



Duquesne Light
Our Energy...Your Power

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June 10, 2010

VIA ELECTRONIC FILING AND OVERNIGHT MAIL

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

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

Dear Secretary Chiavetta:

Enclosed for filing please find one (1) original of Duquesne Light Company's Comments in response to the Commission's May 11, 2010 Opinion and Order in the above-referenced proceeding, wherein the Commission requested comments on several questions posed regarding sub-hourly metering issues. These comments are being electronically filed on the Commission's E-Filing website, with a paper copy and confirmation of electronic filing being sent via overnight mail.

Sincerely yours,

Erin H. Creahan
Senior Attorney

Enclosures

cc: Service List (via Electronic Mail and United States First Class Mail)

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

DUQUESNE LIGHT COMPANY :
Smart Meter Procurement and : Docket No. M-2009-2123948
Installation Program :

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the Comments of Duquesne Light Company in the above-referenced proceeding has been served upon the following persons, in the manner indicated, in accordance with the requirements of § 1.54 (relating to service by a participant):

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Dated: June 10, 2010

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DUQUESNE LIGHT COMPANY :
Petition for Approval of Smart : **Docket No. M-2009-2123948**
Meter Procurement and Installation :
Plan :

COMMENTS OF DUQUESNE LIGHT COMPANY
REGARDING SUB-HOURLY METERING

I. Introduction

The Pennsylvania Public Utility Commission issued an Opinion and Order in the above-referenced docket, approving Duquesne Light’s (“Duquesne” or “Duquesne Light” or “the Company”) Petition for Approval of its Smart Meter Technology Procurement and Installation Plan, with modifications. In conjunction with this Opinion and Order, the Commission recognized an open issue with respect to sub-hourly metering. Specifically, the Commission stated that “[t]he *Implementation Order* requires parties to address the ability to provide hourly *or more frequent* energy use data. *Implementation Order* at 16. In this proceeding, the Parties only addressed fifteen minute sub-hourly metering[.] ...[T]hese requirements may not be responsive to the regional transmission organization requirements of *ancillary* services. Therefore, the Parties are asked to address the need, ability, and cost for sub-hourly metering.” Opinion and Order, p. 31. The Commission propounded a list of 8 questions, and asked the Parties to address these issues for residential, small commercial and industrial and large commercial and industrial customers. *Id.* In addition to some general comments regarding the need for sub-hourly metering, Duquesne Light hereby provides its responses to the Commission’s questions.

II. Comments

A. General Comments Regarding Sub-hourly Metering

Sub-hourly metering should not be a requirement of the smart meter program at this time. There are costs associated with sub-hourly metering, due to increased storage, supporting communication, network and system infrastructure. These costs are being compiled and will be a part of our July 1, 2010 filing in this proceeding. The vast majority of Duquesne's customers do not use sub-hourly metering. Importantly, no Duquesne Light residential customers utilize sub-hourly metering, nor have such customers requested sub-hourly metering service. No Duquesne Light customers participate in the sub-hourly ancillary market in PJM. Duquesne Light endeavors to offer products that are both necessary, cost effective and requested by its customers. Many of Duquesne's customers are sophisticated commercial and industrial enterprises with extensive energy management staffs. But the vast majority of those Duquesne Light customers have not found sub-hourly metering from Duquesne to be either necessary or desirable at this point. As a result, Duquesne Light believes that such capability is unnecessary and not cost effective as part of a smart meter program at this time, and is not a sound expenditure on behalf of its customers, but it will address this issue more thoroughly in its July 1, 2010 filing.

B. Answers to Questions

Duquesne Light responds to the Commission's questions as follows:

- 1. What are the capabilities and limitations of proposed smart meters to measure and record sub-hourly usage?**

Answer: The smart meters available in the industry today have the capability of measuring up to four channels of interval data in periods of 5, 10, 15, 30, and 60 minute

intervals with sufficient on-board meter storage to ensure that monthly billing data is retrieved before the data is overwritten.

2. What are the capabilities and limitations of proposed smart meter communication and data storage systems to transmit and store sub-hourly usage information?

Answer: The smart meter communication and data storage systems available in the industry today can be upgraded to transmit and store sub-hourly usage information. However, the cost to EDCs to provide this capability is substantially higher than the cost to transmit and store hourly usage information on a daily basis. Further, the customer will also incur elevated costs in order to process or utilize this sub-hourly data; without data management upgrades on the customer side of the meter, which presumably will be costly, customers will be unable to effectively utilize this data.

