supplemental testimony of the Company witnesses is not crystal clear regarding the mechanism through which PCT costs would be recovered under the alternative deployment schedules.)

OCA St. 1-Supp at 5-6.

The following chart, prepared by Mr. Hornby provides a comparison of the surcharges that would result under the Company's proposal for residential customers in the time period of June 2013 to May 2014:

Proposed SMT Surcharge (\$ per month), Schedule 10 - Residential, for June 2013 - May 2014

Charges		Original Deployment	375,000 Deployment			100,000 Deployment		
Applies to		All Customers	Customers with SM and IHD	Customers with SM	Customers without SM	Customers with SM and IHD	Customers with SM	Customers without SM
# Customers		725,000	60,000	375,000	350,000	100,000		625,000
SURCHARGES								
Tier I	Base amount without smart meter (SM) and IHD		\$7.93	\$7.93	\$7.93	\$8.23	\$8.23	\$8.23
Tier 2	Incremental amount for smart meter		\$1.93	\$1.93	N/A	\$2.35	\$2.35	N/A
Incremental	Incremental amount for opt-in IHD		\$3.96	N/A	N/A	\$3.86	N/A	N/A
Total		\$15.77	\$13.82	\$9.86	\$7.93	\$14.44	\$10.58	\$8.23

SOURCE: Valdes, Supplemental Direct Testimony, Exhibit REV-1
OCA St. 1-Supp, Exh. JRH-9.

While the Company sought to reduce the surcharge amounts through its alternative deployment plans, the burden on residential customers from even these alternative

plans remains significant. OCA witness Hornby described the impacts on residential customers in the June 2013 to May 2014 time frame:

Under the original deployment schedule in the June 2013 – May 2014 year residential customers would pay nearly \$189 per year. Under the 375,000 meter deployment and the 100,000 meter deployment residential customers without smart meters would pay SMT Tier I charges ranging from \$95 to \$99 per year. The increase in that year for residential customers with smart meters under those alternatives would range from \$118 to \$127 per year. Thus, in that year the bill impacts under the alternative deployment schedules are somewhat lower than those of the original deployment schedule. However those impacts still translate into increases of approximately 17 % for a residential customer without a smart meter using 500 kWh per month, and 21% to 23% for customers with a smart meter.

OCA St. 1-Supp at 17-18. By way of further comparison, in order to fund the Company's EE&C/DR Plan, the average residential customer would pay only about \$25 per year. OCA St. 1-Supp at 18.

As can be seen, both the complexity of the Company's alternative SMIP proposals and the resulting charges to customers do not address the fundamental concerns with the Company's proposed deployment plan that the OCA raised in this proceeding. Additionally, as discussed above, the multi-tiered surcharge structure proposed by the Company where recipients of a smart meter and an IHD pay additional charges, will actually make it more difficult for Allegheny Power to secure participants in its EE&C/DR programs, thus making it more difficult for Allegheny Power to meet its required reductions under its EE&C/DR Plan.

The OCA's recommended alternative deployment plan and surcharge, however, provide a more reasonable level of charges. Under the OCA's proposal there would remain one surcharge amount for each customer class. Included within the costs recovered through the surcharge would be the costs of deploying the smart meters and any necessary investment in the

communication network made to support the smart meters. All other costs, specifically the Customer Information System (CIS), Enterprise Service Bus (ESB), upgraded Work Management System (WMS), new Geographic Information System (GIS) and upgraded Outage Management System (OMS), are costs that the Company would incur in the normal course of business and are not appropriate for recovery through a surcharge. OCA St. 1-Supp at 16. Rather, the Company should allocate the costs of these facilities among its multi-state subsidiaries and seek recovery of the Pennsylvania portion of these costs in a distribution rate proceeding in accordance with ratemaking principles.

