

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

December 22, 2009

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

RE: Petition of Duquesne Light Company for
Approval of its Smart Meter Technology
Procurement and Installation Plan
Docket No. M-2009-2123948

Dear Secretary McNulty:

Enclosed for filing is the Reply 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,

A handwritten signature in cursive script that reads "David T. Evrard".

David T. Evrard
Assistant Consumer Advocate
PA Attorney I.D. # 33870

Enclosures

cc: Honorable Robert P. Meehan

00120473.docx

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of its Smart Meter Technology : Docket No. M-2009-2123948
Procurement and Installation Plan :

REPLY BRIEF
OF THE
OFFICE OF CONSUMER ADVOCATE

David T. Evrard
Assistant Consumer Advocate
PA Attorney I.D. # 33870
E-Mail: DEvrard@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: December 22, 2009

TABLE OF CONTENTS

I. INTRODUCTION 1

II. SUMMARY OF THE ARGUMENT 3

III. ARGUMENT 5

 A. Cost Allocation 5

 1. Duquesne, DII and OSBA’s Assertion that the OCA’s Proposal is Inconsistent with Cost of Service Principles and Related Case Law is Erroneous 5

 2. OSBA’s Assertion that the OCA has Ignored Environmental Benefits and that Assigning Costs on the Basis of Benefits Becomes a “Morass” is Without Merit 11

 3. Duquesne and OSBA’s Claims that the OCA Has Failed to Support its Discussion of Class Benefits is Erroneous 12

 4. Duquesne, OSBA and DII’s Argument that Common Costs Should Be Allocated Based on the Number of Meters is Incorrect 15

 5. OSBA’s Alternative Approach to Cost Allocation Should Be Rejected... 17

 B. Cost Recovery Issues 17

 1. Rate Base Valuation and SMC Base Rate Roll In 17

 2. Return on Equity 19

 3. Capital Structure 22

IV. CONCLUSION 25

TABLE OF AUTHORITIES

Cases

Illinois Commerce Commission v. FERC, 576 F.3d 470 (Seventh Cir. 2009). 12

Lloyd v. Pa.PUC, 904 A.2d 1010 (Pa. Commw. Ct. 2006).....5, 10, 11

Administrative Decisions

Pa.PUC v. Philadelphia Gas Works, Docket No. R-2008-2073938, 2009 WL 884424
(Order entered March 26, 2009)5, 10

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

Statutes

66 Pa.C.S. § 2806.1 *et seq*, pmbl.....6, 12

66 Pa.C.S. § 2807(f)25

66 Pa.C.S. § 2807(g).....25

I. INTRODUCTION

Duquesne Light Company (Duquesne or Company) timely submitted its Smart Meter and Procurement Installation Plan (Plan) to the Pennsylvania Public Utility Commission (Commission) on August 14, 2009. Recognizing the sizable undertaking that the deployment of smart meters would involve, Duquesne summarized its approach to the projects as follows:

Due to the enormity of tasks and cost of such a project, not all of the analysis, development, development and planning is complete at the time of this filing and much further work is needed so that the appropriate overall Plan for post Grace-Period is developed that is the most beneficial and cost-effective to Duquesne customers. Much of the information and costs that are contemplated by the Implementation Order will not be available until well into the 30 month Grace Period. Further information will be gathered and analyzed and thereafter the overall Plan further refined.... Duquesne will file a supplemental filing(s) at a later date...containing future analysis, results and conclusions.

Duquesne Exh. A (Petition) at 4-5.

Thus, Duquesne's Plan will continue to evolve in the months ahead. In particular Duquesne has proposed to conduct the incremental cost analysis of meter capabilities that was mandated by Smart Meter Procurement and Installation, Docket No. M-2009-2092655 (Order entered June 24, 2009)(Implementation Order), and submit it on or before July 1, 2010. Duquesne views this cost analysis as a necessary first step to meeting the various milestones mandated by the Commission to be completed during the Commission's prescribed 30-month grace period. With respect to those milestones, Duquesne's Plan identifies the dates by which it intends to reach each milestone and describes the various activities that will be undertaken to accomplish each. Duquesne's proposed timeline with respect to the grace period milestones is as follows:

- Assessment of needs and technological solutions and selection of technologies and vendors – 12/31/2010

- Establishment of network designs – 3/31/2011
- Establishment of plans to design, test and certify EDI transactions, Web Access and Direct Access capability – 6/30/2011
- Installation, testing and rollout of support equipment and software – 9/30/2011
- Establishment of plans for installation of meters, outside communications and training personnel – 11/1/2011

Duquesne proposes to then make a supplemental filing by December 31, 2011 which will include an updated Smart Meter Plan that will contain greater technical detail and more precise information as to the expected overall cost of the plan.

Among the elements of Duquesne's Plan that remain to be completed are the Company's activity in the post-grace period time frame with respect to system-wide deployment of smart meters, meeting customer requests for smart meters in advance of full deployment, and the installation of meters in new construction. Finalization of all of these elements is dependent on the further analysis, assessment and activity that Duquesne will undertake during the grace period. These matters will be addressed in Duquesne's supplemental filing.

In general, the OCA supports the Duquesne's proposed Smart Meter Plan. There are, however, a number of areas which the OCA submits need to be modified. These areas were covered thoroughly in the OCA's Main Brief. With respect to concerns raised about the technical aspects of the Plan and the details of further Plan development, Duquesne has indicated it will adopt most of the recommendations offered by OCA witness Christina Mudd.¹

In this Reply Brief, the OCA responds to arguments made by the other parties on several of the key modifications the OCA has proposed. Specifically, the OCA responds to other

¹ As detailed in its Main Brief, the OCA continues to be concerned about the cost of interval meters that Duquesne proposes to install for requesting customers during the Grace Period. Duquesne indicates it will continue to explore whether there are other options that would be less expensive. The OCA strongly supports Duquesne's search for a less expensive alternative.

parties on the issues of cost allocation and cost recovery. Regarding cost recovery, the OCA focuses attention on the capital cost issues of return on common equity, equity capitalization ratio and rate base valuation. The OCA also responds to Duquesne as to the manner of rolling its Smart Meter Charge into base rates once smart meter deployment is complete.

