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RHOADS & SINON LLP

FILE NO: 11616/02

June 10, 2010

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

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

Dear Secretary Chiavetta:

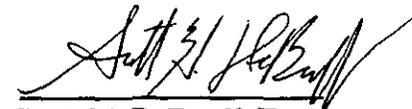
Enclosed herewith please find an original and three (3) copies of the “**Petition to Intervene and Answers in Response to the Questions in the Commission’s May 11, 2010 Order on Behalf of EnerNOC, Inc.**” in the above captioned proceeding. Please enter this into the docket and timestamp the additional two (2) copies.

Should you have any questions, please do not hesitate to contact me at (717) 237-6716.

Sincerely,

RHOADS & SINON LLP

By:


Scott H. DeBroff, Esq.

Enclosures

cc: Service List for Docket M-2009-2123948

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PETITION OF DUQUESNE LIGHT COMPANY
FOR APPROVAL OF ITS SMART METER
PROCUREMENT AND INSTALLATION PLAN

Docket No. M-2009-2123948

PETITION TO INTERVENE AND ANSWERS IN RESPONSE TO THE
QUESTIONS IN THE COMMISSION'S MAY 11, 2010 ORDER
ON BEHALF OF ENERNOC, INC.

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Dated: June 10, 2010

Counsel for EnerNOC, Inc.

ANSWERS IN RESPONSE TO THE QUESTIONS IN THE COMMISSION'S MAY 11, 2010 ORDER

EnerNOC has significant experience with Advanced Metering Infrastructure (AMI) because it currently operates its own "smart grid" network spanning much of the United States and including sites in the United Kingdom. Over 7,200 sites are in constant near real time communication with EnerNOC's Network Operation Center (the "NOC" in EnerNOC.) Meter data is communicated back to the NOC approximately every five minutes, securely over the public internet utilizing encrypted protocols that are comparable to those used for electronic banking. During a demand response event, operators in the NOC identify those customers that are performing as expected and those that are not. Non-performing sites are contacted and "coached" to address their performance issues wherever possible. EnerNOC's communications infrastructure is bidirectional and where authorized to do so by the customer, the NOC can directly control many loads remotely, better ensuring performance. In addition, EnerNOC may require interval data on demand at other times to facilitate the management of EnerNOC's demand response portfolio.

Because EnerNOC (and other CSPs that operate similar systems) require a constant flow of metering data during DR events and tests, and because that quality of data is currently available neither to EnerNOC or the utility customers, EnerNOC is forced to install expensive, and in many cases, redundant interval metering of EnerNOC's own. Notably, though EnerNOC installs and operates many advanced meters, EnerNOC desires is not to be a metering company.

EnerNOC would much prefer to avoid the significant effort and cost associated with installing redundant metering, but being able to coach customers during events and tests is integral to the aggregation function EnerNOC performs. It is what allows EnerNOC to accept the

responsibility for PJM or Act 129 non-performance penalties without passing the risk of those penalties on to customers. EnerNOC also requires very granular data on demand at times to prepare for events, develop nomination strategies, and otherwise efficiently manage EnerNOC's portfolio.

EnerNOC has such a keen interest in the issues raised by the Commission and is supportive of the Commission's AMI Implementation Order precisely because, if properly implemented, the EDC AMI plans hold the promise of avoiding the need to install EnerNOC's own meters, pre-enabling many more customers for participation in demand response and significantly lowering the costs of economically serving those customers. "Properly implemented" in this context means providing raw meter data at the same or lower temporal granularity and at the same or higher frequency as the system that EnerNOC is now deploying in parallel.

Failure to allow customers or their CSPs to download five-minute interval data every five (5) minutes will require them to install redundant "shadow meters" for PJM energy, PJM capacity, and PA Act 129 programs. Failure to allow 1-minute interval data to be downloaded every one (1) minute will require CSPs to install redundant meters in order for customers to participate in PJM ancillary service programs.

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

Most smart meters have the ability to measure and record down to the sub-hourly usage levels, with most technologies capable of getting down to one (1) minute for commercial and industrial customers and five (5) minutes for the residential customers. The primary limiting factor for

recording and measuring sub-hourly usage from a meter perspective will be the relatively minor cost of memory.

The present and future of advanced metering is about more than just the meter. A utility who invests in smart metering is also going to be investing in an advanced metering infrastructure or AMI, which includes the meter, the communications capability behind the meter and the support system that receives the meter data and moves it into the back office of the utility for use in the customer care segment, primarily the billing function. Even if the meter is able to measure and record more granular reads at increments under an hour or fifteen minutes, it needs to have the supporting infrastructure around it to return that data to the customer or its CSP in near real time.

If sub-hourly meter data is important to a customer or its CSP (as would be the case during a demand response event, for example) all that is required is the ability to download that data in a timely fashion. Other customers (or that same customer at less critical times) can have their data downloaded from the meter less frequently and/or with lower granularity, so long as the CSP has the ability to download interval data with greater frequency when it needs to do so.

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

EnerNOC's experience is that virtually all of the meters on the market now have the capability of recording data at essentially whatever interval is likely to be required. The issue is how much data can be stored on-board the meter and even this is becoming less and less of an issue as the price of memory drops. Two months' worth of six-second data might be problematic, but a month's worth of 1- or 5-minute data would not be. As noted above, if data can be downloaded on demand, the on-board storage capacity may be less important.

