COMMONWEALTH OF PENNSYLVANIA

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September 25, 2009

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

RE: 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 are the Comments of the Office of Consumer Advocate, in the above-referenced proceeding.

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

Respectfully Submitted,

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

Enclosures
cc: Honorable Robert P. Meehan
Office of Special Assistants

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BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

COMMENTS
OF THE
OFFICE OF CONSUMER ADVOCATE

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Dated: September 25, 2009

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I. INTRODUCTION

The Office of Consumer Advocate (OCA) is filing these Comments in accordance with the Notice in the Pennsylvania Bulletin published August 29, 2009. 39 Pa.B. 5218. These Comments are in response to the Petition of Duquesne Light Company (Duquesne or Company) for Approval of its Smart Meter Technology Procurement and Installation Plan. The OCA submits these comments as a first step in addressing its initial concerns with Duquesne's Plan and will submit testimony in subsequent evidentiary hearings further detailing these and other issues related to the Plan. The OCA requests that the Commission review these Comments in conjunction with the OCA's testimony and briefs.

A. Background

Act 129 of 2008 (Act), an amendment to the Public Utility Code, took effect on November 14, 2008. Among its provisions, the Act requires that within nine months of its effective date all electric distribution companies (EDCs) with more than 100,000 customers must file with the Public Utility Commission (Commission) a Smart Meter Technology Procurement and Installation (SMPI) plan. The Act requires that smart meter technology must be provided 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; and (iii) in accordance with a depreciation schedule not to exceed 15 years. 66 Pa.C.S. § 2807(f)(2).

The Act defines "smart meter technology" as technology, including metering and network communications technology capable of bidirectional communication that records electricity usage on at least an hourly basis. The technology must provide customers with direct access to and use of price and consumption information. It must also: (i) directly provide customers with information on their hourly consumption; (ii) enable time-of-use rates and real-

time price programs; (iii) effectively support the automatic control of the customer's electricity consumption by one or more of the following as selected by the customer: the customer's utility, a third party engaged by the customer, or the customer. 66 Pa. C.S. § 2807(g). Under the Act, EDCs must, with customer consent, make available direct meter access and electronic access to customer meter data to third parties, including electric generation suppliers (EGSs) and providers of conservation and load management services. 66 Pa. C.S. § 2807(f)(3).

The Act authorizes EDCs to recover the reasonable and prudent costs of providing smart meter technologies. Included in these costs are the capital costs of the smart meter technology and the cost of any system upgrade required to enable the use of smart meter technology. Netted against these costs are to be the capital and operating cost savings brought about by the deployment of the smart meter technology. EDCs are authorized to recover their net costs either through base rates or through a reconcilable automatic adjustment clause under Section 1307 of the Public Utility Code. 66 Pa.C.S. § 2807(f)(7).

On March 30, 2009, the Commission issued a Secretarial Letter seeking comments on a draft staff proposal related to EDC smart meter procurement and installation. The OCA submitted comments on the draft proposal. In an Order entered June 24, 2009 (Implementation Order), the Commission set forth the standards that each EDC SMPI Plan must meet; provided guidance on the procedures to be followed for submittal review and approval of all aspects of the plan; established requirements for smart meter capability; provided guidance on the Commission's expectations for deployment of smart meters; set forth requirements regarding access to smart meters and data; and provided guidance on cost recovery.

In keeping with the requirements of the Act, the Implementation Order required that EDC SMPI plans be submitted to the Commission on or before August 14, 2009. Each plan is to

include a summary of the EDC's current deployment of smart meter technology and a plan for future deployment, including measurable goals and dates for key milestones. Interested parties are permitted to file comments on each plan up to September 25, 2009. Thereafter, a technical conference will be held on each EDC's plan during the month of October and evidentiary hearings will be held in November. Initial decisions of assigned Administrative Law Judges will be rendered by January 29, 2010 and will be subject to Exceptions and Reply Exceptions of the parties. A Commission decision on each plan will follow. Implementation Order at 3-4.

