

# LICKING VALLEY

### RURAL ELECTRIC COOPERATIVE CORPORATION

P. O. Box 605 • 271 Main Street West Liberty, KY 41472-0605 (606) 743-3179



February 13, 2013

MAR 20 2013
PUBLIC SERVICE
COMMISSION

Mr. Jeff Derouen Executive Director Public Service Commission 211 Sower Boulevard Frankfort KY 40602

RE: Public Service Commission Case No. 2012-00428

Mr. Derouen:

Please find enclosed the original and fourteen copies of Licking Valley Rural Electric Cooperative Corporation's responses as requested in Case No. 2012-00428, Commission Staff's First Request for Information to East Kentucky Power Cooperative's Sixteen Member Distribution Cooperatives.

Should you have any questions and/or need any additional information, please let me know at 606-743-3179 or email at kkhoward@lvrecc.com.

Sincerely,

Kerry K. Howard

General Manager/CEO

Enclosure

### **TABLE OF CONTENTS**

- Exhibit 1. Response to Request 98 Request 116
- Exhibit 2. Affidavit attesting that information is true and accurate to the best of preparer's knowledge.
- Exhibit 3. Information concerning testimony of witness.

# LICKING VALLEY RURAL ELECTRIC COOPERATIVE CORPORATION BEFORE THE PUBLIC SERVICE COMMISSION

#### In re the Matter of:

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

RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED FEBRUARY 27, 2013

#### **PSC Staff Data Responses**

Request 1 - 11 Answered by CAC

Request 12 – 23 Answered by Big Rivers

Request 24 - 59 Answered by Duke

Request 60 – 67 Answered by EKPC

Request 68 – 76 Answered by Kentucky Power

Request 77 - 95 Answered by KU

Request 96 - 97 Answered by Atmos Energy

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.

98.

With regard to calendar years 2007 through 2012, Licking Valley RECC has implemented AMI's which allows two way communications. We have this technology installed at 3 of our 10 substations. The estimated cost to implement AMI's for each substation is \$100,000.00.

The use of AMI's allows for Direct Load Control which is part of demand side management. With this smart meter LV receives fewer customer complaints, due to timely meter readings. Our Engineering department can better size needed equipment. This meter can be disconnected and reconnected from our operations center when needed.

Request 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.

99.

With regard to calendar years 2013 through 2018 Licking Valley RECC plans to complete installing AMI technology at each substation. The estimated cost for the remaining 7 substations will be \$700,000.00. Licking Valley RECC's members have an opportunity to participate in DLC (Direct Load Control) programs which can reduce future cost for Licking Valley RECC and our members.

#### Request 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.

#### 100.

- a. As of December 31, 2012, Licking Valley RECC has 80 members participating in Direct Load Control. No measurable benefits at this point.
- b. Licking Valley RECC plans to have all substations upgraded to implement AMI technology by in the next three years when all members will be able to participate in DLC programs.
- c. When the upgrade is complete, all 10 substations will be equipped for AMI technology.

#### **Request 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.

#### 101.

- a. Licking Valley RECC has no Volt/VAR Optimization systems installed.
- b. Licking Valley RECC has no plans at this time to install Volt/VAR systems.
- c. Licking Valley RECC has no plans to install Volt/VAR systems.

**Request 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.
- 102. a. Licking Valley RECC has no SCADA systems installed as of December 31, 2012.
  - b. Licking Valley RECC has no plans to install SCADA systems in the next five years.
  - c. Plans to deploy a SCADA system are not in four year Work Plan.

Request 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.

103.

- a. None
- b. N/A
- c. N/A
- d. N/A

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

104. Licking Valley RECC's software provider provides fire-wall protection to deter hackers and back-up is stored at a remote location for Customer information files and Meter information files.

Request 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.

105. The concerns for interoperability standards for Smart Grid equipment and software are being discussed relating to the high cost and the availability of two way communication systems. Licking Valley RECC feels the utility industry as it moves towards new technology will address these concerns.

Request 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.

106. Licking Valley RECC references the response to PSC Request 106 as submitted by EKPC and adopts that response as its own.

Request 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.

107. Licking Valley RECC references the response to PSC Request 107 as submitted by EKPC and adopts that response as its own.

Request 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.

108. Licking Valley RECC references the response to PSC Request 108 as submitted by EKPC and adopts that response as its own.

**Request 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.

109. Licking Valley RECC references the response to PSC Request 109 as submitted by EKPC and adopts that response as its own.

**Request 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.

110. Licking Valley RECC references the response to PSC Request 110 as submitted by EKPC and adopts that response as its own.

Request 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.

111. Licking Valley RECC does not participate in the Green Button initiative, but with AMI's completely deployed, participation could be possible at a later date.

Request 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.

112. Licking Valley RECC has no time-differentiated rates available.

Request 113. Provide a description of the type of meters (mechanical, electromechanical, 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.

113. Licking Valley RECC currently has AMR and AMI meters. The AMR's were first chosen because they were compatible with existing hardware and the meter reading capabilities allowed us to move away from consumer reading and reporting meter readings for monthly billing purposes. We are currently upgrading our system to allow for the installation of AMI's which will allow two way communication and load analysis and control.

<u>Request 114.</u> 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:
  - 1. 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.
  - 2. an explanation as to whether these opt-out customers could still receive benefit from the utility using either AMR or AMI metering.
  - 3. 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.
- 114. Licking Valley RECC has not received any customer complaints concerning the use of AMR and AMI meters.

Request 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 cyber security issues and concerns.

115. Licking Valley RECC has no written policy for cyber security issues and concerns. No known standard for our industry.

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

116. Licking Valley RECC does not see a need for an opt-out provision for the customer. With everyone having a smart meter, future load forecast or problems on the line can be better detected and resolved. Every customer is given an opportunity for inclusion in DSM programs and savings.

# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE	MATTER OF		
	AN EXAMINATION BY THE PUBLIC SERVICE	)	
	COMMISSION OF THE CONSIDERATION OF	)	CASE NUMBER 2012-00428
	THE IMPLEMENTATION OF SMART GRID	)	
	AND SMART METER TECHONOLOGIES	)	

# <u>AFFIDAVIT</u>

The affiant, Kerry K. Howard, General Manager/CEO of Licking Valley Rural Electric Cooperative Corporation, Post Office Box 605, West Liberty, Kentucky 41472, states that the information provided in this response is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Witness my hand this 18<sup>th</sup> day of March 2013.

Kerry K. Howard General Manager/CEO

Subscribed and sworn before me this 18th day of March 2013.

Notary Public

My Commission Expires:

## TESTIMONY OF WITNESSES

Exhibit 1. Kerry Howard

Exhibit 2. Kerry Howard

Exhibit 3. Kerry Howard