

CITIZEN POWER

Public Policy Research Education and Advocacy

July 20, 2016

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

**Re: Petition of Duquesne Light Company for Approval to Modify its Smart Meter Procurement and Installation Plan
Docket No. P-2015-2497267**

Dear Secretary Chiavetta:

Enclosed please find Citizen Power's Main Brief, in the above referenced proceeding. Two paper copies and one electronic copy of this document have been served in accordance with the attached Certificate of Service.

Sincerely,



Theodore Robinson
Counsel for Citizen Power

Enclosures

cc: Hon. Katrina L. Dunderdale
Certificate of Service

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for	:	
Approval to Modify its Smart Meter Procurement	:	Docket No. P-2015-2497267
and Installation Plan	:	

MAIN BRIEF OF CITIZEN POWER, INC.

July 20, 2016

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I. INTRODUCTION

On August 4, 2015, Duquesne Light Company (“Duquesne Light” or “DLC”) filed the above captioned Petition for Approval to Modify its Smart Meter Procurement and Installation Plan (“Petition”). The Petition set forth Duquesne Light’s proposed Amended Smart Meter Deployment Plan. The Petition requested that the Pennsylvania Public Utility Commission (“Commission”) approve the Petition, find that Duquesne Light’s Amended Smart Meter Plan fully complies with Act 129 and the Commission’s Implementation Order, and grant any waivers that may be necessary for Duquesne Light to implement its Amended Smart Meter Plan. Citizen Power, Inc. (“Citizen Power”) files this Main Brief in support of its positions in the matter of the Petition.

II. PROCEDURAL HISTORY

On August 14, 2009, in Docket M-2009-2123948, Duquesne Light filed their Initial Smart Meter Plan in response to the Commission’s June 24, 2009 Implementation Order (“*Implementation Order*”). On May 11, 2010, the Commission approved a modified version of the Initial Smart Meter Plan. On July 1, 2010, Duquesne Light filed a Cost Benefit Analysis of the nine Smart Meter capabilities identified by the Commission in their Implementation Order that went beyond those required by Act 129. On December 29, 2010, Duquesne Light filed their Application for Approval of Assessment of Needs, Technology Solutions and Vendor Selection (“*Assessment Application*”). On January 31, 2010, Duquesne Light filed a Supplement to their Assessment Application identifying Itron, Inc. as its recommended primary contractor to design, construct, implement, and oversee Duquesne Light’s Smart Meter Program.

On March 31, 2011, Duquesne Light filed the document “Establishment of Network Design for the Duquesne Light Smart Meter Program” which explained the study conducted by Duquesne Light to review the existing communication infrastructure compared to what was needed to implement the AMI. On October 6, 2011, Duquesne Light filed an update regarding the equipment testing planned in conjunction with the rollout of the smart meters titled “Installation, Testing and Rollout of Support Equipment and Software Update.” On November 2, 2011, Duquesne Light filed a status update on the Establishment of Plans for Installation of Meters and Outside Communications and Training. On November 18, 2011, Duquesne Light filed a request for an extension of time to file their final Smart Meter Plan, which was approved by the Commission via Secretarial Letter on December 13, 2011.

On June 29, 2012, Duquesne Light filed a Petition for Approval of their Smart Meter Deployment Plan which included a phased in approach to replace their current Advanced Meter Reading Infrastructure with AMI and identified four main components of the project: Itron Smart Meters, the local area network (“LAN”), the wide area network (“WAN”), and the Head-End Collection System. On December 7, 2012, Duquesne Light and the Office of Consumer Advocate filed a Joint Petition for Approval of Full Settlement (“Joint Petition”). Citizen Power, as well as the other intervenors, did not contest the Petition. On May 6, 2013, the Commission entered an Opinion and Order, granting the 2012 Smart Meter Plan and Joint Petition in part and modifying in part. This Order required Duquesne Light to provide data regarding the cost effectiveness of voltage monitoring and communication of outages. On August 2, 2013, Duquesne Light submitted a Compliance Filing which elucidated the benefits of Volt/VAR optimization, outage notification, and transformer load monitoring capabilities.

On August 4, 2015, the Petition of Duquesne Light Company for Approval to Modify its Smart Meter Procurement and Installation Plan was filed in the above-captioned docket. In addition to the Petition, Duquesne Light submitted the written direct testimony of Brian J. Novicki, James T. Karcher, and William V. Pfrommer. On August 24, 2015, both the Office of Consumer Advocate (“OCA”) and Citizen Power filed Answers to the Petition requesting that the matter be referred to the Office of Administrative Law Judge (“OALJ”) for evidentiary hearings. Also on August 24, 2015, Duquesne Light filed the written supplemental direct testimony of James T. Karcher. On September 4, 2015, the Office of Small Business Advocate (“OSBA”) filed a Notice of Intervention. On September 18, 2015, OCA filed a Notice of Intervention. On October 2, 2015, the Commission issued a Notice of Prehearing Conference scheduled for October 13, 2015. On October 13, 2015 Citizen Power filed a Petition to Intervene.

