

**STATE OF IOWA
DEPARTMENT OF COMMERCE
BEFORE THE IOWA UTILITIES BOARD**

**FILED WITH
Executive Secretary
November 15, 2013
IOWA UTILITIES BOARD**

IN RE:)	
)	
PURPA STANDARDS IN THE)	DOCKET NO. NOI-2008-0003
ENERGY INDEPENDENCE AND)	
SECURITY ACT OF 2007)	

**RESPONSE OF MIDAMERICAN ENERGY COMPANY TO
THE IOWA UTILITIES BOARD’S OCTOBER 18, 2013 ORDER**

COMES NOW MidAmerican Energy Company (MidAmerican), and for its Response to the Inquiry Questions of the Iowa Utilities Board (Board) in the Board’s Order issued on October 18, 2013, (Order), MidAmerican states the following.

Background

On December 5, 2008, the Utilities Board (Board) issued an order initiating a notice of inquiry in response to the requirements of the Energy Independence and Security Act of 2007. Among the many provisions of this federal legislation are four new federal electric ratemaking standards added to the Public Utility Regulatory Policies Act of 1978. Smart grid issues predominated and since the inquiry was opened, two workshops have been held and written comments solicited on various smart grid issues.

On June 25, 2012, the Board issued a smart grid report that, among other things, contained an overview of current activity and technological advances on various smart grid projects Iowa utilities were undertaking. The order noted that the Board might solicit additional information in the future. In its October 18, 2013, Order the Board noted that an update of utilities’ activities and other participants’ comments on current smart grid issues will be helpful so that all participants and the Board have a common knowledge

base to determine whether additional smart grid initiatives would provide value to utility customers. In the last report, a common theme throughout the comments was the importance of focusing on the balance between customer value and cost.

Comments

MidAmerican is a multi-jurisdictional public utility providing natural gas and electric service to customers in the states of Iowa, Illinois, Nebraska and South Dakota. Pursuant to the Board's directive, MidAmerican is providing the following information as requested.

MidAmerican Updates on the Synchrophasor and Opower Projects

Synchrophasor

The Midwest Independent Transmission System Operator, Inc., now known as the Midcontinent Independent System Operator, Inc. (MISO), is the fund recipient of a Smart Grid Investment Grant from the U.S. Department of Energy. As the grant recipient, MISO is required to reimburse certain expenses to install a system of phasor measurement units (PMU) and related devices. MidAmerican is participating in the project and has entered into an agreement with MISO to install certain facilities in its service area. The purpose of the project is to improve the dispatch of energy, system reliability and planning capabilities by strategically deploying PMUs and phasor data concentrators (PDCs) across the Midwest. The project contributes to the furthering development of smart grid functions by use of the PMUs. Combined PMU measurements will provide a precise, comprehensive view of an entire interconnection and enable advanced monitoring and analysis to identify changes in grid conditions. PMU data will feed applications that allow grid operators to understand real-time grid conditions, see changing conditions and

grid problems and better diagnose, implement and evaluate remedial actions to protect the system. The project will also assist in the reliable dispatch of renewable energy resources, which have highly variable output characteristics such as wind power.

The scope of MidAmerican's participation in the project, to date, has included:

1. Installing, testing and integrating 15 PMUs into MidAmerican's service territory.
2. Installing, testing and integrating one primary and one backup PDC and installing communication infrastructure to provide real-time PMU data to MISO.
3. Research on the collected phasor data is conducted by MISO and shared with MidAmerican through emailed weekly information.

Of the 15 PMUs MidAmerican installed, MISO has reimbursed MidAmerican for 12 of the PMUs and both PDCs. MidAmerican expects full reimbursement for the Project.

At this time MidAmerican receives daily updates on the PMUs availability. MidAmerican can view real time and archived data through MISO provided applications. Currently, the PMUs are not used for real time data for MidAmerican operators, but instead are used for reviewing and analyzing system events after the fact and for information on the system at the time of an event.

Opower

MidAmerican began implementing its Home Energy Report pilot program in November of 2011. The Home Energy Report program facilitates energy savings using behavior modification strategies based on comparing and ranking a customer's energy

usage versus 100 similarly-situated homes. MidAmerican's pilot program included approximately 50,000 combination service residential Iowa customers. These customers received approximately six Home Energy Reports by mail per year, and these customers also received access to a customer web portal. The web portal allows these customers to update their home's profile, receive additional energy savings tips and develop a formal plan to save additional energy.

Key Program Statistics

- Electric energy savings through September 30, 2013, for the program total 17,973,000 kWh. Electric savings for the program average 1.7% of total customer kWh usage.
 - Estimated customer electric bill savings is \$1,513,307.
- Natural gas energy savings through September 30, 2013, for the program total 694,365 therms. Natural gas savings for the program average 1.0% of total customer therm usage.
 - Estimated customer natural gas bill savings is \$630,761.
- As of September 30, 2013, the total number of customers active in the program was 41,542. The number of participants drop as customers in the program move from their homes during the program period.
- Customers that opt-out of the program also contribute to the reduction of participants. As of September 30, 2013, 335 customers opted-out from the program.
 - The cumulative opt-out rate for the program is 0.7%.

- Since inception, approximately 4,200 participants visited the Home Energy Report's customer web portal to access additional energy saving strategies and tips.

Customer Feedback

- When MidAmerican first started sending Home Energy Reports in the fourth quarter of 2011, the customer comparison language for ranking purposes compared the customer's energy usage to 100 similarly-situated "neighbors." The use of the word "neighbor" caused more customer confusion and phone calls to MidAmerican than expected. To alleviate the concerns, the word "neighbor" was changed to "similar homes" in January 2012. This language change alleviated many customer concerns.
- Some customers expressed concern that they are being criticized for high energy usage, are being compared to the wrong size home or the because of the use of direct mail. In cases such as this, staff from MidAmerican's Quality Department responds to the customer explaining the purpose of the program is to help customers to save energy and not to be critical. We also explain the value of the energy saved far exceeds the cost of printing and mailing reports and we get better results with mailed reports. Usually this explanation is sufficient and we offer to update the customer's profile to help account for home size and other equipment issues, if possible. In some cases, customers are not satisfied and opt out, but usually the customers are understanding and elect to stay in the program. This is reflected in the overall low opt-out rate of 0.7 percent.

- Most compliments we have received about the program are over the phone. Customers have expressed gratitude for the reports and tips. Many customers share energy efficiency improvements they have made at their homes with MidAmerican's Customer Service Associates. Other customers call with questions about the reports and we are able to answer their questions and help them access other useful energy efficiency programs.

Key Activities Planned in 2014

- MidAmerican plans to expand the Home Energy Report program in its new Iowa energy efficiency plan which is anticipated to run from 2014 - 2018. The existing customers will continue in the program and we plan to add additional customers to bring the total number of participants to approximately 170,000. The program will be called Residential Behavior. Additionally, MidAmerican plans to add a Home Energy Report component to its Low Income program with 20,000 customers receiving Home Energy Reports tailored to low income customers.

WHEREFORE, MidAmerican Energy Company respectfully requests the Iowa Utilities Board to give these updates due consideration. MidAmerican representatives will be made available to meet with the Board or Board Staff to answer any additional questions or to provide any additional information.

Dated this 15th day of November, 2013.

Respectfully submitted,

MIDAMERICAN ENERGY COMPANY

/s/ Jennifer S. Moore

By: _____

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