The Commission made a number of key determinations in the Implementation Order. First, it determined that the Act's provision that smart meter technology is to be provided "in accordance with a depreciation schedule not to exceed 15 years," was intended to require system-wide or universal deployment of smart meter technology by EDCs within a 15-year time frame. Id. at 14. Second, the Commission determined that because of the time needed to develop and install a smart meter network systemwide, it would grant a 30-month grace period following plan approval, during which EDCs will not be required to install a smart meter at a customer's premises. Id. at 7. However, the Commission required that each EDC's SMPI plan include a proposal for meeting specific milestones within the grace period. The milestones are as follows: (1) assessment of needs and technological solutions; (2) selection of technologies and vendors; (3) establishment of network designs; (4) establishment of plans for training personnel; (5) establishment of plans for installation, testing and rollout of support equipment and software; (6) installation, testing and rollout of support equipment and software; (7) establishment of plans to design, test and certify EDI transaction capability; and (8) establishment of plans for installation of meters consistent with applicable rollout requirements. Each plan is required to include a

schedule to meet each milestone and specific deadlines when the EDC will provide the Commission with reports on the status of its plan. Id. at 7-8.

Another key element of the Implementation Order is its identification of fourteen different capabilities that should be considered for each EDC's smart meter technology. The Commission acknowledges that these capabilities go beyond the Act's definition of smart metering technology and states that what the Act provides are to be considered the "minimal requirements." Id. at 16. The Commission requires that in its SMPI plan, each EDC must quantify the costs to meet the minimum technology requirements of the Act and the costs to meet the enhanced technology requirements imposed by the Commission. The analysis must include the incremental cost to include each individual function added by the Commission, less any savings that may result from using the technology. If an EDC is unable to provide such a cost analysis with its August 14 plan filing, it will be permitted to petition the Commission to file at a later date. Id. at 29-31.

Another provision of the Implementation Order is its guidance to EDCs on how to handle customer requests for smart meters during the 30-month grace period. Here the Commission has directed that EDCs are not required to install fully capable "smart meters," but rather meters that are capable of providing interval data. An EDC must give direct access to the customer's interval data to third parties, as requested by the customer. Id. at 7.

The OCA has retained a team of experts to review the Company's filing. The OCA plans to file detailed written testimony in accordance with the procedural schedule established in this proceeding and participate in the technical conferences and evidentiary hearings. The OCA provides these initial Comments on Duquesne's Plan in accordance with the Commission's Implementation Order.

B. Description Of Duquesne's Plan

As required, Duquesne Light Company (Duquesne or Company) filed its SMPI Plan with the Commission on August 14. In addition to the Plan itself, Duquesne's filing included a Petition seeking approval of the Plan as well as the testimony of Ruth Ann DeLost describing the elements of the plan and the testimony of William Pfrommer describing the proposed method of cost recovery. In many respects, Duquesne's plan is dependent on the work to be done during the 30-month grace period. The Company acknowledges this in its Petition:

> 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.

Petition at 4-5.

Further, Duquesne's Petition seeks the additional time the Commission indicated it would allow for EDCs to conduct the incremental cost analysis of meter capabilities that was mandated by the Implementation Order. Duquesne asks permission to file its cost analysis on or before July 1, 2010. Petition at 5. Duquesne views the cost analysis as a necessary first step to meeting the various milestones mandated by the Commission to be completed in the 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. Plan at 10-35. 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 SMPI Plan that will contain greater technical detail and more precise information as to the expected overall cost of the plan. Petition at 11-12.