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

PJM has sub-hourly meter requirements for its ancillary service markets. One of PJM's ancillary markets for spinning or synchronized reserve. This reserve has demand side resources that are synchronized and ready to provide solutions for energy supply and demand imbalance within the first few minutes of an electric grid event. Demand resources providing Synchronized Reserve are required to provide metering information at no less than a one (1) minute scan surrounding a synchronized reserve event. Another PJM ancillary market is the one for non-spinning reserve, applicable to demand side resources not connected to the system but capable of serving demand within a specific time. Both of these reserve markets require one minute granularity meter reads. Specifically, PJM Manual 11 describes the Interval Meter Equipment and Load Data Requirements. All metering equipment at a minimum must meet appropriate ANSI c12.1 and c57.13 standards to ensure the metering equipment is within the Tariff defined accuracy standards.

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

EnerNOC cannot answer this question, but EnerNOC reiterates that it is the "I" in "AMI" that is critical. Absent the required infrastructure to communicate meter data to a customer and/or its CSP in near real time, the capability of the meters themselves will be irrelevant. The Company's failure to install the infrastructure required to download at least a subset of its customers' meters in near real time, will effectively preclude the customers from participating in PJM's ancillary service markets without the installation of duplicative metering by the customer or its CSP. The result will be less participation, leading to necessarily higher prices in those markets than would otherwise be the case. EDCs should factor into their cost/benefit calculations the benefit of lower prices in those markets where enhanced metering will introduce larger numbers of new competitors.

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

The costs of equipment and installation of metering equipment is competitively sensitive information. However, it has been EnerNOC's experience that the costs associated with equipment and installation of metering equipment is very significant (in the thousands to low tens of thousands of dollars per installation). These costs present a major barrier to customer participation in demand response programs. This is especially so for small and medium-sized customers. EnerNOC endeavors to overcome this barrier to customers by using market revenues and not passing on these costs to customers. However, because small and medium-sized customers generate lower revenue from the market per customer site, it is much more difficult to cost justify serving the small and medium-sized customer market segment.

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

EnerNOC is extremely familiar with the requirements and what is needed for PJM's ancillary markets. Interval meter data is sufficient for PJM purposes to provide synchronized reserve, the most valuable ancillary service opportunity for most demand response. A meter or pulse data recorder (PDR) must meet ANSI c12.1 rule. If a PDR is connected to a retail service meter then it complies. The Pulse Data Recorder clock should be checked and reconciled on a daily or per communication basis.

Participation in the regulation markets is unlikely to be feasible using EDC AMI because of the fast scan rates (~once every 5 second) required, compared to the probable latency in the EDC's AMI system. For these markets, dedicated metering is likely to be the only feasible solution,

although EnerNOC would not wish to preclude participation using a very robust EDC AMI system, if such would otherwise be permitted by applicable reliability rules.

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 3rd party or PJM?

Unless there is a tariff based fee for a customer and/or utility data request, the AMI system capability is where the costs for such functionality lie. If the EDC or CSP is transferring pulse meter information from the meter to inside the customer's premises, it will not be the data that is a cost, but will likely be some type of In Home Display (IHD) or other C&I functionality that allows for the data to be viewed and interpreted inside the home or business. The processing of the data into a useable format will likely be a part of the AMI functionality, already built into the system purchased by the utility or deployed by the CSP. Costs associated with communicating the data back to a third party or PJM could be tariff originated or be done at no extra cost to the customer if done on a regular cycle. If there would need to be an "off cycle" read in order to push that data at a time not anticipated by the customer and utility, then there would likely be a fee associated with that transaction.

EnerNOC performs all of these steps for free as part of its commercial offering to its customers.

Through its experience as a demand response provider, and at the present time, EnerNOC estimates that every utility data request costs EnerNOC approximately \$300. However, as such data cannot currently be provided at any cost in near real time, EnerNOC and other CSPs who wish to "coach" their providers during a PJM or Act 129 event, or otherwise effectively manage their portfolios must rely upon a separately installed metering system.

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?

It is EnerNOC's opinion that a cost recovery charge for requested sub-hourly metering is inappropriate. As described in EnerNOC's answer in Question 7, there are fixed, sunk costs associated with the purchase of the AMI meters and the systems around them. Customers who request sub-hourly metering data and who have such functionality that would support it, should be able to receive such data instantaneously, instead of having to wait for the utility to have it verified, edited and estimated (VEE). It is not practical or beneficial for EnerNOC or the customers it serves in demand response programs, to wait for more than a few minutes to receive this data. The demand response programs that EnerNOC enrolls its customers in require data as soon as possible for real time performance monitoring and coaching purposes.

Data being transmitted in its raw form should not impose any additional costs on customers as it has no additional costs. EnerNOC recommends that no fees should be charged to customers requesting sub-hourly meter data.

WHEREFORE, EnerNOC respectfully requests that the Pennsylvania Public Utility Commission grant this Petition to Intervene and Answers in response to the questions in the Commission's May 11, 2010 Order.

Respectfully submitted,

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DATED: JUNE 10, 2010

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PETITION OF DUQUESNE LIGHT COMPANY
FOR APPROVAL OF ITS SMART METER
PROCUREMENT AND INSTALLATION PLAN

DOCKET NO. M-2009-2123948

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties, listed on the next page, in accordance with the requirements of §1.54 (relating to service by a party).

Dated: **June 10, 2010**

By:



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