II. SUMMARY OF THE ARGUMENT

The OCA and other parties to this proceeding agree that the direct assignment of the cost of the meters to customer classes is appropriate. The OCA submits, however, that traditional cost of service principles, the language of Act 129, and the Commission's Implementation Order, all support a finding that the common costs of the Duquesne smart meter system cannot reasonably be allocated on the basis of the number of meters. Other parties' claims that the OCA has failed to support its proposal or that its proposal is inconsistent with cost of service principles are erroneous. As the OCA demonstrated in its testimony and Main Brief, and will also demonstrate in this Reply Brief, allocating common costs based on the number of meters is unreasonable. The number of meters is neither a measure of the benefits derived from the smart meter system nor the cause of non-meter system costs. Indeed, the common costs at issue here do not benefit one customer class solely nor do they benefit all classes equally. Accordingly, the OCA requests that the Commission hold that the appropriate basis on which to allocate common smart meter system costs (other than the cost of the meters themselves) is on the basis of energy and demand as proposed by OCA witness Dr. Swan.

With respect to the appropriate cost of common equity to be used in calculating the Company's Smart Meter Charge, Duquesne expresses reservations about relying on a rate of return derived from a barometer group of utilities, as recommended by the OCA and OTS. Duquesne also expresses reservations about the OCA's proposal to conduct a generic proceeding

to determine the method for calculating an appropriate rate of return to be used by EDCs in setting their smart meter charges. Yet, the OCA submits that Duquesne's concerns about having its Smart Meter Charge return on equity set using a barometer group could best be addressed through exactly the type of generic proceeding the OCA has recommended. The OCA also submits that its recommendation to use an interim return on equity of 10.1% based on the return authorized in the last fully litigated EDC base rate case in Pennsylvania is the only reasonable and appropriate proposal that has been put forth and should be adopted.

With respect to the equity capitalization ratio to be used for the Smart Meter Charge, Duquesne continues to argue for using 59%, the upper end of a range agreed upon in the settlement of its formula transmission rate case before the Federal Energy Regulatory Commission (FERC). Based on data compiled by its expert witness, the OCA opposes that percentage as being outside a reasonable range used by comparable utilities. Under the terms of a provision in Duquesne's merger proceeding with Macquarie Consortium, Duquesne committed to using a capital structure for ratemaking purposes that was within the reasonable range of the capital structure of comparable utilities and it agreed to demonstrate the reasonableness of any capital structure it claimed. The OCA submits that Duquesne has not satisfied its burden of demonstrating that its claimed equity ratio of 59% is reasonable. Further, as with the return on equity discussion above, the OCA submits that until a proper capital structure is determined for use with the Smart Meter Charge, its recommendation to use the equity ratio established in the last fully-litigated base rate case for a Pennsylvania EDC -- 51% -- as an interim value, is the only reasonable and appropriate proposal that has been put forward and should be adopted.

For purposes of setting the Smart Meter Charge, Duquesne proposes to establish the rate on a quarterly basis and to use the projected end-of-quarter smart meter plant in service

as the rate base used for setting the charge. Using the projected end-of-quarter plant will invariably lead to an over-collection of the charge and therefore be rejected. The OCA submits that the appropriate rate base to use is the projected average plant balance over the years. This will more closely match revenues and costs and will minimize the annual over or under recoveries that are experienced when the annual reconciliations are conducted.

Duquesne has advocated that at the end of its deployment of smart meters that it should be permitted to roll its Smart Meter Charge into its base rates either as part of a base rate proceeding or separately without the need for a base rate case. The OCA submits that it is appropriate to roll the charge into base rates *only* as part of a base rate proceeding. This will ensure that recovery of Smart Meter costs and the recovery of existing meter investments are synchronized and that the cost of benefits of smart metering and the changes in customer usage patterns are properly reflected in rates.

III. ARGUMENT

A. Cost Allocation.

1. Duquesne, DII and OSBA's Assertion that the OCA's Proposal is Inconsistent with Cost of Service Principles and Related Case Law is Erroneous.

Duquesne, DII, and OSBA allege that the OCA's proposal to allocate joint and common costs on the basis of energy and demand is inconsistent with traditional cost of service principles and related case law. See Duquesne M.B. at 22-23, OSBA M.B. at 10-12, DII M.B. at 10. DII points to Lloyd and a 2008 Philadelphia Gas Works (PGW) case to support their position. Lloyd v. Pa.PUC, 904 A.2d 1010 (Pa. Commw. Ct. 2006) (Lloyd); Pa.PUC v. Philadelphia Gas Works, Docket No. R-2008-2073938, 2009 WL 884424 *5 (Order entered March 26, 2009) (PGW). The OCA's proposed allocation methodology, however, is in keeping

with traditional cost of service principles found in the cases cited by the parties. Dr. Swan explained, that the OCA's cost allocation proposal is based on cost causation. In his Surrebuttal testimony he stated:

The fundamental rule in cost of service studies is to allocate costs based on the cause of the costs. The costs at hand would not be incurred if it were not for the expectation that benefits will be realized from the incurrence of those costs. As the expected benefits are what will cause those costs to be incurred, it is fully consistent with normal cost allocation practice to allocate the costs on the expected distribution of those benefits.

