

Grayson Rural Electric Cooperative Corporation

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April 28, 2010

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602-0615

RE: Case No. 2008-00408

Dear Mr. Derouen:

Enclosed please find our responses to Case No. 2008-00408. We are in the initial stages of installing Landis-Gyr TS2 metering, so our experience is somewhat tentative at this time. However, we have done our best to answer these questions as carefully and as thoughtfully we can. We look forward to the final report that might aid us as we move forward in this endeavor.

Sincerely,

GRAYSON RURAL ELECTRIC
COOPERATIVE CORPORATION



Carol Hall Fraley
President and CEO

CHF

Enclosure

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Grayson Rural Electric Cooperative Corporation's
Response to PSC Case No 2008-00408

1. Our definition of 'Smart Meter' is equipment that has two way communications and the ability to inform the end user with notifications of usage limits as well as give the utility better information concerning the individual customer's usage.
2. Our definition of 'Smart Grid' is the information provided back to the utility from Smart Meters either through automation or requests. Because the information can be gathered in a relatively small window of time, it allows more accurate calculations of system losses, better reporting of outages. Through the implementation of demand side management devices, the utility can better control both the utilities demand as well as the end user.

Grayson RECC is not familiar enough to discuss all the different Smart Grid applications that can be effective with or without implementation of time of use rates.

Based on our definition of Smart Meter, it is necessary to implement bidirectional data communications for the flow of data to and from the utility and the end user. The amount of data gathered from the end user should be directly proportional to the type of application. Only the information necessary for an application should be utilized. The request for hourly data from every meter may just increase the need for larger bandwidth needs. Communication paths should be used judiciously and not overloaded for the sake of additional data that may or may not be utilized.

3. The essential functions of Smart Meter and Smart Grid systems is to provide information to educate both the end user and help the utility make better decisions concerning their electric consumption.
4. The essential components of the Smart Grid are smart meters, data collectors/receivers, a two-way communications path and, most importantly, someone to interpret and make changes based on the data collected.
5. The benefit of a Smart Meter ultimately is to help make smart choices concerning energy consumption.
6. The benefit of a Smart Grid is to help the utilities and the end user make smarter choices concerning energy consumption. It also helps the utility perform their jobs more effectively by utilizing information to help identify outages for faster restoration. By implementing remote disconnects, it also provides a safer way to disconnect/connect customers.

- 14-2b. We are not familiar with the pros and cons of utilizing either HAN or the internet. I would think not having to develop and maintain a separate HAN would be a better option. If it is provided through an internet browser, it should not be browser specific and should be available to the mobile community. I believe it would make things much more complicated for the end user if the web host were based at the end user PLUS it would add a huge load to the utilities to maintain that many servers.
- 14-2c. Should the rate structure come to a point that real-time pricing is being utilized; I believe there should be some type of interface to home automation systems and information systems that would provide the data to the end user. This would allow a central control point that appliances could interface with inside the home as well as a central point for the meter to interface. This would force manufacturers to work together for a common interface and protocol reducing the confusion for the consumer.
- 14-3a. The usage data collected from a Smart Meter should be based on the application(s) the utility is trying to implement. The gathering of data just because you can is a huge waste of resources and shows up in every aspect of work and personal lives today.
- 14-3b. We do not believe the Commission should establish minimum requirements on data acquired.
- 14-3c. The commission should not establish minimum data intervals.
- 14-3d. With the current technology, usage data should be validated periodically through site visits of some or all metering points. As technology progresses and statistics prove validation is not required, changes should be made to accommodate those validation requests.
- 14-3e. The commission should not establish a common validation or error detection protocol but rather setup guides for standards and deviation from those standards.
- 14-3f. The customer should have the choice of usage information either through the internet or an in-home display.
- 14-3g. The commission should not establish protocols standard for any usage information.
- 14-3h. Third parties should NOT have direct access to the meter. Information could be provided from the utility for things like home automation but only when authorized and granted by the utility.
- 14-3i. We are not familiar with the communication methods, software nor hardware that would be required for this to happen.
- 14-3j. Third party data requests should be limited to time stamped usage and demand data that provide the information to the end-user.

14-7a. Yes. Grayson RECC applied for stimulus money to accelerate the Landis-Gyr Turtle 2 metering program, but was not selected to receive funds. It would be reasonable to offer incentives that would help lower demand for future power plants, shift usage to off-peak times and lower consumption. It would also be helpful to educate consumers to build homes and buy mobile homes that meet Energy Star standards and to lower our dependency on foreign oil and environmental practices that are not conservative.