COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID AND SMART METER TECHNOLOGIES)	CASE NO. 2012-00428
)	

ORDER

This case was initiated on October 1, 2012 to consider the implementation of Smart Grid and Smart Meter technologies and dynamic pricing as well as to consider the adoption of the EISA 2007 Smart Grid Investment Standard and the EISA 2007 Smart Grid Information Standard. Each jurisdictional electric utility¹ and the five largest jurisdictional gas utilities ("Gas LDCs")² were made parties to this proceeding. The Attorney General of the Commonwealth of Kentucky by and through his office of Rate Intervention ("AG"), the Community Action Council for Lexington-Fayette, Bourbon, Harrison and Nicholas Counties, Inc. ("CAC") and Kentucky Industrial Utility Customers, Inc. ("KIUC") were granted intervention.

¹ The jurisdictional electric utilities which have been made parties to this case are: Big Rivers Electric Corporation; Big Sandy Rural Electric Cooperative Corporation; Bluegrass Energy Cooperative Corporation; Clark Energy Cooperative Inc.; Cumberland Valley Electric, Inc.; Duke Energy Kentucky, Inc.; East Kentucky Power Cooperative; Farmers Rural Electric Cooperative Corporation; Fleming-Mason Energy Cooperative; Grayson Rural Electric Cooperative Corporation; Inter-County Energy Cooperative Corporation; Jackson Energy Cooperative; Jackson Purchase Energy Corporation; Kenergy Corporation; Kentucky Power Company; Kentucky Utilities Company; Licking Valley Rural Electric Cooperative Corporation; Louisville Gas and Electric Company; Meade County Rural Electric Cooperative; Nolin Rural Electric Cooperative Corporation; Owen Electric Cooperative; Salt River Electric Cooperative Corporation; Shelby Energy Cooperative Inc.; South Kentucky Rural Electric Cooperative Corporation; and Taylor County Rural Electric Cooperative Corporation.

² The jurisdictional gas utilities which have been made parties to this case are: Atmos Energy Corporation; Columbia Gas of Kentucky, Inc.; Delta Natural Gas Company, Inc.; Duke Energy Kentucky, Inc.; and Louisville Gas and Electric Company.

In accordance with the procedural schedule, testimony was submitted by the jurisdictional electric utilities, the Gas LDCs and CAC on January 28, 2013. The parties responded to one round of data requests and an Informal Conference ("IC") was held on April 19, 2013. The purpose of the IC was to discuss the need for, and feasibility of, uniform standards for Smart Grid Investment and Smart Grid Information; to develop a process for the identification of reasonable standards and programs for the implementation of Smart Grid Investment, Smart Grid Information, reliability improvements, and dynamic pricing; and to determine the willingness of all parties to work in a collaborative manner to identify reasonable standards and programs consistent with a Smart Grid and the principles set forth in the Energy Independence and Security Act of 2007.³ An IC memo was issued and the parties filed their Joint Comments on May 20, 2013.

Summary of the Joint Comments⁴

The parties ask that the Commission issue an order by July 15, 2013, in which the Commission declines to adopt or impose either the EISA 2007 Smart Grid Investment or the EISA 2007 Smart Grid Information Standard. The parties also state that they have agreed to work together in a collaborative manner and they ask the Commission to approve the following topics for the Joint Parties' Collaborative to address: customer privacy, opt-out provisions, cyber-security, customer education (including health-related education), dynamic pricing, AMR and AMI deployment

³ Case No. 2012-00428, Consideration of the Implementation of Smart Grid and Smart Meter Technologies, Order scheduling an Informal Conference (Ky. PSC Apr. 11, 2013) Ordering Paragraph 2.

⁴ CAC plans to participate in the Collaborative and joins in only the section of the Joint Comments that relates to the Collaborative.