OCA St. 3-S at 9-10.²

In making their arguments regarding cost of service, the other parties overlook the basic fact that for Duquesne, which acknowledges that it has already reaped the benefits of more advanced meter reading and billing technologies in its current meters, the smart meters are not being installed for billing purposes. Instead, these meters are being installed to impact demand and energy consumption. The preamble to Act 129 states that one of the main goals of the Act is to reduce the cost and price instability of electric energy:

The General Assembly recognizes the following public policy findings and declares that the following objectives of the Commonwealth are served by this act:

(1) The health, safety and prosperity of all citizens of this Commonwealth are inherently dependent upon the availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at the least cost, taking into account any benefits of price stability over time and the impact on the environment.

Act 129, 66 Pa.C.S. § 2806.1 *et seq*, pmb1. The purpose of this massive new investment is not simply to count kilowatt hours and provide accurate bills to each individual customer. Rather, it

² DII argues that Dr. Swan has employed a "value of service" not cost of service methodology. This is incorrect. These parties reach this conclusion because they fail to ask the fundamental question of why these costs are being incurred in the first place.

is to reduce overall demand and energy costs for the benefit of all customers. As noted by the OCA in its Main Brief, OCA witness Swan reviewed Duquesne's application for funding under the American Recovery and Reinvestment Act (ARRA) and testified as follows:

... the Company's Smart Meter Plan (the Plan) and its application for Federal assistance under the American Recovery and Reinvestment Act (ARRA) both identify other longer term benefits that will accrue to the Company and its customers. These benefits primarily take the form of reductions in energy use and peak period capacity utilization. In response to OCA Data Request IV-4, the Company stated:

The Company agrees that the implementation of a smart meter system and customer participation in dynamic pricing programs, including time-of-use, real time and critical time pricing options provide an opportunity for customers to reduce their energy costs and reduce PJM capacity and transmission costs.

In its ARRA application, the Company includes the following in its list of benefits that will accrue to Duquesne or its customers as a result of the implementation of its smart meter program:

- Reduce electric consumption by permitting increased energy efficiency and conservation;
- Reduce demand for peak electrical power;
- Improve demand forecasting to assist with medium and long term infrastructure planning;
- Facilitate the introduction of innovative pricing mechanisms; and
- Increase system reliability by predicting trouble spots, lowering demand during peak periods thereby reducing stress on the system, and assisting with faster restoration of service. (Citation omitted)

OCA St. 3 at 3-4.

Thus, the Company acknowledges that the benefits to be gained from smart meters include the reduction of electricity consumption and of peak electricity demands. The

Company's ARRA Application offers greater detail on expected benefits from the smart meter system and provides estimates of expected savings for various rate classes resulting from the implementation of the first 8,000 smart meters during Phase I of the Company's Plan. Duquesne Cross Exam Exh. 2.

In response to Duquesne's assertion that Dr. Swan's cost allocation approach does not comport with the principle of cost causation, Dr. Swan stated:

Mr. Pfrommer has proposed to allocate the common costs of Duquesne's Smart Meter System on the number of meters because the infrastructure costs are required by all meters. As I stated in my direct testimony, the analyst must go further and ask the fundamental question what has caused the cost to be incurred in the first place, if he wants to follow the basic precept of cost of service studies -- to allocate costs based on the factors that caused those costs to be incurred. In my view, Mr. Pfrommer has failed to do that.

OCA St. 3-S at 2-3.

Additionally, as the OCA explained in its Main Brief and Testimony, the OCA's proposed allocation is consistent with both the language and intent of Act 129, as well as the Commission's Implementation Order. The Commission required that all measures associated with an EDC's smart metering plan be financed by the customer class that receives the benefits of such measures. The Commission stated:

...we will require the EDC to allocate those costs to the classes whom derive the benefit from such costs.

Implementation Order at 32. The Commission went on to say:

Any costs that can be clearly shown to benefit solely one specific class should be assigned wholly to that class. Those costs that provide benefit across multiple classes should be allocated among the appropriate classes using reasonable cost of service practices.

Id. As indicated in the Implementation Order, smart meter plan costs are appropriately allocated to those customer classes who derive the benefits from such costs. Implementation Order at 32. The number of meters is neither a measure of the benefits derived from the smart meter system nor the cause of the system costs. Dr. Swan further elaborated on Act 129 and the Implementation Order in his Surrebuttal testimony:

Like Mr. Pfrommer, Mr. Baudino concludes that these common costs should be allocated based on the number of customers without asking the fundamental question why these costs are going to be incurred in the first place. As I stated in my direct testimony, the General Assembly made clear that one of the main goals of Act 129 was to reduce the cost and price instability of electric energy for customers. That is, the General Assembly has required that Pennsylvania distribution utilities incur these costs to bring about savings for its customers. That requires that one look beyond mechanical cost allocation approaches to determine the factors that caused these costs to be incurred in the first place. The Commission explicitly recognized this relationship in its June 18, 2009 Implementation Order when it stated that "...we will require the EDC to allocate those costs to the classes whom derive benefit from such costs."

Mr. Baudino fails to ask what factors caused these costs to be incurred in the first place, which is fundamental in observing reasonable cost of service principles. In so doing, I believe he ignores the dictates of the Commission in requiring that costs be allocated to the classes whom derive benefits from those costs.

OCA St. 3-S at 7³.

Allocating these common costs based on energy and demand recognizes the purpose of Act 129 and also recognizes that larger customers (in terms of demand and energy usage) will derive far greater benefits from both the smart meter systems and the enhanced

³ The OCA notes that this quotation from Dr. Swan's Surrebuttal testimony was in response to the assertion by DII witness Baudino that Dr. Swan's cost allocation approach is similar to a "value of service" pricing theory. DII's Main Brief again suggests that Dr. Swan's approach is based on "value of service principles." DII M.B. at 9. As Dr. Swan makes clear in the quoted language, his method of cost allocation observes fundamental cost of service principles, *not* value of service principles as contended by DII.

technological capabilities. This allocation is consistent with Lloyd and PGW.⁴ The common costs at issue do not benefit one class solely nor do they benefit all of the classes equally. It is simply inappropriate to allocate the exact same dollar level of these costs to an individual 500 kWh per month residential customer as to the largest industrial or commercial customer on the Duquesne system.

