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PUBLIC SERVICE
COMMISSION

April 3, 2013

Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Blvd.
PO Box 615
Frankfort, KY 40602-0615

Re: Response to Initial Data Request Case 2012-00428

Mr. Derouen:

Please find enclosed 15 copies of Jackson Energy Cooperatives' response to Attorney General's inquiry dated February 27, 2013.

Please inform me if any further information is required.

Sincerely,

A handwritten signature in black ink, appearing to read "Clayton O. Oswald", written in a cursive style.

Clayton O. Oswald
Attorney for Jackson Energy Cooperative

STATE OF KENTUCKY)

COUNTY OF JACKSON)

I, Ricky C. Caudill, state that I am the Planning Engineer at Jackson Energy Cooperative, that I have personal knowledge of the matters set forth in this application and attached exhibits, and that the statements and calculations contained in each are true as I verily believe.

This 2nd day of April 2013.

Ricky Caudill
Ricky C. Caudill

SUBSCRIBED AND SWORN to before me by Ricky C Caudill this
2nd day of April, 2013.

Connie Reid # 470311
Notary Public, KY State at Large

My Commission Expires: 7-30-16

STATE OF KENTUCKY)

COUNTY OF JACKSON)

I, Karen Combs, state that I am the Director of Public Relations at Jackson Energy Cooperative, that I have personal knowledge of the matters set forth in this application and attached exhibits, and that the statements and calculations contained in each are true as I verily believe.

This 1 day of April 2013.


Karen Combs

SUBSCRIBED AND SWORN to before me by Karen Combs this
1 day of April, 2013.

 # 470311
Notary Public, KY State at Large

My Commission Expires: 7-30-16

STATE OF KENTUCKY)

COUNTY OF JACKSON)

I, Patrick Head, state that I am the Information System Technician at Jackson Energy Cooperative, that I have personal knowledge of the matters set forth in this application and attached exhibits, and that the statements and calculations contained in each are true as I verily believe.

This 1st day of April 2013.



Patrick Head

SUBSCRIBED AND SWORN to before me by Patrick Head this
1st day of April, 2013.

Connie Reid # 470311
Notary Public, KY State at Large


My Commission Expires: 7-30-16

STATE OF KENTUCKY)

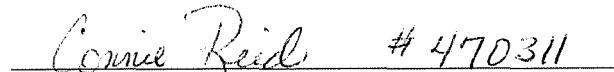
COUNTY OF JACKSON)

I, John Clevenger, state that I am the Information System Technician at Jackson Energy Cooperative, that I have personal knowledge of the matters set forth in this application and attached exhibits, and that the statements and calculations contained in each are true as I verily believe.

This 2nd day of APRIL 2013.


John Clevenger

SUBSCRIBED AND SWORN to before me by John Clevenger this
2nd day of April, 2013.


Notary Public, KY State at Large

My Commission Expires: 7-30-16

JACKSON ENERGY COOPERATIVE
CASE NO. 2012 - 00428
RESPONSE TO COMMISSION STAFF'S INITIAL DATA REQUEST

98. With regard to calendar years 2007 through 2012, identify and discuss what Smart Grid and/or Smart Meter initiatives the utility implemented. The discussion should include but not be limited to the reasons why each initiative qualifies as a Smart Grid and/or Smart Metering initiative; the date of installation; the total cost of installation; and any benefits resulting from the initiatives, quantifiable or otherwise, received by both the utility and the customers.

Response by Ricky Caudill

Jackson Energy completed the installation of the TWACS AMI system in 2006.

The Commission approved a prepay metering tariff on November 30, 2010. The prepay program roll out began June 27, 2011.

Consumer benefits of the prepay program include

- a. Promotes energy conservation by allowing the cooperative member to monitor their daily electric consumption
- b. By conserving energy the cooperative member can save money
- c. The prepay metering program is voluntary
- d. The cooperative member does not have to pay a deposit or late payment penalties.
- e. There are no reconnect or disconnect charges
- f. The consumer can add money to their account at any time in any amount.