On Exh. JRH-14, OCA witness Hornby presented an estimate of the costs and projected SMT surcharges for his alternative deployment strategy and surcharge recommendation. In that only the Company is in a position to provide detailed estimates of costs, rate and bill impacts, Mr. Hornby provided order of magnitude estimates given the time frame for this supplemental phase of the proceeding. The following summarizes Mr. Hornby's estimates:

Fourth Alternative - Deploy 100,000 Meters and Communication Network through 2012 - Recover from all Ratepayers by Rate Class

Tariff Classification	June 2010 thru May 2011	June 2011 thru May 2012	June 2012 thru May 2013	June 2013 thru May 2014
SMT Surcharge				
Sch 10	1.84	2.42	2.36	1.91
Schs 20, 22, 23 & 24	1.78	2.36	2.30	1.85
Schs 30, 40, 41, 44, 46, 86 & Tariff 37	1.64	2.22	2.16	1.71
Street Lighting	-	-	-	-
Incremental amount for opt-in IHD				
Any eligible customer	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86

OCA St. 1-Supp; Exh. JRH-14, pg. 2.⁴ For residential customers, the SMT charge in the early years would be on the order of \$2 per month, resulting in an annual bill of approximately \$24 per year. This level is on the same order as the EE&C/DR Plan charge for residential customers. OCA St. 1-Supp at 28-29.

The OCA submits that the Company's proposed multi-tiered SMT surcharge includes costs that should not properly be included in the surcharge and introduces a level of complexity and risk to the SMIP that is not warranted. The Company's SMT surcharges should not be accepted.

4. Other issues.

As discussed in the Supplemental Direct Testimony of OCA witness Hornby, the primary reason that Allegheny Power's Smart Meter Plan has an installed cost per meter that is so much higher than the smart meter plans of other utilities is that Allegheny Power has proposed back office systems, customer interface systems, and billing systems as part of its Smart Meter Plan that are part of the normal distribution service business and are systems that will support operations across multiple affiliated companies. OCA St. 1-Supp at 15-16. Additionally, even though the Company has proposed alternative deployment schedules that scale back the pace of meter deployment, the Company has not scaled back any of its proposals for back office systems, customer interface and system management/security.

The Company's proposed alternative deployment schedules further highlight the necessity for the Company to revisit its proposal and to further address the proper allocation of these costs among its affiliates. The Company back office system hardware and software will have the capability to support the deployment of smart meters not only in Allegheny Power's

⁴ As set forth in OCA Supplemental Hearing Exhibit 5 and 6, these values are based on the Company's cost estimates and are presented for comparison to the Company's presentation.

service territory but in the service territory of its sister companies in Maryland, Virginia and West Virginia. OCA St. 1-Supp at 15. Except for the Customer Information System (CIS), however, the Company has allocated all of the costs to Pennsylvania and has sought recovery of those costs through the SMT surcharge.

The OCA submits that the costs associated with back office system investments that the Company would be making as part of its normal distribution service business should be removed from the surcharge. Specifically, the Customer Information System (CIS), Enterprise Service Bus (ESB), upgraded Work Management System (WMS), new Geographic Information System (GIS) and upgraded Outage Management System (OMS) must be removed from the surcharge (and properly allocated among affiliates). OCA St. 1-Supp at 16. The Company can seek recovery of these normal jurisdictional back office systems costs in its distribution base rates rather than through the special SMT surcharge. See, OCA M.B. at 48-52; OCA R.B. at 30-32. In addition to the investments in modernizing the CIS system, these normal business investments include the installation of the Enterprise Service Bus (ESB), an upgraded Work Management System (WMS), a new Geographic Information System (GIS) and an upgraded Outage Management System (OMS), OCA St. 1-Supp at 16.

Further, the Company should be required to allocate some of the costs of its back office systems to its sister companies, just as it did the CIS costs, regardless of whether or when those jurisdictions may move forward with smart metering. Under the OCA's alternative deployment schedule, the Company should provide this allocation in its first report, or it can provide the allocation in the distribution base rate case when it seeks recovery of these costs in its distribution rates. Pennsylvania ratepayers, however, should not be asked to bear the all of the costs of systems that will support operations in other states.