Dr. Swan addresses these issues very effectively in the summary to his Surrebuttal testimony:

I think the General Assembly was quite clear in its reasons for requiring Pennsylvania's distribution utilities to incur the costs of a smart meter system – to reduce the cost of energy and to minimize the volatility of energy prices. I also think the Commission was clear in its desire that distribution utilities allocate costs to those classes that will benefit from the incurrence of the costs of a smart meter system. I do not think that the Commission's directive to use reasonable cost of service practices to allocate costs that benefit multiple classes is inconsistent at all with the recognition of which classes will benefit from the incurrence of these costs. Reasonable cost of service practices do seek to identify the causes of the costs incurred. Some hard thinking can only lead one to conclude that it is the expected realization of benefits that have caused these costs to be incurred in the first place.

OCA St. 3-S at 12-13.

Dr. Swan goes on to recognize the fundamental equity in the cost allocation approach he has advanced:

⁴ While DII cites Lloyd for the proposition that cost of service is the "polestar" of utility ratemaking and argues that allocating costs on the basis of benefits violates cost of service principles, it fails to mention another section of the Lloyd decision which upholds the allocation of Sustainable Energy Fund (SEF) costs to all distribution ratepayers on the basis that all ratepayers benefit from the Fund's activities. Lloyd at 23-29. In the face of an argument by industrial customers that the SEF provides no demonstrable benefits to ratepayers, the Court stated: "What the core of that argument ignores is that the General Assembly has specifically authorized that public service programs such as SEF be funded." Lloyd at 26. The Court noted that the purpose of the SEF is "to promote the development and use of renewable energy and clean energy technologies, energy conservation and efficiency which promote clean energy." Lloyd at 23. Act 129, which established the Smart Metering program, likewise seeks to further the availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at the least cost, taking into account the benefits of price stability over time and the impact on the environment. Act 129 preamble.

I think there is also a fundamental question of equity involved in this decision. It is illogical to suggest that customers with single phase meters will receive 96.2 percent of the benefits of implementing Duquesne's smart meter plan and that customers with poly-phase meters will receive only 3.8 percent of the benefits. Yet that is how Duquesne proposes to allocate the common costs of the plan. Simple fairness, as well as sound cost of service principles, dictate that a more reasonable allocation of these costs among the customer groups be implemented, such as the use of the broader energy and peak demand allocator that I have proposed.

OCA St. 3-S at 13.

The OCA proposal for cost allocation is entirely consistent with fundamental cost of service principles, is in accord with Lloyd and the Implementation Order, achieves equity in the distribution of costs among the customer classes, and should be adopted by the Commission.

2. OSBA's Assertion that the OCA has Ignored Environmental Benefits and that Assigning Costs on the Basis of Benefits Becomes a "Morass" is Without Merit.

The OSBA argues that the OCA has ignored the fact that "environmental benefits" are also a goal of Act 129 and that environmental benefits will accrue to all citizens regardless of their energy use.⁵ OSBA M.B. at 12-13. OSBA also states concerns about how these benefits would be allocated. OSBA M.B. at 13. OSBA uses this argument to support its assertion that any customer benefit standard for cost allocation can lead to "a morass of conflicting interpretations as to (a) what the benefits of the SMIP are and (b) which customers and customer classes received these benefits." OSBA M.B. at 13; OSBA St. 1 at 3. This notion that an allocation analysis, if difficult, should not be performed completely ignores the fact that cost of service analysts must always make interpretations and utilize their judgment regarding multi-purpose cost elements. The benefits here, however, are not difficult to discern as the

⁵ The OCA would note that the environmental costs that are being avoided by consumption and demand reduction will actually become part of the cost of energy when any legislation is enacted calling for reductions in carbon-dioxide emissions.

specific goal of the smart meter initiative is to affect the cost of energy and capacity. Act 129, 66 Pa.C.S. § 2806.1 *et seq*, pmb1.

As discussed above, the OCA's proposal is consistent with cost of service principles—principles that are the foundation for normal cost of service studies. Indeed, FERC requires the demonstration of a causal relationship between costs and benefits for approval of rates to be shared by utilities. See OCA M.B. at 16-17. Additionally, no party to this proceeding has demonstrated that the supposed “difficulty” of measuring benefits in the smart meter context exceeds the difficulty of measuring benefits in any other type of proceedings. See, e.g. Illinois Commerce Commission v. FERC, 576 F.3d 470, 475 (Seventh Cir. 2009).

3. Duquesne and OSBA's Claims that the OCA Has Failed to Support its Discussion of Class Benefits is Erroneous.

Both Duquesne and OSBA assert that Dr. Swan has provided no evidence to support his claim that each customer class will derive benefits from smart meter technology common costs that are proportionate to the class' demand and energy. Duquesne M.B. at 23; OSBA M.B. at 12. This is simply not the case. As a preliminary matter, Dr. Swan did not measure the benefits to each class as Duquesne has not yet developed a cost/benefit analysis. The Company did, however, clearly indicate in its ARRA application that these benefits will take the form of energy and capacity savings to customers. OCA St. 3 at 4. In addition, as noted above, Dr. Swan testified that the Company, in response to an OCA Data Request, agreed that the smart meter program and customer participation in dynamic pricing programs will provide customers an opportunity to reduce their energy costs and reduce PJM capacity and transmission costs. OCA St. 3 at 3.

