

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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SMART METER PROCUREMENT :
AND INSTALLATION PLANS :

Docket No. M-2009-2092655

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COMMENTS OF CITIZEN POWER

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

I. Introduction

In its Secretarial Letter dated March 30, 2009 the Pennsylvania Public Utility Commission ("Commission") invited comments concerning the March 20, 2009 draft staff proposal regarding electric distribution company ("EDC") smart meter procurement and installation plans. As a guide, in Attachment A, several questions related to the Commission's Smart Meter Procurement and Installation Program were raised. Citizen Power provides the following comments.

Before answering the specific question posed in Attachment A, Citizen Power has a few general comments. First, Citizen Power opposed the inclusion of a mandatory smart meter requirement in Act 129 due to our concern about certain impacts of smart meter installation and usage, particularly on those with limited resources. The cost of large-scale smart meter programs can vary significantly depending upon the capabilities of the equipment used and the efficiency of the installation. A paper for the National Regulatory Research Institute (NRRI) estimates that the cost per meter can range anywhere from \$110 to \$525.¹ In a recent case, Southern California Edison is paying over \$370 per meter on a project replacing about 5.3 million traditional meters with smart

¹ **Advanced Metering Infrastructure: What Regulators Need to Know About Its Value to Residential Customers**, Nancy Brockway, NRRI Chief, Multi-Utility Section, NRRI Report 08-03 (February 2008), page 12.

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meters.² We would have preferred that the legislature have the results of trial programs before moving forward with a requirement that all Pennsylvania utilities install smart meters. However, since the installation of smart meters is now mandatory, Citizen Power offers these comments in an attempt to ensure that the installation and use of smart meters turns out to be a benefit to customers. Accordingly, we believe that the Commission should take an active role in keeping the cost of installation down, especially in these economic times.

Citizen Power also hopes that customer specific usage information is treated confidentially, and that affirmative permission is required from a customer before any information is provided to any third parties. Any potential information source points in a proposed smart meter system should be reviewed for possible data security issues. In addition, any smart meter and/or demand management equipment installed in the interior of a home as part of this installation program should be considered a fixture belonging to the homeowner. Finally, although Citizen Power understands the usefulness of the 3/27/09 Working Group Draft's recommendation on page 9 that the smart meter technology should support remote disconnection, we would like to express our continued support of the Responsible Utility Consumer Protection Act's requirement that a utility, in order to terminate service to a customer, must attempt to make personal contact with the customer or a responsible adult at the time service is terminated.

² Southern California Edison Company's (U 338-E) Application for Approval of Advanced Metering Infrastructure Deployment Activities and Cost Recovery Mechanism. Decision 08-09-039, September 18, 2008; available at: http://www.sce.com/NR/rdonlyres/6DC13EB1-0AFA-40A8-B9E3-93546F24015C/0/081114_A0707026Final_Decision.pdf

II. Responses to Additional Questions Related to the Commission's Smart Meter Procurement and Installation Program at Docket No. M-2009-2092655 in Attachment A

2. Home Area Network (HAN) Protocols

2b. *Should smart meter information be available through a HAN or an internet browser? If through an internet browser, should this come from a website, or directly from the meter, or both? Through which browsers should this be made available?*

HAN to an in-home display should be provided universally. Access to the information through the internet should also be provided in order to allow for creative parsing of the data. This information should be provided from a website and also directly from the meter if not cost prohibitive. The smart meter information should be available through all commonly used browsers including Internet Explorer, Opera, Mozilla Firefox, Safari, Avant Browser, Konqueror, Lynx, and Google Chrome.

However, due to the digital divide, many households in Pennsylvania do not have easy access to the internet. It should not be incumbent for a customer to purchase an in-home display or have internet access in order to have up to date information on their usage. At a less than preferred option, a hard (paper) summary of hourly usage information should be provided for any customers that do not have in-home displays or home internet access at the request of the customer. Each customer should be notified of the option to receive hard copies of their usage data after installation of their smart meter.