As required by the Commission, Duquesne's Plan includes a description of its current deployment of smart meter technology. Between 1996 and 1998, the Company rolled out a territory-wide automated meter reading system that included approximately 608,000 meters. The meters used in that system already have certain smart meter capabilities. The meters used for the Company's large commercial and industrial customers (with demand greater than 300 kW) obtain reads at 15-minute intervals. Petition at 3. Duquesne states that these large customer meters and the associated systems that support them already satisfy the Act 129 requirements and the Commission's enhanced smart meter capabilities, with the exception of a remote connect/disconnect feature, which Duquesne says cannot be done with a polyphase meter. Plan at 7. Meters used for medium-size commercial and industrial customers (demand between 50 and 300 kW) provide daily reads to the Company, but substantial additional communications,

reprogramming and backend data collection and management systems are needed before these meters can be upgraded to meet the specified requirements in Act 129. Id. The vast majority of meters in use in Duquesne's territory are for residential and small commercial customers. Approximately 90% of these meters provide Duquesne with a daily read, while the remaining 10% are read monthly with the use of a drive-by, handheld radio frequency device. Id. at 5. With respect to the current meter stock and its applicability to the future, Duquesne states:

> Duquesne's assessment of how to move forward to achieve the ultimate goals of Act 129 and the Implementation Order will necessarily need to consider the current meter environment and the investment that Duquesne has already made in meters. Duquesne has a contractual obligation with Itron for AMR infrastructure maintenance and support through 12/31/2013 and nearly $57 million left in undepreciated meter assets, and thus during the Grace Period, Duquesne will be assessing the extent to which it can utilize as much as possible of pre-existing meters and infrastructure, while at the same time meeting the statutory and regulatory requirements.

Petition at 4.

As part of its SMPI Plan, Duquesne is currently incurring costs to acquire and install new customer care and data management systems. These systems will enable Duquesne to comply with the requirement to provide interval data and direct access to such data to third parties. The systems are also necessary to support expansion of the Time-of -Use and Real-Time pricing options mandated by Act 129. Plan Exhibit C, Testimony of Ruth Ann DeLost, at 12-14.

As required by the Implementation Order, during the grace period, Duquesne will supply customers requesting smart meters with an interval data-capable meter. Duquesne proposes to provide such customers with the type of meter currently in use by its large commercial and industrial customers. Id. at 11.

As mentioned earlier, there are elements of Duquesne's Plan that remain to be finalized. Among them are the Company's activity in the post-grace period time frame with respect to its plans for 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. Duquesne states that during the grace period, as it determines "major decision matters such as recommended design and expected costs," it will seek approval of the Commission. Petition at 13.

With respect to cost recovery, Duquesne proposes to implement a reconcilable automatic adjustment clause pursuant to Section 1307 of the Public Utility Code. Duquesne's Smart Meter Charge (SMC) will recover applicable capital costs and operating expenses on a forward-looking basis, using quarterly filings and an annual reconciliation. The rate paid by customers in a given quarter will be based on the revenue requirement projected for that quarter using estimated smart meter-related operating and capital expenditures for the upcoming quarter. The specific charge per customer will be a fixed amount per meter per month calculated by dividing the projected revenue requirement by the forecast number of smart meters and customer bills for the upcoming period. Plan Exhibit D, Testimony of William V. Pfrommer, at 4.

The OCA submits that given Duquesne's circumstances, Duquesne's approach is generally reasonable. Duquesne's multi-staged, iterative approach allows time for the necessary evaluations, information gathering and design of deployment approach. The OCA will identify some specific issues and make recommendations in these comments, its testimony and briefs to assist in the process.

II. COMMENTS ON THE PLAN

A. Introduction

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

There has not yet been significant full scale deployment of smart meters across much of the nation. The 2008 FERC Staff Report on Demand Response and Advanced Metering finds that 6.7 million smart meters are installed across the nation—a penetration rate of 4.7%.[1] Pilot projects throughout the nation continue, and the OCA anticipates that the next few years will be critical to the development and understanding of the issues and challenges involved in full scale smart meter deployment.

Based on its preliminary review of the Plans filed by the Pennsylvania EDCs, the OCA submits that most of the Pennsylvania EDCs that are faced with this challenge have proposed a generally reasonable approach. Duquesne has proposed a Plan that will allow it to utilize the 30-

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

month grace period provided in the Commission's Implementation Order to conduct analysis and research, continue evaluations of technology, and make additional filings as milestones and decision points are reached. The OCA generally agrees with this approach that will allow Duquesne the time to develop a detailed business case that fully considers the goals of the smart metering program, the costs and benefits of the system, the need to integrate technological changes, customer research regarding the potential use and acceptance of the systems, and the evaluation of lessons learned.