(including prepaid meters and remote disconnections), cost recovery for smart-technology deployments, and how natural gas companies might participate in the electric smart grid.⁵ Finally, the parties ask the Commission to approve a procedure⁶ that allows for an organizational meeting, a tour of the Duke Energy Kentucky, Inc. Envision Center, a visit to the KEMA Laboratory to view smart grid equipment hardware and software, and an opportunity for other presentations on Smart Grid issues.⁷ According to the Joint Comments, a collaborative report would be provided to the Commission by June 30, 2014.⁸

The EISA 2007 Smart Grid Standards

The EISA 2007 Smart Grid Investment Standard:

Section 1307 of EISA 2007 amends the Public Utilities Regulatory Policy Act of 1978 ("PURPA") by including a new Smart Grid Investment Standard for electric utilities. The standard is as follows:

Each State shall consider requiring that, prior to undertaking investments in non-advanced grid technologies, an electric utility of the State demonstrate to the State that the electric utility considered an investment in a qualified Smart Grid system based on appropriate factors, including:

- total costs:
- cost-effectiveness:
- improved reliability;
- security;

⁵ Joint Comments at 2.

⁶ The Joint Comments ask the Commission to approve a procedural schedule that allows for the events noted above. The Joint Comments propose an organizational meeting, eight topic-specific meetings and a due date for a report of recommendations; however, there are few dates included. This order refers to the request as a "procedure" only.

⁷ *Id.* at 7-8.

⁸ *Id.* at 2.

- system performance; and
- societal benefit.

The EISA 2007 Smart Grid Investment Standard also requires each state to consider rate recovery of Smart Grid capital expenditures, operating expenses, and other costs related to the deployment of smart grid technology, including a reasonable return on the capital expenditures. As part of the rate recovery consideration, each state is also to consider recovery of the remaining book value of obsolete equipment associated with smart grid deployment.

The EISA 2007 Smart Grid Information Standard:

Section 1307(a)(17) of EISA 2007 amends PURPA by including a Smart Grid Information Standard for electric utilities. Essentially, the standard requires that electricity purchasers shall be provided direct access to the following types of information from their electricity suppliers:

- Prices Purchasers and other interested persons shall be provided with information on time-based electricity prices in the wholesale electricity market, and time-based electricity retail prices or rates that are available to the consumers.
- Usage Purchasers shall be provided with the number of electricity units, expressed in kWh, purchased by them.
- Intervals and Projections Updates of information on prices and usage shall be offered on a daily basis, shall include hourly price and use information, where available, and shall include a day-ahead projection of such price information to the extent available.
- Sources Purchasers and other interested persons shall be provided annually with written information on the sources of the power provided by the utility, to the extent that it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis.

The EISA 2007 Smart Grid Information Standard also requires electric utilities to provide consumers access to their own information at any time through the Internet and by other means of communication elected by the electric utility for smart grid applications. Other interested persons shall be able to access information not specific to any customer through the Internet. Customer-specific information shall be provided solely to that customer.

Joint Comments - The Smart Grid Standards

The Joint Parties state that they are unanimous in their position that the Commission should not adopt either standard. Given their diverse interests, the Joint Parties state that their unanimity is significant.⁹ The position of the jurisdictional electric utilities and the large gas utilities is consistent with their recommendation in Case No. 2008-00408 ("Admin 408")¹⁰ in which the Commission first considered the adoption of these two standards.

The Joint Parties assert that the EISA 2007 Smart Grid Investment Standard is redundant and could stifle innovation in smart-technology proposals. The Joint Parties support using cost-benefit analysis for all utility investment proposals; however, they believe the standard adds constraints on costs, benefits and cost-recovery methods.¹¹

The Joint Parties assert that the EISA 2007 Smart Grid Information Standard would impose a one-size-fits-all requirement that could require uneconomic

⁹ *Id*.

¹⁰ Case No. 2008-00408, Consideration of the New Federal Standards of the Energy Independence and Security Act of 2007 (Ky. PSC Oct. 6, 2011).

¹¹ Joint Comments at 5-6.

investments.¹² They contend that since the current offering of time-based or time-of-use pricing options is limited to voluntary pilot programs and not widely adopted, there is no need to require utilities to provide the extensive pricing, interval, and projection information that adoption of the standard would require. The Joint Parties state that the EISA 2007 Smart Grid Information Standard does not consider the economics of serving different customers and service territories and would require some utilities to make uneconomical investments in customer related technology.¹³

The Commission believes that it is premature to decline to adopt either standard. Since Kentucky has not restructured its electric industry, there may be a number of issues regarding the adoption of the EISA 2007 Smart Grid Information Standard and making certain information publicly available. However, even though the Commission has considered the issues in the context of Admin 408, it has not considered the issues in a case limited solely to Smart Grid issues.