2c. *Should there be other interconnectivity between the meter and other equipment in the home? If so, how much? [read capability vs. two way communication]*

There should be the capacity for interconnectivity between the meter and other equipment in the home in order to fulfill Act 129's requirement to "effectively support the automatic control of the customer's electricity consumption". A cost/benefit analysis should be performed to determine whether it is cost efficient to provide the smart meters with two-way communication capability for the purpose of having direct access to specific equipment including electric heating systems and central air conditioning. It should also be determined whether it is cost efficient to vary the capabilities of the smart meter depending upon the electric usage of the house (as opposed to installing one standard model). In addition, there should be a safety override available in order to prevent direct access to the functioning of equipment that regulates temperature when the temperature inside the home is outside of a range safe for its inhabitants.

3. Utility Meter Data and Usage Access

3e. *Should this usage data be validated first?*

Ideally all usage data should be validated before becoming available to the EDC, CSPs/EGSs and customers. However, the raw data should be available for inspection at the request of the customer. This raw data should be available in a form easily comprehended. The customer should be notified if estimated data was used to determine usage.

3f. *Should the Commission establish a common Validation, Error Detection, and Editing (VEE) protocol? If so, what should that be?*

Any VEE protocol should use conservative data estimation rules. The algorithm should be designed so that there is 95% confidence that any estimated usage is equal to or less than the actual usage.

3h. *How should customers be provided direct access to usage information? [examples, website access, HAN to an in-home display or other devices]*

Customers should be provided direct access to usage information through HAN to an in-home display (or compatible technology). Website access should also be provided. Hard (paper) summaries of hourly usage information should be made available to customers without in-home displays or home internet access.

3i. *What electronic access to customer meter data do CSPs and EGSs need from EDCs, that they currently do not have? Provide specific examples where these entities do not have such access currently, and provide examples, if available, of electronic transactions that can be adopted by this Commission to comply with this statutory requirement.*

Citizen Power does not have an opinion on what data CSPs and EGSs need.

However, we note that any customer meter data should only be available to third parties with express customer consent.

5. Access to Price Information

5a. *How should customers be provided direct access to pricing information? [examples, website access, HAN to an in-home display or other devices]*

Customers should be provided direct access to pricing information through HAN to an in-home display (or comparable device). Website access to pricing information should also be available.

5b. *Should the Commission require the meter to communicate price information, or should this information be provided over another communication medium?*

Citizen Power has no preference as to whether the meter or another communication medium provides price information. However, this information should be conveniently available to a customer inside their home even if they do not have home internet access.

5c. *What pricing information should the Commission require to be provided? [examples, RTP, Day ahead prices, default service rates]*

Customers with Real Time rates should be provided with RTP and day ahead prices. Customers with TOU rates should be provided with the RTP.

5d. *Should the Commission establish minimum standards on how frequently price information should be provided? If so, what should be the minimum standard?*

Any customer with variable rates should be provided RTP in near real time.

5e. *Should the Commission establish standard formats for presentation of price information? If so, suggest a format.*

If not cost prohibitive, an indication of the current cost per kWh, the current usage, and bar graph showing future prices for the next 36 hours would be preferable. This amount of information should allow for some consumer load shifting to occur.

7. Smart Metering Acceleration

7a. *To the extent permissible under the law should the Commission provide an incentive to EDCs to accelerate their smart meter deployment by giving a credit*

towards the required Energy Efficiency and Conservation Goals? If so, how should such credit be determined?

Citizen Power does not believe that the Commission should provide an incentive to EDCs to accelerate their smart meter deployment. The costs of the technology involved should decrease over time, giving customers a better return on their investment.

III. Conclusion

Citizen Power greatly appreciates the opportunity to file these comments. We are committed to working constructively with the Commission and the other stakeholders on the goal of developing guidelines for the development of procurement and implementation plans for smart meters.

Respectfully submitted,



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