B. Revenue Requirement

1. Company Proposal.

The Company proposed two changes to elements of its calculation of the revenue requirements reflected in the SMT surcharge. First, the Company proposed changes to the asset book lives for certain components including In Home Technologies, Smart Meters, Hardware, Software (without CIS), Software (with CIS). AP St. 3-STD at 4-5. Second, the Company proposed to use a return on equity of 10.5% for its revenue requirement calculation (until its next base rate case) rather than its originally proposed 11.5% return on equity. AP St. 3-STD at 6-7. The OCA agrees with the Company's proposal regarding the change in asset lives, but the OCA continues to recommend the use of the 10.1% return on equity for the reasons set forth in the OCA's Main Brief and Reply Brief. OCA M.B. at 69-71; OCA R.B. at 48-52.

2. Rate of Return.

The Company proposed to reduce the return on equity used in the determination of the revenue requirement for the SMT surcharge from its originally proposed 11.5% to a level of 10.5% for the initial surcharge until its next distribution base rate case. Company witness Valdes explained that this proposal would have the effect of lowering the SMT surcharge. AP St. 3-STD at 7. The Company also notes that this alternative return on equity matches the return on equity in the settlement of PECO Energy Company's smart meter case. Id.

The OCA appreciates the Company's efforts to lower the return on equity component in an attempt to lower the SMT surcharge. This OCA, however, continues to support the use of a return on equity of 10.1% for Allegheny Power's SMT surcharge. OCA St. 1-Supp at 8. See also, OCA M.B. at 69-71; OCA R.B. at 48-52. The OCA would also note that reliance on the settlement of PECO's Smart Meter Plan is misplaced. The use of the 10.5% return on

equity in the PECO case was in the context of a comprehensive settlement of all but one issue presented by that case. Settlements do not form the basis of precedent for further Commission decisions.

3. Asset Lives.

The Company has proposed to extend the book lives of many major SMIP assets.

The following table from Allegheny Power witness Valdes summarizes the proposal:

<u>Asset Type</u>	<u>Alternative Book Life</u>	<u>Difference from Original Filing</u>
In Home Technologies	10 years	Additional 5 years
Smart Meters	15 years	Additional 5 years
Hardware	5 years	No change
Software (without CIS)	10 years	Additional 5 years
Software (with CIS)	10 years	Additional 3 years

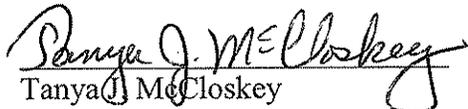
AP St. 3-STD at 5. Since the capital costs associated with the SMIP are depreciated or amortized over the estimated useful lives of the asset, this proposal will lower the magnitude of the SMT surcharge as compared to the original request.

The OCA agrees with Allegheny Power’s proposal to extend the book lives of the identified SMIP assets. The OCA submits that these extended book lives should be used in any resulting calculation of the SMT surcharge.

VI. CONCLUSION

For the reasons set forth in the OCA's Main Brief and Reply Brief, Allegheny Power's Smart Meter Procurement and Installation Plan must be rejected in its entirety. For the reasons set forth in this Supplemental Brief, the alternative deployment schedules proposed by Allegheny Power do not adequately address the fundamental flaws in its SMIP and must also be rejected. Allegheny Power should be required to develop and Smart Meter Plan that allows for a gradual transition to smart meter deployment and meets the requirements of Act 129 in a cost-effective manner. The OCA submits that the alternative deployment framework presented by the OCA in this Supplemental Brief provides a means for Allegheny Power to meet the Act 129 smart meter requirements in a more measured and cost-effective manner. The OCA's alternative should be adopted.

Respectfully Submitted,



Tanya J. McCloskey
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50044
E-Mail: TMcCloskey@paoca.org
Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@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: March 26, 2010
124263

APPENDIX A

Appendix A: Supplemental Proposed Findings of Fact and Conclusions of Law

Supplemental Proposed Findings of Fact

The OCA incorporates by reference the Proposed Findings of Fact Numbers 1 through 18 listed in Appendix A of the OCA's December 18, 2009 Main Brief and adds the following Supplemental Proposed Findings of Fact:

19. In its January 29, 2010 Supplemental filing, Allegheny Power proposed two alternative smart meter deployment plans for an initial deployment of 375,000 smart meters and an initial deployment of 100,000 smart meters as well as modifications to the originally proposed In-Home Display (IHD) deployment, asset book lives, return on equity, and the resultant SMT surcharge amounts.
20. In its alternative Smart Meter deployment plans, Allegheny Power proposes to maintain its original schedule to deploy its back office systems, customer interfaces system management/security over a three year period from 2010 through 2012. OCA St. 1-Supp at 3-4, Exh. JRH-8.
21. In its alternative Smart Meter deployment plans, Allegheny Power proposes to maintain its original schedule to deploy its communication network throughout its service territory, by geographic segment starting with the most populous segment, over a five year period through 2014. OCA St. 1-Supp at 3-4, Exh. JRH-8.
22. Under the 375,000 smart meter deployment option, Allegheny Power proposes to deploy 375,000 meters by mid-2012 in selected geographic areas of the service territory, focusing on the highest customer density, and the remainder of the smart meter deployment would be completed by 2017. Allegheny Power St. 1-SDT at 5-6.
23. Under the 100,000 smart meter deployment option, Allegheny Power proposes to deploy smart meters through mid-2012 only in response to a customer request, as needed for participation in one of the smart meter programs or rate offerings, and for new construction. Allegheny Power St. 1-SDT at 6; OCA St. 1-Supp at 5.
24. Under the 100,000 smart meter deployment option, Allegheny Power would deploy the remainder of the smart meters throughout its service territory by 2019. Allegheny Power St. 1-SDT at 6-7; OCA St. 1-Supp at 5.
25. Under both the 375,000 smart meter deployment option and the 100,000 smart meter deployment option, customers receiving a smart meter would pay a surcharge that includes the costs of the communication network, back office systems, customer interfaces and system management/security (Tier 1 charges) and the cost of the smart meter (Tier 2 charges). OCA St. 1-Supp at 5-6, Exh. JRH-9.

26. Under both the 375,000 smart meter deployment option and the 100,000 smart meter deployment option, customers without a smart meter would pay the Tier 1 charges. OCA St. 1-Supp at 5-6, Exh. JRH-9.

27. Under both the 375,000 smart meter deployment option and the 100,000 smart meter deployment option, Allegheny Power proposes a change from the original deployment plan and would provide In-Home Displays (IHDs) and programmable communicating thermostat (PCT) only to those customers who request one or who enroll in one of the Company's EE&C/DR Plan programs or rate offerings for which the Company considers that an In-Home Display is necessary. Allegheny Power St. 1-SDT at 6-7.

28. The Company's 375,000 smart meter alternative plan results in an installed cost per meter of \$1,300. OCA St. 1-Supp at 12; Exh. JRH-10.

29. The Company's 100,000 smart meter alternative plan results in an installed cost per meter of \$4,300. OCA St. 1-Supp at 12; Exh. JRH-10.

30. For residential customers without a smart meter, the Company's 375,000 smart meter alternative plan for the SMT is projected to start at \$6.37 per month in June 2010; \$9.23 per month in June 2011; \$8.60 per month in June 2012; and \$7.93 per month in June 2013. Allegheny Power 3-SDT at Exh. REV-1, page 3.

31. For residential customers with a smart meter, the Company's 375,000 smart meter alternative plan for the SMT (Tier 1 plus Tier 2) is projected to start at \$8.30 per month in June 2010; \$11.16 per month in June 2011; \$10.53 per month in June 2012; and \$9.86 per month in June 2013. Allegheny Power 3-SDT at Exh. REV-1, page 3.

32. For residential customers without a smart meter, the Company's 100,000 smart meter alternative plan for the SMT is projected to start at \$6.21 per month in June 2010; \$9.14 per month in June 2011; \$8.75 per month in June 2012; and \$8.23 per month in June 2013. Allegheny Power 2-SDT at Exh. REV-1, page 2.

33. For residential customers with a smart meter, the Company's 100,000 smart meter alternative plan for the SMT (Tier 1 plus Tier 2) is projected to start at \$8.56 per month in June 2010; \$11.49 per month in June 2011; \$11.10 per month in June 2012; and \$10.58 per month in June 2013.

34. Under the OCA's alternative, the Company would make an initial deployment of approximately 100,000 smart meters in one of the most densely populated segments of its service territory. OCA St. 1-Supp at 23-24.