The benefits to Jackson Energy include

- a. Reduced costs related to disconnects and reconnects
- b. Reduction in bad debt
- c. Higher member satisfaction

The cost of the prepay metering system has thus far been \$809,350.

Jackson Energy received a Department of Energy (DOE) grant through the Kentucky Department for Energy Development and Independence (DEDI) which offset a portion of the cost of the prepay system. The amount of the grant was \$100,000.

99. With regard to calendar years 2013 through 2018, identify and discuss what additional Smart Grid and/or Smart Meter initiatives the utility has forecasted to be implemented. The discussion should include but not be limited to why each forecasted initiative qualifies as a Smart Grid and/or Smart Metering initiative; the forecasted date of installation; the forecasted total cost of installation; and any forecasted benefits to result from the initiatives, quantifiable or otherwise, received by both the utility and the customers.

Response by Ricky Caudill

Jackson Energy is not planning any additional smart grid or smart meter projects for this time period.

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100. With regard to DA Smart Grid Initiatives provide the following:

- a. the number of DA systems installed as of December 31, 2012, along with the associated benefits realized.
- b. the number of DA systems to be installed in the next five years.
- c. the total number of DA systems to be installed when the DA system is completely deployed.

Response by Ricky Caudill

- a. None
- b. None
- c. None

101. With regard to Volt/VAR Optimization, provide the following:

- a. the number of Volt/VAR Optimization systems installed as of December 31, 2012, along with the associated benefits realized.
- b. the number of Volt/VAR Optimization systems to be installed in the next five years, along with the forecasted in-service date.
- c. the total number of Volt/VAR Optimization systems to be installed when the Volt/VAR Optimization system is completely deployed.

Response by Ricky Caudill

- a. None
- b. None
- c. None

102. With regard to Supervisory Control and Data Acquisition ("SCADA") Smart Grid Initiatives, provide the following:

- a. the number of SCADA systems installed as of December 31, 2012, along with the associated benefits realized.
- b. the number of SCADA systems to be installed in the next five years, along with the forecasted in service date.
- c. the total number of SCADA systems to be installed when the SCADA system is completely deployed.

Response by Ricky Caudill

- a. One SCADA system is installed. The Jackson Energy SCADA system is a client of the EKPC SCADA system. This SCADA system allows Jackson Energy to monitor the status of the equipment inside the EKPC substations within the Jackson Energy service area. The SCADA system also gives Jackson Energy the ability to remotely operate the reclosers and regulators in each substation. The SCADA system helps to diagnose whether an outage affects an entire feeder or just a portion of the feeder. The benefit is that the field personnel have a better understanding of the situation before they arrive on scene. If a problem exists

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inside the substation it is diagnosed more quickly thus enabling a more timely response.

- b. None
- c. One

103. As it relates to Dynamic Pricing (where rates are established hourly throughout the day) Tariffs or TOU Tariffs, provide the following:

- a. the number of customers the utility has or had on these types of tariffs, identified separately by specific tariff.
- b. whether these customers shifted load from high-price times periods to lower-priced time periods.
- c. whether these customers consumed more, less or the same number of kWh.
- d. whether the utility reached any findings or conclusions based on its experience with customers on Dynamic Pricing and/or TOU Tariffs.

Response by Ricky Caudill

Jackson Energy has tariffs relating to the use of Electric Thermal Storage (ETS). These tariffs incentivize the use of off peak ETS units.

- a. There are 1,001 residential consumers on Jackson Energy Rate 11. There are 15 commercial consumers on Jackson Energy Rate 22
- b. Yes, the ETS heating load was shifted to an off peak time period.
- c. The consumers consumed about the same number of kWh. But the purpose of the ETS tariffs is to give consumers an incentive to shift their heating load from peak times to off peak times.
- d. The tariffs have been successful in shifting consumer heating loads from peak times to off peak times.

104. Describe precautions taken and/or standards developed by the utility to address concerns regarding cybersecurity and privacy issues.