On October 13, 2015, a Prehearing Conference was held by the Honorable Katrina L. Dunderdale, Administrative Law Judge. On October 14, 2015, a Prehearing Order was issued memorializing the discussion of the parties at the Prehearing Conference including setting forth a litigation schedule and granting Citizen Power’s Petition to Intervene.

Duquesne Light filed Supplemental Direct Testimony on August 24, 2015 and November 13, 2015. OCA filed Direct Testimony on December 12, 2015. Rebuttal testimony was filed by Duquesne Light on January 21, 2016. Surrebuttal testimony was filed by OCA on February 4, 2016. Duquesne filed rejoinder testimony on February 11, 2016. An evidentiary hearing was held on February 18, 2016 before ALJ Katrina L. Dunderdale, at which written testimony and exhibits were received into evidence. Main Briefs were filed on March 17, 2016 by Citizen Power, Duquesne Light, and OCA. Reply Briefs were filed on April 7, 2016 by Citizen Power, Duquesne Light, and OCA. On May 4, 2016, ALJ Dunderdale issued a Post-Hearing Order to

reopen the hearing record in order to flesh out and separate smart meter costs from operational business enhancement costs. On May 24, 2016, a post-hearing conference was held where the parties agreed to suspend the litigation schedule and established a further litigation schedule. On May 25, 2016, ALJ Dunderdale issued a Second Post-Hearing Order which suspended the litigation schedule, directed Duquesne Light to respond to four enumerated inquiries, provided all parties with an opportunity to serve supplemental direct and/or supplemental rebuttal written testimony, and directed the parties to appear at an evidentiary hearing on June 30, 2016. On June 6, 2016, Duquesne Light filed Supplemental Post Hearing Direct Testimony. On June 24, 2016, OCA filed Supplemental Post Hearing Rebuttal Testimony. A Further Hearing occurred on June 30, 2016, where additional written testimony as well as an exhibit was moved into the hearing record.

III. STATEMENT OF THE QUESTIONS INVOLVED

1. Has Duquesne Light demonstrated that the benefits of implementing an Advanced Distribution Management System (“ADMS”) exceed the implementation and ongoing costs and correspondingly represent a reasonable use of ratepayer funds that is justified at this time?

Citizen Power’s suggested answer: No.

2. Is it appropriate to allocate costs associated with the Outage Management System to the residential customer class when they receive a de minimus benefit from such a system?

Citizen Power’s suggested answer: No.

3. If the Commission determines that the implementation of ADMS is justified at this time, is it appropriate to allocate the total cost of the ADMS on a per meter basis?

Citizen Power’s suggested answer: No.

IV. BURDEN OF PROOF

As the petitioner for a Commission Order in this matter, Duquesne Light has the burden of proving that the proposed modifications to their Smart Meter Procurement and Installation Plan meet the requirements of Act 129 and the Installation Order. 66 Pa.C.S. § 332(a). To satisfy that burden, the proponent must prove each element of its case by a preponderance of the evidence. *Samuel J. Lansberry, Inc. v. Pa. PUC*, 578 A.2d 600 (Pa. Cmwlth. 1990). A preponderance of the evidence is established by presenting evidence that is more convincing, by even the smallest amount, than that presented by the other parties to the case. *Se-Ling Hosiery, Inc. v. Margulies*, 364 Pa. 45, 70 A.2d 854 (1950). Additionally, the Commission's decision must be supported by substantial evidence in the record. More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established. *Norfolk & Western Ry. Co. v. Pa. PUC*, 489 Pa. 109, 413 A.2d 1037 (1980).

V. SUMMARY OF ARGUMENT

The Commission, in its *Implementation Order*, set out nine additional capabilities that EDCs were to consider in the development of their SMP. These capabilities were only required by the Commission if they were determined to be cost effective. Among these capabilities were the ability to monitor voltage as well as the ability to communicate outage and restoration information. As part of the Petition, Duquesne Light proposed to implement an ADMS in order to achieve enhanced outage communication and voltage monitoring capabilities. Furthermore, Duquesne Light proposes to collect the costs to implement an ADMS under the Smart Meter Charge Rider approved by the Commission in the May 11, 2010 order approving a modified version of the Initial Smart Meter Plan.