In the final Order in Admin 408, the Commission made clear its inclination to adopt the EISA 2007 Smart Grid Investment Standard.¹⁴ It was only upon considering the rehearing arguments of the jurisdictional electric utilities and the large gas utilities that the Commission revisited its order and decided to defer a decision on the adoption of the EISA 2007 Smart Grid Investment Standard to this proceeding. Given this history, and the issues to be addressed by the Joint Parties' Collaborative as stated previously, the Commission finds that the record should be more fully developed before

¹² Id. at 3.

¹³ *Id.* at 4.

¹⁴ Case No. 2008-00408, Consideration of the New Federal Standards of the Energy Independence and Security Act of 2007 (Ky. PSC Oct. 6, 2011) at 113 and Ordering Paragraphs 3 and 10.

it makes a decision on either standard. Consequently, the Commission will require the Joint Parties' Collaborative to address the issues of whether the EISA 2007 Smart Grid Investment Standard, the EISA 2007 Smart Grid Information Standard or any other Smart Grid Standard should be adopted.

Joint Comments - The Collaborative and Procedural Schedule

In Admin 408, the Commission, with the agreement of the parties, initiated a collaborative process to review matters relating to smart grid deployment in Kentucky. The collaborative effort in that case resulted in the submissions of a Report of the Joint Parties and the Joint Comments of the AG and CAC on March 25, 2011, both of which have been incorporated into the record in this proceeding. The Report of the Joint Parties provided a broad overview of the extensive Smart Grid issues but concluded with the recommendation that the Commission not adopt the PURPA Smart Grid Standards and not implement any requirements for smart technology deployment.

As previously stated, the Joint Parties propose to address the following topics as part of the collaborative: customer privacy, opt-out provisions, cyber-security, customer education (including health-related education), dynamic pricing, AMR and AMI deployment (including prepaid meters and remote disconnections), cost recovery for smart-technology deployments, and how natural gas companies might participate in the electric smart grid.¹⁵ The Commission finds those topics should include issues relating to the recovery of obsolete equipment, further consideration of Smart Grid Standards and any other related issues not already set forth that may be identified by the

¹⁵ Joint Comments at 2.

Collaborative or the Commission. With these additions, the Commission agrees with the proposal of the Joint Parties regarding the efforts of the Collaborative.

The Commission also agrees with the procedure provided in the Joint Comments and the events the Collaborative proposes to include. However, the Commission has become aware of potential scheduling conflicts regarding the proposed July 23, 2013 organizational meeting and directs the Joint Parties to propose a different date for the organizational meeting.

Summary of Findings

For the reasons set forth above, the Commission finds that the request that it decline to adopt the EISA 2007 Smart Grid Investment Standard and the EISA 2007 Smart Grid Information Standard is premature and should be denied. The Collaborative should give further consideration to the adoption of these standards as part of its review. Further, the Commission finds that, except as noted above, the topics to be addressed by the Collaborative are reasonable and the procedure and related events set forth in the Joint Comments are reasonable.

IT IS HEREBY ORDERED that:

- 1. The request to decline to adopt the EISA 2007 Smart Grid Investment Standard and the EISA 2007 Smart Grid Information Standard is denied as premature.
- 2. The Collaborative shall give further consideration to the adoption of the EISA 2007 Smart Grid Investment Standard and the EISA 2007 Smart Grid Information Standard as part of its review.
- 3. The Commission authorizes the Collaborative to proceed to address the topics set forth in the Joint Comments as amended by the findings in this Order.

- 4. With the condition noted above, the procedure and related events set forth in the Joint Comments shall be followed.
- 5. The Informal conference scheduled for Tuesday, July 23, 2013 is canceled.
- 6. Within 15 days of the date of this Order, the Joint Parties shall propose a new date for an organizational meeting.

By the Commission

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KENTUCKY PUBLIC SERVICE COMMISSION

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Executive Director

Case No. 2012-00428

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