Response by John Clevenger and Patrick Head

Jackson Energy is Red Flag compliant and Payment Card Industry (PCI) Data Security Standard compliant. The software vendors that Jackson Energy contracts with are also Red Flag compliant and PCI compliant.

Jackson Energy uses firewall hardware, antivirus protection and spam filters to reduce cybersecurity threats. Jackson Energy works with software vendors that specialize in threat reduction software and practices.

The SCADA system Jackson Energy utilizes is owned and operated by East Kentucky Power Cooperative (EKPC). EKPC is responsible for the secure operation of the SCADA system

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105. Provide a discussion and details of progress made regarding the concern raised by the utilities as it relates to the interoperability standards for Smart Grid equipment and software.

Response by Ricky Caudill

Various organizations continue to work on developing standards for smart grids.

For example the Smart Grid Interoperability Panel (SGIP), an offshoot of the National Institute of Standards and Technology (NIST), is developing a Catalog of Standards for use with smart grid deployments.

The fact that organizations, such as SGIP, continue to work on developing standards illustrate that standards are still not set in stone.

The Utilities Telecom Council (UTC) has organized a Smart Networks Council (SNC). One of the objectives of this entity is to determine how the developed standards can be moved from guidelines to implementation.

This illustrates that even after standards are developed they will have to be adopted by the industry in order to be implemented.

While the standards are still being developed and adopted, vendors are selling hardware and software now. The question is how compatible with the proposed standards this hardware and software will be.

These standards being developed will apply to new equipment and controls. Most utilities have legacy equipment which may not operate according to the new standards.

106. Provide a discussion concerning how the costs (investment and operating and maintenance costs) associated with the installation of Smart Grid facilities should be recovered from the ratepayers.

Response

Jackson Energy references the response to PSC 106 submitted by EKPC and adopts that response as its own.

107. State whether the utility would favor a requirement that it report to the Commission so that the Commission is aware of the jurisdictional Smart Grid and/or Smart Meter activities within the Commonwealth. As a specific example, the requirement could order that a report be provided each September regarding the Smart Grid and/or Smart Meter activities the utility is planning to perform during the upcoming calendar year, followed by an April report of the Smart Grid and/or Smart Meter activities the utility completed the preceding calendar year.

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Response

Jackson Energy references the response to PSC 107 submitted by EKPC and adopts that response as its own.

108. State whether the utility believes KRS 278.285 is an appropriate approach to recovering the costs (investment and operation and maintenance) associated with Smart Grid investments.

Response

Jackson Energy references the response to PSC 108 submitted by EKPC and adopts that response as its own.

109. State whether the utility believes a tracking mechanism as described beginning on page 3 of the Wathen Testimony on behalf of Duke Kentucky is an appropriate approach to recovering the costs associated with Smart Grid investments.

Response

Jackson Energy references the response to PSC 109 submitted by EKPC and adopts that response as its own.

110. State whether the utility has commissioned a thorough DSM and Energy Efficiency ("DSM-EE") potential study for its service territory. If the response is yes, provide the results of the study. If no, explain why not.

Response

Jackson Energy references the response to PSC 110 submitted by EKPC and adopts that response as its own.

111. Refer to the Munsey Testimony on behalf of Kentucky Power, page 10, lines 11-19 regarding the Green Button initiative. Describe the extent of your utility's participation in this industry-led effort.

Response by Karen Combs

The Green Button initiative is an industry-led effort to provide electric utility consumers with easy-to-understand data about their household energy use. The general idea is for utility web sites to include a Green Button icon that is generally understood as the link to download their household data.

Jackson Energy's Web site, www.jacksonenergy.com, does not include a Green Button icon, but members are able to access their energy usage information through the Web site. Co-op members can sign up for the free e-bill service, which does have a link on the site's home page, and through the ebill screen, the customer can easily access their monthly energy usage information.

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The information is a historical record of the household usage from the present day back to 2005.

