



Alliant Energy Corporate Services
Legal Department
319-786-7765 – Phone
319-786-4533 – Fax

Kent M. Ragsdale
Managing Attorney - Regulatory

Interstate Power and Light Co.
An Alliant Energy Company

Alliant Tower
200 First Street SE
P.O. Box 351
Cedar Rapids, IA 52406-0351

Office: 1.800.822.4348
www.alliantenergy.com

November 15, 2013

NOI-2008-0003

Ms. Joan Conrad, Executive Secretary
Iowa Utilities Board
1375 East Court Avenue, Room 69
Des Moines, IA 50319-0069

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

RE: Interstate Power and Light Company
PURPA Standards in the Energy Independence and Security Act of 2007
Docket No. NOI-2008-0003
Comments

Dear Secretary Conrad:

Enclosed please find Interstate Power and Light Company's Comment in the above-referenced docket, as filed today on EFS.

Very truly yours,

/s/ Kent M. Ragsdale

Kent M. Ragsdale
Managing Attorney - Regulatory

KMR/kjf
Enclosure

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

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

COMMENTS

COMES NOW, Interstate Power and Light Company (IPL) and responds to the Iowa Utilities Board's (Board) Order Requesting Additional Information (Order) issued on October 18, 2013. The Board requests information regarding updates on smart grid issues and new issues that have arisen since IPL filed comments on November 17, 2011. In addition, the Board has asked IPL to respond to a question regarding Web-based interface and meter installation. In compliance with this Order IPL provides the following comments:

SMART GRID UPDATE

IPL's long-term vision for Smart Grid continues to evolve as more is learned from experiences and insights gained through deployments of various technologies by other utilities, including those of IPL's sister utility, Wisconsin Power and Light Company (WPL). In addition, for the past several years, IPL has been participating in several Electric Power Research Institute (EPRI) research program areas. An example is *P180F-Grid Modernization*, which is intended to provide member utilities with comprehensive guidelines and tools to

understand benefits and costs associated with innovative approaches to applying Smart Distribution solutions.

This information gained through such research is being applied as IPL makes adjustments and revisions to its Smart Grid Strategic Roadmap, originally developed with the consulting assistance of IBM in 2010. IPL's newly updated Smart Grid Roadmap, expected to be completed by the end of 2013, will reflect the emerging issues, new technologies and changing business needs that have arisen since 2010.

It continues to be IPL's strategy to develop and implement its new Oracle Customer Care and Billing system (expected in the 2015 timeframe) prior to consideration of installing AMI. Therefore, IPL has no specific timetable for installing AMI technology.

Regarding the Smart Grid Roadmap, there are some significant changes and impacts associated with the multi-year implementation underway of a new Oracle Customer Care and Billing system that will serve as a replacement and upgrade to both IPL's and WPL's legacy mainframe customer billing systems. The significant capital and labor resources associated with this initiative represent a major investment targeted toward:

- **Minimizing Risk** - Mitigate serious and ongoing risks associated with the many aging, inflexible and difficult to modify or support systems now being used. Reduce business and financial risks associated with large number of secondary billing processes (e.g., spreadsheets).

- **Enhancing Customer Service** - Provide residential and business customers with more powerful, flexible and customizable tools to manage their accounts, bills, payments and communication preferences.
- **Aiding Compliance Support** - Efficient compliance with Sarbanes-Oxley regulations, and other financial reporting requirements.
- **Maximizing Efficiency** - Unite all critical billing processes to increase efficiency, reduce the risk of error and allow customer support resources to assist customers across utilities.

Another area of focus for IPL is the development of a new strategy for expansion and enhancement of distribution grid monitoring and control capabilities. Many of IPL's substations do not currently have remote Supervisory Control and Data Acquisitions (SCADA) capabilities, often due to the relatively high cost of deploying and maintaining that capability, especially in rural areas. However, technological advancements in grid monitoring technologies have significantly expanded the available options that can be cost effectively deployed, even for small substations in remote areas. IPL's monitoring and control of the Electric Distribution System strategy is based on a multi-faceted approach seeking to leverage these new technologies to achieve those monitoring capabilities for substations on a prioritized basis, over a 5 to 10 year period. This strategy also calls for the expansion of targeted control capabilities for higher priority substations where that capability would be expected to provide significant benefit in terms of operating efficiencies and improved service reliability. IPL's

continued engagement in several other EPRI research programs, including *P161-IntelliGrid*, will provide useful guidance in support of effective execution of this strategy in a secure and cost effective manner.