Dr. Swan explained that participation in these types of programs, although available to everyone, will likely be much higher among Large C&I customers than among residential customers because of the nature of the Large C&I customers. OCA St. 3 at 6. Large C&I customers are much more sophisticated electricity consumers and they often have staff that are dedicated to managing their firm's energy use since the cost of energy to these firms will have significant impacts on their bottom line. Dr. Swan further explained:

Moreover, the savings to these customers from participation in these programs will be in proportion to their energy use or their peak demands. Even if the participation rates in these programs were the same among all the classes, which they will not be, the average benefit per customer will be significantly higher for the largest C&I customers than for the much smaller residential customers. It is naive to assume that the benefits will be the same for all customers, and it is erroneous to conclude that these common costs should be allocated on the number of meters.

OCA St. 3 at 6.

In their Main Briefs, Duquesne and DII claim that Large C&I customers will not see additional benefits from the installation of smart meters as the Large C&I class already has interval meters and the benefits to be gained from the new smart meters have largely been realized by these customers. Duquesne M.B. at 23; DII M.B. at 9-10. This argument ignores the fact that the smart meter technology that Duquesne will install will expand the options available to the Large C&I class. See OCA M.B. at 42; OCA St. 3-S at 6-7. If this were not the case, then the smart metering aspect of Act 129 would serve no purpose. This expansion of services will include programs beyond those offered by PJM and will include a full menu of dynamic pricing options. Further, the increased information about usage that will result from the new smart meter installation will bring competition with many more pricing options specific to each Large C&I customer's usage. Indeed, Constellation New Energy and Constellation Energy Commodities

Group (Constellation) filed testimony in this proceeding addressing how the new smart meter technology will increase the amount of data being collected and will allow EGSs to better understand usage patterns and help customers with functions such as energy efficiency and peak load reductions. Constellation St. 1 at 8-9. Constellation specifically discussed these “increasingly sophisticated energy strategies” and stated:

Overlaying Smart Meter technologies onto existing open platforms makes it possible to more successfully harness and shape load whether the load is distributed across a single facility, college campus or retail chain with multiple locations throughout a large geographic area. This ability to shift and shape load across multiple building is going to reveal itself to be the smartest and most efficient way to create the virtual peaking plans and intelligent buildings of the greener energy grid of the future... This shift in direction, however, while *possible* is only *likely* to occur if the proper access to data is available to customers and their EGSs in quick, easy and straightforward manners, and if the data provided by such new Smart Meter technologies is as specific and frequent as possible.

Constellation St. 1 at 9-10 (Emphasis in original). Further, in its Main Brief, Constellation, which argued for 15-minute interval data to be made available to EGSs on an *hourly* as opposed to a *daily* basis, stated:

...providing 15-minute data on a *daily basis at a minimum* will encourage new innovation and efficiencies in energy use, but providing such 15-minute data *on an hourly basis* will go even further to allow all C&I customers to take advantage of new energy infrastructure and shape new energy and resource management innovation.

Constellation M.B at 16.⁶ (Emphasis in original) The testimony and brief of Constellation provide persuasive evidence that, contrary to Duquesne and DII, the benefits of smart metering

⁶ It is worth noting that while Duquesne argues that Large C&I customers have already largely reaped the benefits that smart meters will bring and that smaller customer classes stand to realize greater benefits from smart meters (Duquesne M.B. at 23), the Constellation brief references C&I customers exclusively.

have not been fully tapped by C&I customers. To argue that the Large C&I customers have already reaped all of the benefits of smart meters is simply incorrect.

Further, Dr. Swan provided information from Duquesne's ARRA application that included specific initial estimates of benefits accruing to each customer class. OCA St. 3-S at 7-8; Duquesne Cross Exam Exh. 2. For Duquesne's initial meter installation, Large C&I customers are estimated to receive 67 to 69 percent of savings; Medium C&I customers 27 to 28 percent of savings; and residential customers only 2.7 to 5.5 percent of the savings—even though more than half of the meters to be installed by Duquesne in the initial deployment will be for residential customers.⁷ Id.

As the OCA has provided both analytical and empirical evidence to support its claim that each customer class will derive benefits from smart meter technology, Duquesne and DII's assertions are without merit.

4. Duquesne, OSBA and DII's Argument that Common Costs Should Be Allocated Based on the Number of Meters is Incorrect.

Duquesne, OSBA and DII all argue that the appropriate method for allocating smart meter-related common costs is on the basis of the number of meters, the approach

⁷ In its Main Brief, Duquesne criticizes Dr. Swan for relying on the benefits assessment the Company included in its ARRA application. Among other things, Duquesne states that Dr. Swan incorrectly presumed that the ARRA filing "would have the same implementation plan" as the Smart Meter Plan and then goes on to state that the criteria examined in the ARRA filing were different than those examined for the Smart Meter Plan. Duquesne M.B. at 24. However, Duquesne provides no further information explaining the difference between the criteria examined for the ARRA filing and those examined for the Smart Meter Plan. The OCA would point out that in Surrebuttal testimony, Dr. Swan answered criticism of his use of the ARRA customer benefit estimates by noting as follows:

It strikes me as inconsistent for the Company to state that such savings will be realized when seeking federal funding for the project, and then to deny the appropriateness of these same savings estimates when determining the expected distribution of benefits among the customer classes for purposes of cost allocation.

OCA St. 3-S at 6.

proposed by the Company. Duquesne M.B. at 23; Duquesne St. D-R at 6; OSBA M.B. at 9-10; DII M.B. at 7. Duquesne and DII assert that the common costs of the smart meter network are driven by the number of meters deployed. Duquesne M.B. at 23; Duquesne St. D-R at 6; DII M.B. at 10. Duquesne further asserts that the functions of the common infrastructure (to collect, backhaul, store and maintain data) are required equally for each meter and do not depend on the size of the customer. Duquesne M.B. at 22-23. Even if Duquesne and DII are correct regarding the relationship between the level of common costs and the number of meters and even if Duquesne is correct about the infrastructure functions being necessary for all meters, the conclusion that costs should be allocated based on the number of meters still does not hold. As Dr. Swan explained:

Mr. Pfrommer's point seems to be that these infrastructure functions will be required for all meters. I do not disagree with Mr. Pfrommer on this point. However, it does not follow that, just because all meters will rely on the infrastructure, these costs should be allocated on the number of meters. Why have these infrastructure costs been incurred in the first place? The answer is that energy and capacity savings were expected to result. Thus, the fundamental cause of these costs is the expectation of savings and the distribution of those savings benefits provide the proper basis for allocating these common costs among the customer groups.