However, Duquesne Light has not demonstrated that the proposal to implement an ADMS is cost effective. Specifically, Duquesne Light's cost/benefit analysis depends upon an estimated societal benefit of \$6M per year to show that the ADMS has a net benefit without addressing the fact that the ADMS does not have a net benefit for the residential class which represents almost 90% of Duquesne Light's customers. In addition, by proposing to collect the ADMS costs through the Smart Meter Charge Rider, the groups that most benefit from the ADMS are not the ones that primarily pay for it. Although Act 129 allows an EDC to collect smart meter technology costs through either a reconcilable automatic adjustment charge under Section 1307 or through base rates, that choice should be responsive to the requirement that rates be prudent and reasonable. It is unreasonable for a majority of the costs of the ADMS be placed upon residential customers when they receive relatively few benefits.

VI. ARGUMENT

A. SUMMARY OF DUQUESNE LIGHT'S MODIFIED SMART METER PLAN AND DISPUTED ISSUES IN PROCEEDING

On August 4, 2015, Duquesne Light Company ("Duquesne Light") filed the above captioned Petition for Approval to Modify its Smart Meter Procurement and Installation Plan ("Petition"). The Petition proposes a number of significant modifications to the 2012 Smart Meter Plan including: (1) changing the implementation date for Time of Use ("TOU"), Real Time Pricing ("RTP"), and net metering functionality to 2016 from 2015; (2) implementation of an Advanced Distribution Management System ("ADMS") which includes a new Outage Management System ("OMS") and Distribution Management System ("DMS") at an estimated cost of \$46M-\$56M plus an estimated cost of \$5-\$6M for ADMS run operations as well as an ongoing incremental cost of \$2.8M per year; (3) a ramped-up smart meter deployment schedule

which would complete all residential meter installations by 2018 and all commercial and industrial meter installations by 2019; (4) an increase in the estimated cost of the Amended Smart Meter Plan to \$257M, exclusive of the ADMS costs; (5) approval of a \$15M contingency component to cover changes in scope or requirements, unforeseen cost increases, or implementation complications; (6) approval for additional repairs of equipment adjoining the new advanced metering infrastructure (“AMI”) to insure safe installation of the new meters, which would have any costs incurred recovered through the Smart Meter Charge Rider; and (7) the continued collection of any AMI costs, as well as new costs relating to the Petition, through the existing Smart Meter Charge Rider.

Citizen Power has identified the disputed issues as whether the ADMS Project, as proposed, is cost effective and whether the proposed use of the Smart Meter Charge Rider is appropriate.

B. ADMS ISSUES

1. ADMS Project Approval Issues

Duquesne Light has estimated that the cost of implementing the ADMS Project is between \$46M and \$56M. Of this estimate, between \$42.2M and \$51.6M comes from the implementation of the Outage Management System (“OMS”) while between \$3.8M and \$4.4M is from the implementation of the Distribution Management System (“DMS”). DLC Petition pg. 13, §35. In addition, there is an estimated ADMS Run Operations cost of between \$5M and \$6M as well as ongoing incremental annual costs to operate and maintain ADMS of \$2.8M per year. DLC Petition pg. 17, §44; DLC Petition pg. 13, §35. The estimated quantifiable benefits of implementing the ADMS Project are \$46.3M over a 20 year period. DLC Petition pg. 14, §37. Specifically, the quantifiable benefits gradually increase until they reach a plateau of \$2.585M

per year in 2023. DLC Petition pg. 15, §40. Duquesne Light is expected to realize a savings benefit of \$300,000 from the OMS Implementation and a savings of \$285,000 per year from the DMS Implementation. The other \$2,000,000 per year is expected to be passed on to customers through reduced power costs. DLC St. No. 2, pp. 12-13.

In addition, Duquesne Light estimated a societal benefit of \$6M per year. DLC Petition at 14, §37. This estimate was the result of a study performed by DNV GL, a consultant hired by Duquesne Light for their OMS Study. DLC St. No. 2-R, pg. 4. The formulas used by DNV GL for this study were proprietary and were based on an average reduction of outage duration time of 5 minutes. DLC St. No. 2-R, pp. 4-5. Due to the proprietary nature of DNV GL's model, Duquesne Light also provided societal benefit estimates from the Interruption Cost Estimate ("ICE") Calculator, a publically available model for calculating societal benefits. Taken together, "[t]he ICE model and the DNV GL study predict societal benefits of approximately \$4 - \$6 million per year." DLC St. No. 2-R, pg. 7.

An analysis of the benefits and costs provided by Duquesne Light does not demonstrate that the ADMS Project is cost effective. First of all, the Commission did not specify what type of cost/benefit analysis should be performed. As pointed out by the OCA's Witness Stacy L. Sherwood, there are many instances where the Commission does not take societal benefits into account when looking at the cost-effectiveness of a proposal. OCA St. 1-S, pg. 5. Also, even if you take societal benefits into account, the cost effectiveness is unclear. The estimated benefits of the ADMS project are \$2.585M per year in quantifiable economic benefits and \$56M in soft benefits as calculated using the ICE model. DLC Ex. JK 2-R, Pg. 2. On the other hand, the estimated O&M costs of ADMS are \$2.8M per year with the combined cost of the ADMS project implementation and the ADMS Run Operations running as high as \$62M (\$56M + \$6M).