35. The Company is capable of supporting an initial smart meter deployment of 100,000 smart meters with its existing back office and other systems. OCA St. 1-Supp at 25.

36. Under the OCA's alternative, a uniform SMT charge would apply to all customers within each class to recover the costs of deploying smart meters and any investment in the

communication network. OCA St. 1-Supp. at 28. The initial estimate of the SMT charge for a residential customer under the OCA's alternative is \$2 per month. OCA St. 1-Supp at 28.

Supplemental Conclusions of Law

The OCA incorporates by reference the Proposed Conclusions of Law Numbers 1 through 10 listed in Appendix A of the OCA's December 18, 2009 Main Brief and adds the following Supplemental Conclusions of Law:

11. Allegheny Power's alternative 375,000 and 100,000 smart meter deployment proposals are unreasonable, inconsistent with 66 Pa.C.S. § 2807(f) and will not result in just and reasonable rates.
12. Allegheny Power has not shown that its proposed alternative 375,000 smart meter deployment option and 100,000 smart meter deployment option are cost-effective approaches to meeting the goals of Act 129.
13. Allegheny Power has not shown the prudence of moving ahead with either its 375,000 smart meter deployment option or its 100,000 smart meter deployment option.
14. Allegheny Power's alternative SMIP plan is unnecessarily costly.

APPENDIX B

Appendix B: Supplemental Proposed Ordering Paragraphs

The OCA incorporates by reference the Proposed Ordering Paragraphs Numbers 1 through 12 listed in Appendix B of the OCA's December 18, 2009 Main Brief and adds the following Supplemental Proposed Ordering Paragraphs. It is ordered that:

13. Allegheny Power's alternative 375,000 smart meter and 100,000 smart meter deployment proposals are hereby rejected.

14. Allegheny Power shall implement the Office of Consumer Advocate's proposed alternative smart meter deployment plan with an initial deployment of approximately 100,000 smart meters and associated communications network in one of the most populous segments of Allegheny Power's service territory.

15. Allegheny Power shall develop a low cost direct load control program that it could offer to residential and small commercial customers throughout its service territory in advance of the full deployment of smart meters and Smart Meter Infrastructure.

16. Allegheny Power shall develop a uniform SMT charge that would apply to all customers within each class to recover the costs of deploying smart meters and any investment in the communication network.

17. Allegheny Power shall extend the asset book lives of the In-Home Technologies to ten years; Smart Meters to fifteen years; Software (without the Customer Information System) to ten years; and Software (with CIS) to ten years.

18. Allegheny Power should submit a filing to the Commission for approval in the Fall of 2011 that includes: (1) an assessment of the initial deployment and customer response; (2) a reassessment of plans for upgraded or additional back office systems, and a revised plan for these components, including costs, if justified; (3) proposed allocations of back office system costs among its jurisdictions; (4) identification of the normal back office system business investments to be recovered in base rates; and (5) recommendation for the completion of full deployment within ten years based on the results of its experience to date.

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 Supplemental Main Brief 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 26th day of March 2010.

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*

Barry A. Naum, 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*

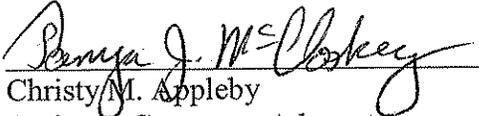
Kurt E. Klapkowski, Assistant Counsel
Commonwealth of Pennsylvania
RCSOB, 9th Floor
400 Market Street
Harrisburg, PA 17101
Counsel for: *Department of Environmental
Protection*

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

Divesh Gupta
Constellation NewEnergy
111 Market Place
Suite 500
Baltimore, MD 21202
Counsel for: *Constellation NewEnergy, Inc. and
Constellation Energy Commodities Group, Inc*

Christopher A. Lewis, Esquire
Christopher R. Sharp, Esquire
Melanie J. Tambolas, Esquire
Blank Rome, LLP
One Logan Square
Philadelphia, PA 19103
Counsel for: *Constellation NewEnergy, Inc. and
Constellation Energy Commodities Group, Inc*

Theodore S. Robinson, Esquire
Citizen Power
2121 Murray Avenue
Pittsburgh, PA 15217
Counsel for: *Citizen Power, Inc.*


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