OCA St. 3-S at 3-4. As mentioned above, the Company's current Automated Meter Reading (AMR) system has already yielded the benefits associated with the near elimination of Duquesne's physical meter reading force and other operational savings. Duquesne Exh. C at 8. As further noted above, the Company has stated that it agrees that the implementation of a smart meter system and customer participation in dynamic pricing programs will provide an opportunity for customers to reduce their energy costs and reduce PJM capacity and transmission costs. OCA St. 3-S at 3. It is apparent that the benefits expected from smart meter implementation are not related to the number of customers.

5. OSBA's Alternative Approach to Cost Allocation Should Be Rejected.

In its Main Brief, OSBA advocates use of an alternative method for allocating common costs in the event the Commission rejects the Company's proposal to assign such costs on the basis of the number of meters. Rather than adopt the OCA's approach to assign costs on the basis of customer benefits, OSBA proposes that common costs be allocated in proportion to the allocation of the directly assigned costs of the meters. OSBA M.B. at 14. OSBA maintains that rather than requiring a decision on whether common costs should be allocated on the basis of meters, on the basis of energy consumption or on some hybrid of the two, its alternative offers a simple solution, that is, let the common costs follow the meter costs.

Simple as it may be, the OCA submits that the OSBA alternative should be rejected. The OSBA's proposal is flawed in the same way as the Company's proposal. It fails to follow the principle of cost causation by not reaching the ultimate cause of the smart meter-related costs – the expectation that customers will benefit in the form of energy savings as a result of smart meters being deployed. By not basing common cost allocation on the distribution of expected benefits, OSBA's proposal fails to recognize a basic goal of Act 129 – energy savings for consumers – and fails to adhere to the Implementation Order directive that costs be allocated to the customer classes who derive the benefits from those costs. Implementation Order at 32.

B. Cost Recovery Issues.

1. Rate Base Valuation and SMC Base Rate Roll In.

At pages 22 and 23 of its Main Brief, the OCA addresses a number of cost recovery issues as to which there appears to be agreement between Duquesne and the OCA.

After reviewing Duquesne's Main Brief, the OCA is not certain that as to two of these issues there indeed is a mutual understanding.

First, with respect to rate base valuation, it does appear that Duquesne and the OCA agree that for purposes of the annual SMC reconciliation, the actual timing of capital investment made during the year under review should be reflected. Duquesne M.B. at 24. In terms of setting the SMC rate prospectively, however, Duquesne indicates its intention to update the rate quarterly and to use projected end-of-quarter plant in service for this purpose.⁸ *Id.*; Duquesne Exh. D-R at 4. Here the OCA takes issue with Duquesne. Using projected end-of-quarter rate base will inevitably lead to over recovery each quarter as the end of quarter plant will exceed the actual plant balance over the course of the quarter and over the year. Consequently, the OCA submits that it would be more appropriate to use the projected average plant balance over the course of the quarter (or year if the OCA's recommendation for annual updates is adopted) to set the SMC rate. This will ensure that the costs recovered from customers over the course of the quarter (or year) will most closely match costs and will minimize the annual over or under recoveries that are experienced when the annual reconciliations are conducted.⁹

Second, the OCA's Main Brief indicated that there appeared to be agreement that the SMC would be rolled into base rates after full deployment of smart meters only in conjunction with a base rate proceeding. OCA M.B. at 23. In its Main Brief, however,

⁸ The OCA proposed that Duquesne update the SMC on an annual, not quarterly, basis. OCA M.B. at 28.

⁹ In its Main Brief, Duquesne supports its proposal to use end-of-quarter plant-in-service projections by noting that Pennsylvania is a "terminal rate base state." Duquesne M.B. at 25. The OCA is unsure of the meaning of the phrase "terminal rate base state," but suspects that it refers to the fact that in Pennsylvania base rate proceedings, the end of future test year rate base is what is used in setting rates. It must be remembered, however, that the future test year is normally over or close to being over by the time new rates go into effect. The OCA submits that the use of a terminal or end of period rate base is not meaningful when rates are being set prospectively and revenues and costs are fully reconciled on an annual basis. Employing an end of period rate base will only result in over-recoveries that will have to be refunded to ratepayers.

Duquesne indicates that while it is amenable to this option, it should also have the option to roll the surcharge into base rates without it being part of a complete base rate case. Duquesne M.B. at 25. The OCA submits that Duquesne's position in Brief is at odds with the testimony of its witness Pfrommer. The following is from Mr. Pfrommer's Rebuttal testimony:

Q. What is your response to Mr. Catlin's recommendation to roll the Smart Meter Charge into base rates in a distribution rate case?

A. I agree with Mr. Catlin's recommendation that the Smart Meter Charge should be rolled into base rates as part of a distribution rate case.

Duquesne Exh. D-R at 5.

Clearly, Duquesne has given conflicting signals on its position with respect to the proper method for rolling the SMC into base rates. In the face of Duquesne's uncertainty over this issue, the OCA submits that it has presented, both in testimony (OCA St. 2 at 13) and at hearing (Tr. 118-121), very cogent arguments for rolling the SMC into base rates *only* as part of a base rate proceeding, and therefore, its recommendation should be adopted.¹⁰

2. Return on Equity.

For purposes of calculating the Smart Meter Charge (SMC), Duquesne proposed adopting the return on equity and equity capitalization ratio used in its 2006 formula transmission rate case before the Federal Energy Regulatory Commission (FERC). Duquesne Exh. D at 6-7. The OCA objected to using equity values determined in a settled FERC proceeding for Pennsylvania ratemaking purposes. OCA M.B. at 24; OCA St. 2 at 4.