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

The privacy of customer information will also present a new challenge to the EDCs and the Commission. With smart metering, electricity data at a level of detail that has never before been available will now be collected for each and every customer. While such data may be able

to provide benefits for some customers, the potential for pitfalls and unintended consequences now exists at a level not previously contemplated by the Commission, the stakeholders or the EDCs. It will be critical to both the acceptance of the smart meters by customers and to the proper implementation of the smart meter initiative that these issues be fully considered and that the necessary protections be developed during the early stages of the Plans.

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

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

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

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

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

B. Duquesne Must Demonstrate That The Plan Is Reasonable And Will Produce Just And Reasonable Rates.

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

Act 129 establishes important goals for Pennsylvania in ensuring the availability of reliable, affordable, efficient and environmentally stable electric service at the least cost. The OCA fully supports these goals and recognizes the importance of smart meter deployment as one tool in helping to meet these goals. The cost estimates contained in the EDC Plans suggest that the costs of these efforts will be significant. The estimated cost of Smart Meter Plans for these seven major EDCs is around $1.5 billion, all of which will be collected from ratepayers. For Duquesne the estimated cost of full deployment falls in a range from $152 million to $262 million. Petition at 14.

The OCA submits that there are many different approaches to designing a plan for the selection and deployment of smart meters. Duquesne must bear the burden of demonstrating that the particular design of its Smart Meter Plan is the most cost effective and reasonable approach from the range of available alternatives. While Duquesne has estimated the costs of its Smart Meter Plan, the filing provides only limited information as to the specific benefits anticipated from smart meter deployment. For those EDCs that already have automated meter reading such

as Duquesne, a large share of the benefits in distribution operations savings, such as through the reduction of meter reading costs, have been achieved. Beyond these distribution operations savings, most of the benefits of smart meter deployment have been shown to be in the area of enabling demand response.

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

While difficult to estimate, the OCA submits that a rigorous cost/benefit analysis is a key task that must be undertaken to determine whether the rates resulting from the Plan are just and reasonable. As mentioned, there are many different technologies that can be adopted, functionalities that can be included, and strategies that can be used for deployment of smart meters. A rigorous cost/benefit analysis that seeks to determine not only the costs, but the actual benefits, how those benefits are achieved, and how those benefits will be realized by customers is a necessary task to determine whether the alternative being selected is the most cost-effective and reasonable. In its Implementation Order, the Commission recognized the importance of this type of analysis when it directed that the EDCs obtain the necessary cost and savings information

to evaluate certain smart meter capabilities so that the Commission can determine whether the additional capabilities, beyond the statutorily required capabilities, are cost-effective. Implementation Order at 30-31.

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

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

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

At this time, efforts have, understandably, been directed toward analysis of the technology and systems that will be required, and the specific steps necessary to procure and deploy the Smart Meters. As Duquesne's Plan develops and milestones are achieved, however, the Company must also begin the process of articulating the purpose and goals of the smart meter initiative to customers and communicating information to customers about the Smart Meter Plan. Duquesne must also clearly communicate to its customers, among other things, what the smart meter is, what it does, how it can be used to the benefit of the customer, what changes in rules,

rights or procedures may take place, and what protections are in place for the data that is now being collected. Without this education, many of the benefits of smart meters could be lost.

While Duquesne did not include a specific Customer Education component in its Smart Meter Plan, it did include a section on Customer Education in its Petition. Petition at 10. There Duquesne noted that, "Communication will be a critical component for those customers who choose to take advantage of specialized time-of-day and/or seasonal rates as part of the rollout of smart meters throughout Pennsylvania." Id. It also said, "Duquesne recognizes that outside communication is crucial to the success of smart meter rollout," and that "[it] intends to engage in an aggressive consumer education campaign." Id.