112. Refer to the Roush Testimony on behalf of Kentucky Power, DMR Exhibit 1. Provide a similar exhibit containing a list of time-differentiated rates available to your customers.

Response by Ricky Caudill

Jackson Energy has two rates relating to Electric Thermal Storage (ETS) heating systems. Jackson Energy Rate 11 is for residential consumers and Rate 22 is for commercial consumers.

113. Provide a description of the type of meters (mechanical, electro- mechanical, AMR [one-way communication], AMI [two-way communication]) currently used by the utility. Include in the description the reasons the current meters were chosen and any plans to move to a different type of metering configuration.

Response by Ricky Caudill

All the meters used by Jackson Energy are electronic AMI meters.

Jackson Energy was already transitioning to electronic meters prior to the installation of an AMI system. When Jackson Energy began installing the AMI system it continued purchasing the same electronic meters but with an AMI module installed in the meter.

Jackson Energy plans to continue utilizing electronic meters with AMI modules.

114. If either AMR or AMI metering is in use, state whether the utility has received any customer complaints concerning those meters. If the response is yes, provide the following:

- a. the number of complaints, separated by gas and electric if a combination utility, along with the total number of customers served.
- b. how the complaints were addressed by the utility.
- c. a detailed explanation as to whether customers should have the ability to opt out of using either AMR or AMI metering.
- d. If customers were to be given the opportunity to opt out of using either AMR or AMI metering, provide:
 - i. an explanation as to whether the utility should establish a monthly manual metering reading tariff or charge applied to the opt-out customers to recover the costs associated with manually reading the non-AMR or -AMI accounts.
 - ii. an explanation as to whether these opt-out customers could still receive benefit from the utility using either AMR or AMI metering.

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- iii. an explanation addressing the point at which opt-out customers, either in terms of number of customers or a percent of customers, affect the benefits of the utility using either the AMR or AMI metering.

Response by Ricky Caudill

- a. Jackson Energy has received one formal complaint concerning electric AMI meters.
- b. Jackson Energy addressed the issues raised by the consumer by phone and a follow up letter.
- c. Jackson Energy believes that consumers should not be allowed to opt out. Allowing consumers to opt out decreases the benefits gained by the use of the AMI system. The benefits the consumer is foregoing include the ability to participate in prepay metering. The benefits of prepay metering are described in response 98. The benefits also include reduced costs to the cooperative, which means reduced costs to the consumer. The reduced costs include lower vehicle fuel costs and reduced vehicle wear and maintenance costs because a meter reader would not have to make a trip to read the meter each month.
- d.
 - i. Jackson Energy would want to establish a tariff that would allow the ability to recover the full cost of manually reading the meter.
 - ii. By opting out of the AMR/AMI system the consumer would be foregoing any benefit they may have received by participating in the system.
 - iii. Jackson Energy does not have an estimate.

115. In testimony, each utility cited cybersecurity as an area of concern related to the implementation of Smart Grid technologies. Provide and describe your company's policy regarding cybersecurity or the standard your company has adopted governing cybersecurity. If your company has not adopted any policy or standard, identify and describe any industry or nationally recognized standards or guidelines that you may be aware of that the Commission should consider relating to cybersecurity issues and concerns.

Response by Ricky Caudill

The SCADA system resides on servers operated and maintained by East Kentucky Power Cooperative (EKPC). Jackson Energy references EKPC PSC response 104 for the standards and protocols used for security of this system.

Response by John Clevenger and Patrick Head

Jackson Energy is compliant with Red Flag Rules established by the Federal Trade Commission. Information about Red Flag Rules can be found at the website www.ftc.gov/redflagrules .

Jackson Energy is PCI Compliant. Information about PCI Compliance can be found at http://en.wikipedia.org/wiki/PCI_DSS

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116. If not previously addressed, provide a detailed discussion of whether deployment of smart meters should allow for an opt-out provision.

Response by Ricky Caudill

See Jackson Energy response to Request 114 parts c and d.