The Duquesne Light infrastructure upgrades required to support sub-hourly metering include:

LAN and WAN communications Infrastructure: The Local Area Network and Wide Area Network communication infrastructure operated by Duquesne will need to be increased in size to support not only the additional data traffic that will be generated as a result of any move to sub-hourly collections, but it will also need to support the requirements of both hourly and sub-hourly usage information.

Collection Systems and Meter Data Management (MDM): The Head End data collections systems and MDM systems are significantly impacted by having to size processing capabilities and storage capacity that is sufficient to handle the increased amount of data flowing through the system.

3. What are the sub-hourly PJM requirements for participation in ancillary service markets?

Answer: The PJM ancillary service market generally operates on a daily and, for some products, an hourly basis. PJM does operate sub-hourly pricing or measurements for a few ancillary services: Regulation Market (real-time telemetry), Synchronized Reserve Market (one minute scan), and Day Ahead Scheduling Reserve Market (one minute scan). No Duquesne Light customer utilizes sub-hourly pricing or measurements for PJM ancillary service markets. They could participate – using interval metering – but have chosen not to participate.

4. What are the Companies' incremental smart meter, communication, data storage, and data sharing costs associated with these sub-hourly requirements for ancillary services?

Answer: Duquesne Light is currently analyzing the incremental costs to provide 15-minute or shorter interval data to customers, EGSs, third-parties and the RTO on a daily basis, consistent with the data availability, transfer and security standards adopted by the RTO. That information will be supplied in our July 1, 2010 smart meter cost/benefit filing.

5. What are the incremental equipment and installation costs of pulse data recorders used to measure sub-hourly meter data?

Answer: The incremental costs to add pulse outputs to industrial/commercial meters is approximately \$500 per meter, which includes equipment as well as additional installation costs. The option to add the pulse output is not available with residential meters.

This per meter \$500 cost does not include any costs that a customer would incur in interfacing the pulse output available from the meter to their own energy management systems or other equipment.

- 6. Is a pulse data recorder attached to the Companies' meter sufficiently accurate for use by PJM in ancillary markets, or is redundant metering required to meet PJM standards?**

Answer: Duquesne Light believes that the information available from the pulse outputs that are attached to the company's industrial/commercial meters is sufficient for participation in the PJM ancillary markets when interfaced to a third party's energy management systems or other equipment.

- 7. What are the additional customer costs associated with (1) transferring pulse meter information from the meter to inside the customer's premise, (2) processing this data into usable format, (3) communicating the data to a third party or PJM?**

Answer:

(1) The cost of transferring pulse meter information from the meter to inside the customer's premise will depend on the requirements of the communications network. The factors influencing these requirements include the distance between the meter and the device or system within the customer premise as well as the amount of data being transferred. Therefore, these costs will vary significantly and cannot be estimated without a better understanding of each customer's network requirements.

(2) The cost of processing pulse meter data into usable format will be included in the cost of the devices and systems within the customer premise. The costs of

these devices and systems will be dependent on the various features and services that may be available within each product offering. Therefore, these costs will vary significantly and cannot be estimated without a better understanding of how each customer plans to utilize the pulse information.

(3) The cost of communicating the data to a third party or PJM also depends on the requirements of the communications network and is influenced by distance and volume factors. Therefore, these costs will vary significantly and cannot be estimated without a better understanding of each customer's individual circumstances.

- 8. To the extent a customer requests sub-hourly data, what, if any cost recovery charge is appropriate. For example, would it be appropriate to have a customer charge that varies with the level of sub-hourly metering requested, and, if so, what would those sub-hourly metering charges be?**

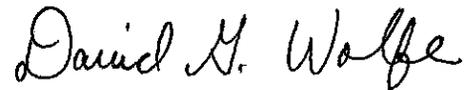
Answer: The ability to provide sub-hourly data will create incremental costs for expanded communication capability, data storage, data processing and meter related costs for additional functionality. If sub-hourly capability is to be required (even though customers do not desire it), expanded communication ability would be installed at the time of implementation (as the most cost effective approach) and probably recovered from all customers since the cost is part of the communication network cost. The other costs are driven by the number of participants, and the company would propose to recover those costs from participants who desire the expanded service. The Company believes a single charge for the expanded service, regardless of the level of sub-hourly

metering requested, may be appropriate, at least initially. It is premature in the Company's smart meter implementation plan to estimate that charge.

III. Conclusion

Duquesne Light appreciates that it was given the opportunity to comment on this matter.

Respectfully Submitted,



David G. Wolfe, Director of Technology



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Dated: June 10, 2010