The OCA applauds Duquesne's awareness of the importance of this issue and encourages Duquesne to include in its Plan, milestones and tasks related to educating consumers and gaining consumer acceptance of the smart meter initiative.

D. Grace Period Budget

The final milestone identified in Duquesne's Plan is its December 31, 2011 "Supplemental Filing with Costs." A review of the Company's 30-Month Grace Period Budget Overview (Exhibit B to the Plan), however, indicates Duquesne's intention to spend nearly $13.4 million on the Smart Meter Technology Infrastructure portion of its plan, in 2012, the year *after* the final milestone of its grace period activity is to have been reached. Duquesne's plan provides no details on what costs are to be incurred in 2012 or for what purpose. Thus, of the $38 million in costs budgeted for the grace period, $13.4 million, or 35%, is not accounted for within the Duquesne Plan. Further, Exhibit B includes $6.2 million in a subcontract to be awarded to Itron or Sensus in 2012 for smart meter communication and system infrastructure components, yet there is no further description of the work to be done or the technology upgrades that will be

made under the contract. Because the costs included in the grace period budget are not fully explained, the OCA recommends that the Company provide a more detailed description of the expenditures to be made, that costs be tied to the various milestones to be accomplished during the grace period, and that the Company provide an explanation of the considerable portion of its budget projected to be expended in the year *after* its milestone targets are reached.

E. Provision of Interval Meters During the Grace Period

As discussed earlier, Duquesne proposes to satisfy residential and small commercial customer requests for smart meters during the grace period by providing the meter it currently uses for its large commercial and industrial customers. Duquesne's charge for these meters will be $1,305, including a $586 basic charge (per Duquesne's current tariff) and a $719 charge to cover the communications equipment needed to go along with the interval meter. Duquesne proposes adding the latter charge as part of its SMPI tariff filing. For customers requesting pulse data from the interval meter, an additional $197 charge is proposed. Plan Exhibit D, Testimony of William V. Pfrommer, at 13. There is no indication that residential or small commercial customers will have an alternative, lower cost option available.

In explaining its rationale for the grace period interval meter requirement, the Commission stated:

> The requirement to install interval capable meters during the grace period or smart meters at the request of the customer is intended to support rate structures, energy efficiency or demand response programs offered by the EDC or a third party at the request of the customer. These types of programs have been in place and offered to customers for decades. All the Commission is requiring is that EDCs *facilitate these programs in a cost effective manner that provides access to the data needed to support these programs without unnecessary or unreasonable barriers.*

Implementation Order at 11. (*Emphasis supplied*)

The OCA submits that the proposed $1,305 charge is unreasonably high for residential and small commercial customers and essentially precludes them from taking advantage of the interval meter option during the grace period. Moreover, this very high charge is at odds with the Commission's desire to facilitate participation in rate structures and energy efficiency or demand response programs in a cost effective manner. A charge at the proposed level can not be said to facilitate participation in a cost effective manner. Therefore, the OCA recommends that Duquesne develop an alternative interval meter solution that will be more affordable for residential and small commercial customers.

F. Cost/Benefit Analyses

As required by the Commission, Duquesne plans to conduct a cost/benefit analysis of smart meter technology including identification of the incremental costs of incorporating each of the enhanced meter capabilities specified by the Commission. The OCA would submit that while this analysis of meter technology costs is important, it is equally important to conduct cost/benefit analyses with respect to other components of the smart meter system. Indeed, Duquesne's plan recognizes this when it says, "while the capability may be in the meter, the cost is in the communications, network and backend systems to provide the functionality." Plan at 10. Inasmuch as many details of Duquesne's plan remain to be filled in during the grace period, the OCA would recommend that as Duquesne moves through the different grace period milestones that it conduct rigorous cost/benefit analyses as a condition of receiving Commission approval for specific technologies, applications and programs to be deployed. Further, each economic analysis should require a careful mapping of benefits and costs to specific market participants. As part of this process, Duquesne should identify how the technology choices will impact customer costs and benefits. When making its supplemental filing in December of 2011,

Duquesne should include in that document information on: (1) what direct consumer investments will be required to realize the benefits of the smart meter network; (2) what consumer investments are available to enhance customer benefits; (3) how Duquesne will assist customers in the purchase and installation of in-home capabilities; and (4) whether Home Area Network (HAN) devices are required to realize the projected benefits included in the cost/benefit analysis.