¹⁰ In its Main Brief, Duquesne states that OCA witness Catlin "noted that roll-in could be accomplished without a base rate case...". Duquesne M.B. at 25. Duquesne cites p. 120 of the Hearing Transcript for this point. The OCA submits, however, that an objective reading of the hearing testimony on this issue (Tr. 118-121) reveals no concession by Mr. Catlin that the roll-in could be accomplished without a base rate case.

OCA witness Catlin offered a three-part alternative to the Company's proposal. Services (FUS). OCA St. 2 at 5-6. First, if Duquesne has had a fully litigated base rate case within three years of the effective date of the time Duquesne seeks to update its SMC, then the common equity return established in that case should be used for SMC purposes.¹¹ Second, if more than three years have passed since the Company's last fully litigated rate case, then the equity return should be based on the most recent "Report on the Quarterly Earnings of Jurisdictional Utilities" (Quarterly Earnings Report) prepared by the Commission's Bureau of Fixed Utility Services (FUS). OCA St. 2 at 5-6.¹² However, Mr. Catlin noted that based on his review of recent Quarterly Earnings Reports the equity cost rates for electric utilities have been inconsistent and volatile. OCA St. 2 at 6. He therefore recommended adopting the procedure used by the Commission in setting an equity return for water utilities that utilize a Distribution System Improvement Charge (DSIC). Further, he recommended that the procedure for calculating the return applicable to EDC Smart Meter Charges be the subject of a generic proceeding. Mr. Catlin testified:

After the Commission approved the use of DSICs by water utilities, the Commission Staff/Bureau of Fixed Utility Services (FUS) began developing and publishing a return on equity explicitly for use in determining allowed DSIC returns. Consistent with that approach, I would recommend that the Commission direct the FUS to begin publishing a return on equity that would be specifically applicable for smart meter charges (SMCs) in instances where an EDC has not had a base rate case in three years. The procedure for calculating that return on equity should be established through a generic proceeding in which the FUS participates.

¹¹ The Rebuttal testimony of Duquesne witness David Bordo indicates that the Company agrees that the cost of equity established in a rate case should be the first option. Duquesne Exh. E at 4-5.

¹² OTS also recommends use of the cost rate of common equity calculated by the Commission for electric utilities in the most recent Quarterly Earnings Report of jurisdictional utilities produced by FUS. OTS notes that the Report's cost of common equity for the electric industry is based on the Commission's established barometer group. OTS also notes that the cost of equity used in water company DSICs is determined in the same way. OTS St. 1 at 14-15.

OCA St. 2 at 6.

The third part of Mr. Catlin's cost of equity proposal is that until such time as the Commission establishes the appropriate equity rate of return through a generic proceeding, the return that should be used in calculating Duquesne's SMC is that which was established in the most recent fully litigated base rate proceedings among Pennsylvania EDCs, the 2006 (decided in early 2007) rate cases of Metropolitan Edison Company(Met-Ed) (Docket No. R-00061366) and Pennsylvania Electric Company (Penelec) (Docket No. R-00061367).

In its Main Brief, Duquesne again indicates that it agrees with the OCA that the return on equity determined in a recent rate case should be the first option for use in calculating the SMC. Duquesne M.B. at 27. The Company also indicates it would be willing to have the return on equity used for the SMC be determined through reference to an appropriate barometer group of utilities, but expresses reservations about this method's ability to account for the unique attributes of individual utilities. Id. at 28. The Company likewise expresses reservations about OCA's proposal for a generic proceeding to establish the procedure for calculating the return on equity to be used by EDCs for their SMCs. Id.

Duquesne's reservations about the barometer group method go even further than concerns about reflecting the attributes of individual utilities. Duquesne expresses reluctance to subject itself to a process under which FUS determines the cost of equity to be used in the SMC. It states that there has been "no evidence presented as to how FUS conducts its methodology or derives its calculations." Duquesne M.B. at 29. Duquesne maintains that without additional information, it cannot agree to such a process as it has no certainty on the methodology it would be supporting and no assurance that the process would produce a fair result. Id.

The OCA submits that its proposal for a generic proceeding to determine the procedure for calculating the return on equity should resolve Duquesne's concerns with the methodology. Such a proceeding would allow for the openness and opportunity for input that Duquesne appears to desire.

With respect to the third prong of Mr. Catlin's proposal, that in the absence of a recent Duquesne base rate proceeding and until a generic proceeding on how to calculate an appropriate return on equity is completed, the return on equity authorized (10.1%) in the 2006 Met-Ed and Penelec cases be used, Duquesne continues to oppose this recommendation. Duquesne M.B. at 28. The OCA submits that without a recent Duquesne base rate to draw upon and given the Company's reluctance to have the return on equity set by FUS through a barometer group process (and its hesitancy about the OCA proposed generic proceeding), the OCA's proposal to use the Met-Ed and Penelec return on equity as an interim rate of return represents the only appropriate and reasonable proposal that has been put forward and it should be adopted.

3. Capital Structure.

For purposes of calculating the SMC, Duquesne proposed using the range of equity capitalization ratios agreed upon in the FERC transmission formula rate case. That range is from 45% to 59%. Duquesne Exh. D at 7. In its filing, Duquesne specifically proposed that the upper end of that range -- 59% -- be used. Duquesne Exh. WVP-2 at 2.