As noted above, IPL and other utilities are becoming increasingly dependent on information technology and telecommunications infrastructures to maintain the reliability and security of the electric grid. Therefore cyber and physical security and data privacy are critical priorities for electric utilities, including IPL. In recognition of this, IPL's parent company Alliant Energy Corporation (AEC), created a new *Business Infrastructure and Technology* organization earlier this year. This new structure helps align and focus resources and responsibilities related to the areas of Information Technology, NERC-Critical Infrastructure Protection, Infrastructure and Cyber Security, Business Continuity, Facilities, Crisis Management, and Risk Management. In addition, AEC joined EPRI's *P183-Cyber Security and Data Privacy* research program. This program is intended to address the emerging threats to an interconnected electric system through a cross-sector collaborative approach on cyber security standards, business processes, and technology to protect the electric grid. The program also will undertake research projects to develop technologies, best practices, and controls on data privacy for the electric grid.

BOARD QUESTION

- 1. An update from Interstate Power and Light Company on its Web-based interface with industrial customers, including any customer feedback, and an update on its meter installation in Dubuque.**

Response:

IPL's web-based interface used by large electric retail and wholesale customers is called PeakMap™. This web-based interface provides an enhancement to the monthly data reports (included with their bill, on request) that customers currently receive for analyzing their 15-minute interval load data. Currently, there are approximately 200 IPL customers utilizing PeakMap.

The PeakMap user interface works hand-in-hand with the Itron MV-90 data collection and analysis software utilized by IPL to collect interval-based metering and event data. PeakMap uses a familiar, Internet browser-based design to deliver load profile information directly to those in the customers' organization who can use it to streamline operations. PeakMap's graphic interface and search functions make it highly interactive and intuitive to use. PeakMap makes it easy for customers to:

- Structure their business operations to take advantage of more favorable rates;
- Make informed energy procurement decisions;
- Pursue bulk purchasing and aggregation opportunities;
- Allocate costs to individual products or processes; and
- Fine tune equipment operation and startup schedules to reduce or eliminate demand peaks.

PeakMap also provides IPL staff with access to customers' interval load data to review and analyze for potential opportunities to leverage available programs and service that may help the customer reduce or manage their energy costs more

effectively. PeakMap offers a self-service to customers at no incremental cost to them, replacing the single plotted graph previously offered to customers at a cost of \$25 per report. PeakMap provides the customer with more options at less cost to the utility since little billing staff time is required to support this service. Some key features of PeakMap include:

- Nine interactive graphs and two reports that are available (instead of one plotted graph).
- Historical data can be loaded for up to 24 months.
- Customers can access recorded quantities of their load profile data, as well as calculated quantities (KVAR, KVA, Power Factor) whenever it's convenient for them and as many times as they want through the Alliant Energy PeakMap website.
- The most recent data available is that which is through the last billing cycle (this is not real-time data; data is read at 15-minute intervals).

Although about 40 of IPL's customers use PeakMap on a regular basis, and have confirmed they find great value in the information it provides, PeakMap does not support providing such information to IPL's other customers. Therefore, as part of the Oracle Customer Care and Billing project, IPL is implementing the Oracle Utilities Customer Self-Service functionality that will support providing all customer classes with access to their energy usage data via a customer portal. With that new capability, IPL expects it will migrate its large commercial and industrial customers to its new customer portal with enhanced capabilities, and will retire the PeakMap system.

As previously reported, IPL supported the IBM/City of Dubuque “Smarter Electricity Project” by installing approximately 1,000 AMI meters at the residential premises of its participating customers. In early 2010, IPL did not make the additional investments required to integrate AMI and legacy IPL CIS billing systems due to significant cost for the systems to achieve this integration, and the potential for the IPL CIS system to be replaced. Therefore, the AMI data from these 1,000 meters has not been used by IPL for customer billing purposes.

The IBM/City of Dubuque Smarter Electricity Project formally ended in early 2012. Since then, fewer customers have been regularly accessing and using the electricity portal that was developed, with only a handful of volunteers continuing to log in to the portal as of October of this year. With the costs of maintaining the portal for users to access their data being disproportionately high for the very small number of continued users, access to the portal was discontinued on October 15, 2013. Users were individually notified, and a "Lessons Learned" document was drafted by IBM to summarize how the pilot enabled participants to reduce their energy consumption. In that document, it is reported by IBM that:

“...most actively engaged citizens (97 or 36%) were able to conserve an average 7% in electricity consumption. Total of 266 portal users conserved about 31817 kWh (or \$3,818) over a 21-week period. Active users of the Portal saved 3x the rate of energy savings for compared to non-active users. The behavior study of the 78 (53%) survey respondents who used the portal more than once showed that 69% said that the Electricity Portal increased their understanding of their electricity use; 72% said the portal helped reinforce what they were already doing to save electricity; 46% felt that portal helped them conserve electricity; 79% reported taking some action to conserve electricity during the pilot.”