G. Commission Approval of Selection of Technologies and Vendors

The OCA submits that of all the grace period milestones identified by the Commission perhaps the most critical is the first -- the assessment of needs and technological solutions and selection of technologies and vendors. Because the decisions made at this step will have a significant bearing on the overall cost of the smart meter program, the OCA submits that Duquesne should be required to seek Commission approval of its selection of technologies and vendors. In its plan, Duquesne indicates that it will seek the approval of the Company's Board of Directors with respect to these selections. The Company obviously recognizes the importance of these decisions. The Company should therefore likewise present its proposal to the Commission. Indeed, this would seem to fall in the category of "major decision matters" that Duquesne indicates it will bring before the Commission. Petition at 13.

H. Establishment of Network Designs

This is one of the Commission-prescribed milestones for the grace period. Duquesne proposes to accomplish this milestone by March 31, 2011. Plan at 12. It follows, and builds on, the technology and vendor selections discussed in II. G. above. Duquesne does not, however, provide much information with regard to the specific components of this milestone or the associated costs to complete the tasks included. It is not clear whether Duquesne is limiting its proposed network architecture and design to that of an AMI communication network or whether

its plan includes other related communications networks such as in-home networks, utility field networks, or wide area/backhaul networks. Its proposal should include more detailed information on plans to evaluate network security systems.

I. Other Milestones Require More Cost Information

Consistent with the OCA's recommendation in III. E. above (Grace Period Budget), the OCA is concerned that there is no cost information provided with respect to the various tasks identified under each of the milestones described at pages 10-14 of its plan. The OCA recommends that Duquesne estimate the costs associated with each milestone and present that information as part of, or in conjunction with, its Exhibit B.

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

As noted above, Duquesne's Plan establishes various milestones with the expectation that the Company will return to the Commission with additional filings to seek approval of decisions that have been made and the next steps that will be undertaken. While the Company makes reference to only one "supplemental filing" that it intends to make on or before December 31, 2011, its Petition states that "It is Duquesne's intent to file for approval with the Commission during the Grace Period for major decision matters such as recommended design and expected costs." Petition at 13.

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

significant impact on both customers and the Company. The OCA submits that it is reasonable for the Company to make the necessary additional filings so that all input can be provided as to the proper course.

The OCA submits that the Commission should determine the milestones, or points in the Plan development, that will require further filings with the Commission.

III. COMMENTS ON COST RECOVERY ASPECTS OF THE PLAN

A. Introduction

Duquesne proposes to recover its smart metering related costs through a reconcilable automatic adjustment clause under Section 1307 of the Public Utility Code. The Smart Meter Charge (SMC) will recover capital costs and operating expenses on a forward-looking basis, using quarterly filings and an annual reconciliation. The rate paid by customers in a given quarter will be based on the revenue requirement projected for that quarter using estimated smart meter-related operating and capital expenditures for the upcoming quarter. The specific charge per customer will be a fixed amount per meter per month calculated by dividing the projected revenue requirement by the forecast number of smart meters and customer bills for the upcoming period. Plan Exhibit D, Testimony of William V. Pfrommer, at 4.

For purposes of calculating the rate of return element of its quarterly revenue requirement, Duquesne proposes to use as its cost of common equity, the amount approved in formula transmission rate proceeding at the Federal Energy Regulatory Commission (FERC), which established a base cost of equity of 10.9%. In that proceeding, Duquesne was also authorized to use a capitalization ratio for common equity in a range between 45% and 59%. The Company also proposes to use a 15-year depreciation schedule for its smart meters and a 10-year schedule for its investment in elements that are common to all the smart meters installed.