The OCA opposes use of the 59% equity ratio on two grounds: (1) use of an equity ratio from a settled FERC transmission rate case is inappropriate for use in a PUC-jurisdictional, distribution-related proceeding; and (2) a provision in the settlement of the Duquesne- Macquarie Consortium merger proceeding (Docket No. A-110150F0035) states that Duquesne will not request a capital structure for ratemaking purposes that is outside a reasonable

range of that used by comparable companies, and Duquesne has made no showing that the 59% ratio is within such a reasonable range.¹³ OCA M.B. at 24, 26; OCA St. 2 at 7-8.

As an alternative to the Company's proposal, and for use until a more appropriate equity ratio for Duquesne can be established in a distribution base rate case, the OCA recommended, as it did with the cost of equity, that the equity ratio utilized in the 2006 Met-Ed and Penelec cases be used. There the Commission approved a 51% equity ratio. OCA St. 2 at 8.

In its Main Brief, Duquesne notes that the OCA opposes its proposal to use the equity ratio range from the FERC proceeding and specifically Duquesne's proposal to use 59% as being unreasonable. The Brief then states, "But no realistic range was presented by the OCA." Duquesne M.B. at 29-30. In response, the OCA notes that the burden of proof in this proceeding rests with Duquesne. Moreover, the merger settlement provision imposes on Duquesne, not the OCA, the duty to demonstrate that the Company's claimed equity ratio falls within a reasonable range used by comparable utilities. Finally, the OCA submits that it did present a "realistic range" of equity ratios in the form of Schedules TSC-1 and TSC-2 attached to the Direct testimony of its witness Catlin. Schedule TSC-1 shows the common equity ratios for seven electric utility companies that are primarily distribution-only utilities and thus represents Mr. Catlin's effort to identify comparable companies. Schedule TSC-2 shows the common equity ratios for the six companies used as the proxy group in the Commission's Quarterly Earnings Reports. The equity ratios in TSC-1 range from 46.4% to 54.6%, and in TSC-2, they

¹³ The language of settlement provision is as follows:

Duquesne shall not request a capital structure for ratemaking purposes which is outside of a reasonable range of that used by comparable companies. In any future base rate proceeding, Duquesne must demonstrate that its claimed common equity ratio is reasonable and in the best interests of its customers.

OCA M.B. at 26.

range from 42.6% to 58.6%. The OCA submits that there is nothing unreasonable about these ranges.

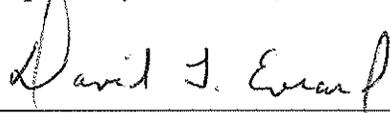
Duquesne also opposes the OCA's recommendation for using the Met-Ed/Penelec equity ratio of 51% until a more appropriate ratio can be determined. Duquesne M.B. at 30; Duquesne Exh. E at 5-6. In addition, Duquesne opposes the OTS proposal to use the equity ratio of a barometer group of utilities.¹⁴ Duquesne M.B. at 30; Duquesne Exh. E at 3-4. As is the case with OCA's recommendation to use the Met-Ed/Penelec return on equity as an interim step, the OCA submits that its recommendation to use the Met-Ed/Penelec equity ratio on an interim basis is the only appropriate and reasonable proposal that has been advanced by any party and should be adopted.

¹⁴ The OCA notes that in his Surrebuttal testimony, Mr. Catlin stated that if the Met-Ed/Penelec return on equity is not utilized as an interim value, he would recommend that Duquesne's interim equity ratio be based on the average for the FUS Barometer Group. OCA St. 2-S at 3.

IV. CONCLUSION

As stated in its Main Brief and noted in the Introduction to this Reply Brief, the OCA submits that Duquesne's Smart Meter Plan is in general compliance with 66 Pa.C.S. § 2807(f) and (g) and is reasonably structured to meet the goals of the statute. There are, however, modifications to the Plan that should be adopted before the Commission grants its approval of the Plan. The OCA respectfully requests that the Commission modify Duquesne's Plan as set forth in the OCA's Main Brief and Reply Brief.

Respectfully Submitted,



David T. Evrard
Assistant Consumer Advocate
PA Attorney I.D. # 33870
E-Mail: DEvrard@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: December 22, 2009

CERTIFICATE OF SERVICE

Petition of Duquesne Light Company for :
Approval of its Smart Meter Technology : Docket No. M-2009-2123948
Procurement and Installation Plan :

I hereby certify that I have this day served a true copy of the foregoing document, the Reply 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 2nd day of December 2009.

SERVICE BY E-MAIL and INTEROFFICE MAIL

Charles Daniel Shields, Esquire
Office of Trial Staff
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

SERVICE BY E-MAIL and FIRST CLASS MAIL

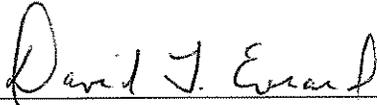
Gary A. Jack
Assistant General Counsel
Duquesne Light
16th Floor
411 Seventh Avenue
Pittsburgh, PA 15219
Counsel for: *Duquesne Light Company*

Sharon E. Webb
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*

Pamela Polacek, Esquire
Shelby A. Linton-Keddie, Esquire
Barry A. Naum, Esquire
McNees Wallace & Nurick, LLC
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108-1166
Counsel for: *Duquesne Industrial Intervenors*

Scott Perry, Assistant Counsel
Aspassia V. Staevska, Assistant Counsel
Commonwealth of Pennsylvania
Department of Environmental Protection
RCSOB, 9th Floor
400 Market Street
Harrisburg, PA 17101-2301
Counsel for: *Department of Environmental Protection*

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



David T. Evrard
Assistant Consumer Advocate
PA Attorney I.D. # 33870
E-Mail: DEvrard@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
00116979.docx

Harry S. Geller, Esquire
John C. Gerhard, Esquire
Julie George, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101-1414
Counsel for: *Pennsylvania Association of Community Organizations for Reform Now*

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.*

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