2. ADMS Cost Recovery Issues

Related to the issue of whether the proposed ADMS Project is cost-efficient is the question of cost recovery. Duquesne Light proposes to capture the costs associated with the ADMS Project through the Smart Meter Charge Rider, which allocates common costs on a per meter basis as opposed to recovering ADMS costs in base rates.

However, there is the requirement that “all measures associated with an EDC’s smart metering plan shall be financed by the customer class that receives the benefit of such measures.” Implementation Order at 32. Citizen Power submits that if a customer class receives a negligible amount of benefits from a measure, it should not be required to contribute toward the financing of such measure.

The OMS implementation is expected to cost between \$42.2 and \$51.6 million dollars. DLC St. No. 2, pg. 11. However, the quantifiable benefits of the OMS implementation are limited to reduced call volume related to customer outreach, increased efficiencies during and after storm events, and customer benefits resulting from reduced outage time. DLC St. No. 2, pg. 7. The benefits from the reduced call volume and storm efficiency accrue directly to Duquesne Light and therefore the associated costs are not recoverable.¹ The only costs that are to be recovered are those related to the benefits associated with reliability improvements. Using the ICE model, less than 2% of these societal benefits accrue to those in the residential class. On a benefit per customer basis, residential customers receive \$1.70 each in soft benefits over the entire forecasting horizon through 2039, a de minimis amount. DLC Exhibit JK 2-R, pg. 2. Small

¹ “An electric distribution company may recover reasonable and prudent costs of providing smart meter technology under paragraph (2)(ii) and (iii), as determined by the commission. This paragraph includes annual depreciation and capital costs over the life of the smart meter technology and the cost of any system upgrades that the electric distribution company may require to enable the use of the smart meter technology which are incurred after the effective date of this paragraph, **less operating and capital cost savings realized by the electric distribution company from the installation and use of the smart meter technology.**” *Emphasis added.* 66 Pa. C.S. § 2807(f)(7).

C&I customers will receive over 24,000% more in benefits per customer and Medium and Large C&I customer will receive over 170,000% more in benefits per customer over the same timeframe.² Therefore, the residential class should not be required to contribute toward the OMS implementation project.

In the alternative, if the Commission determines that ADMS costs, including the OMS implementation costs, should be collected from the residential customer class, Citizen Power proposes that the costs are allocated to base rates. Although Duquesne Light has pointed out that it is allowed to recover smart meter technology costs either through base rates or a reconcilable automatic adjustment clause under Section 1307, the issue is not what is allowed as an option but which option is most appropriate in the given circumstances. In this case, the benefits from the ADMS are much more similar than those found with distribution system upgrades than the benefits from the smart meters themselves which are derived from efficiencies from TOU pricing.

As another alternative, if the Commission determines that ADMS costs should generally be collected through a reconcilable automatic adjustment clause, Citizen Power maintains that the costs associated with surveying the existing distribution system should be separated out from the other ADMS costs and recovered through base rates. Part of the inherent value of the existing distribution system is an effective inventory of all assets. The proposed survey of the distribution system, though necessary for the implementation of ADMS, is more intimately associated with maintaining an effective distribution system and should properly be allocated to base rates.

² On average, a Medium and Large C&I customer will receive \$2,926.30 in benefits, a Small C&I customer will receive \$422.80 in benefits, and a Residential customer will receive \$1.70 in benefits according to the ICE model. DLC Exhibit JK 2-R, pg. 2.

C. RECOVERY OF BILL READY COSTS

Citizen Power takes no position on this issue.

D. INCREMENTAL AMI PROJECT COSTS

Citizen Power takes no position on this issue.

E. MISCELLANEOUS ISSUES

Citizen Power has not identified any miscellaneous issues it wished to address.

VII. CONCLUSION

Citizen Power avers that Duquesne Light has failed to demonstrate that the ADMS project is cost-effective and therefore the Commission should reject that aspect of the Petition. Furthermore, if the Commission determines that the ADMS is cost-effective, they should not collect OMS costs from the residential customer class. In the alternative, if OMS costs are recovered from the residential customer class, then ADMS costs should be recovered through base rates. In the second alternative, if ADMS costs are recovered through a reconcilable automatic adjustment clause, costs associated with surveying the existing distribution system should be separated and recovered through base rates.

Respectfully submitted,



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Date: July 20, 2016

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
Approval to Modify its Smart Meter : Docket No. P-2015-2497267
Procurement and Installation Plan :

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document of Citizen Power, Inc. 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 as listed below:

Dated this 20th day of July, 2016.

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