Duquesne also states that it has existing undepreciated meter investment. The Company proposes to seek recovery of this investment through the SMC, but will not do so until after all smart meters have been deployed. Throughout the grace period and smart meter deployment Duquesne will continue to recover depreciation on its existing meters through its distribution rates.

In terms of reconciliation of the SMC, Duquesne proposes that both under and overcollections of the charge be collected or refunded subject to interest at the rate of 6%. Any refund of an overcollection or charge for an undercollection will be made in the quarter immediately following the reconciliation calculation.

Because the SMC will be a fixed charge, Duquesne proposes to add the SMC to the monthly customer charge of the applicable rate schedule.

Duquesne indicates its intention to keep the SMC in place until the final smart meter and common plant are installed and fully functional. It will then calculate a final reconciliation adjustment and within one year of filing that adjustment, it will either roll the SMC into base rates or include the applicable plant and expenses in base rates via a base rate case.

Finally, as noted earlier, Duquesne provides a wide range projection of what the overall cost of its SMPI plan might be – between $152 and $262 million. Duquesne proposes to submit a more refined projection when it makes its Supplemental Filing. The Company does, however, provide a specific budget for the grace period of $38 million.

B. Capital Structure and Cost of Equity Used in Calculating the Smart Meter Charge

As described above, for purposes of calculating its revenue requirement in the SMC, Duquesne proposes to use the capital structure and cost of equity approved in its formula transmission rate case at FERC. This would mean an equity ratio of 59% and a cost of equity of

10.9%. The OCA submits that reliance on the cost of equity established in the FERC proceeding is not appropriate here. First, the FERC proceeding was a settled proceeding that was not intended to have any precedential value for other cases. Second, FERC employs or relies on rate of return methodologies that are different from Pennsylvania ratemaking. The FERC return on equity (ROE) is based on transmission operations and may not be consistent with a return that would be set in a Pennsylvania distribution base rate case. Apart from the FERC-set cost of equity being high in light of today's economic conditions, it is also high when one considers the guaranteed nature of the cost recovery that has been afforded Duquesne by Act 129. It is the OCA's position that the allowed return for the smart meter riders should be based on the utilities' most recent Commission-approved capital structure and capital cost rates if that proceeding was within the last few years. Duquesne's last litigated Commission proceeding was ruled upon in 1988 and resulted in an ROE of 12.87%, while the most recent litigated cases for other Pennsylvania electric utilities were in 2006 and resulted in ROEs of 10.1%. Pa.P.U.C. v. Met-Ed Co., Docket No. R-00061366 and Pa.P.U.C. v. Penelec, Docket No. R-00061367 (Orders entered January 11, 2007).[2] In the absence of a more recent litigated rate case, it is the OCA's view that Duquesne's current capital structure and senior cost rates, if reasonable, could be utilized along with a properly updated ROE. One method to reflect any necessary change to the ROE would be to utilize the most recent Bureau of Fixed Utilities Services' Report on Quarterly Earnings to establish the necessary adjustment.

C. Allocation of Costs

In its Implementation Order, the Commission provides that the costs of an element of an EDC's Smart Metering Plan are to be financed by the customer class or classes that receive the benefit of that element. The Commission states:

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[2] Duquesne's 2006 base rate proceeding was settled with no specified return component.

> 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 appropriate classes using reasonable cost of service practices.

Implementation Order at 32.

Duquesne describes its proposed cost allocation process as follows:

> The company envisions three primary capital cost components of the smart meter system: a) single-phase meters, b) three-phase or poly-phase meters and c) common costs for infrastructure to collect, back haul, store and bill the customer, all of which are required to implement the Plan and make the smart meter fully functional regardless of meter type. A separate [Smart Meter Revenue Requirement (SMRR)] will be calculated for each meter type and for common costs. The SMRR for common costs will be allocated to the SMRR for each meter type based on the number of meters.

Plan Exhibit D, Testimony of William V. Pfrommer, at 9.

The OCA agrees that the costs of the meter should be directly assigned to customer classes. It is inappropriate, however, to allocate all other smart meter systems costs and administrative expenses, such as the network, infrastructure and computer investment, based on the direct meter investment. As indicated in the Implementation Order, smart meter plan costs are appropriately allocated to those customer classes who derive benefit from such costs. Direct meter investment or number of meters is not a measure of either the benefits derived from the smart meter system or the causation of non-meter system costs. The OCA requests that the Commission consider that a more appropriate basis on which to allocate smart meter system costs (other than the meters) may be on a kWh basis. Allocating these costs on electricity usage recognizes that larger customers (in terms of their usage) will derive greater benefits from the smart meter system and its technological capabilities.

D. Rate Design

As noted earlier, Duquesne proposes to collect the smart meter costs as a fixed monthly charge. For residential and small commercial and industrial general service rate classes, the SMC will be added to the fixed monthly distribution charge, also referred to as the customer charge.

The Company's smart meter costs can be recovered from customers in three ways: (1) on a per kWh, or usage, basis; (2) through a fixed customer charge; or (3) through a combination of usage and fixed charges. The Company's proposal to collect all smart meter costs through a fixed customer charge is not consistent with the Commission's ratemaking standards. The Commission has limited the costs that can be included for recovery in the customer charge to "basic customer costs" necessary to customer service. See e.g., Pa.P.U.C. v. West Penn Power Co., 69 PUR4th 470, 521 (1985) (West Penn); Pa.P.U.C. v. West Penn Power Co., 1994 Pa. PUC LEXIS 144, 154 (1994). The Commission has defined "basic customer costs" to include the costs for the meter and service drop, meter reading and billings. West Penn at 521. The OCA submits that recovery of the indirect component of smart meter costs on a per kWh basis reflects the greater benefits that residential customers with greater usage stand to realize from smart meter capabilities. Further, because Duquesne will be allowed to fully reconcile smart meter costs and revenues, the Company bears no risk of under-recovery of actual sales are less than projected.

E. Frequency of Surcharge Updates

Duquesne proposes to update the rates in the SMC on a quarterly basis. Most other Pennsylvania EDCs propose to adjust smart meter surcharge rates on an annual basis. In the

interest of administrative simplicity and to be consistent with the other EDCs, the OCA recommends that Duquesne consider making only annual adjustments to its SMC.

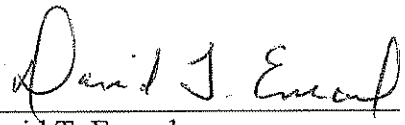
F. Return to Normal Ratemaking

As noted above, Duquesne plans to keep the SMC in place until the final smart meter and common plant are installed and fully functional. It will then calculate a final reconciliation adjustment and within one year of filing that adjustment, it will either roll the SMC into base rates or include the applicable plant and expenses in base rates via a base rate case. The OCA agrees that once full implementation is completed, the SMC should be eliminated and metering costs should be included as part of the normal, ongoing cost of running the EDC.

IV. CONCLUSION

The OCA appreciates this opportunity to provide comments on this important topic. The OCA submits that Duquesne's Plan presents a reasonable way to proceed to further define and delineate the specifics of its Plan. The OCA has here offered comments applicable to Smart Meter Plans in general as well as specific recommendations on various elements of Duquesne's Plan. The OCA submits these comments as a first step in addressing its initial concerns with Duquesne's Plan and will submit testimony further detailing these and other issues relating to the Plan. The OCA requests that the Commission review these Comments in conjunction with the OCA's testimony and briefs.

Respectfully Submitted,



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Dated: September 25, 2009

CERTIFICATE OF SERVICE

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

I hereby certify that I have this day served a true copy of the foregoing document, the Comments of the Office of Consumer Advocate, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code Section 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 25th day of September, 2009.

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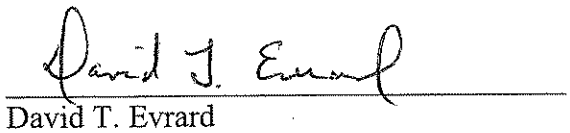

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