RECEIVED

W. PATRICK HAUSER, P.S.C.

200 KNOX STREET

MAR 20 2013

Telephone (696) 546-38:11 // CE Telefax: (696) 546-3050 E-MAIL phauser@barbourville.com

P.O. Box 1900 BARBOURVILLE, KENTUCKY 40906

March 20, 2013

HAND-DELIVERED

Mr. Jeff Derouen Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, KY 40601

Re: Case No. 2012-00428

Dear Mr. Derouen:

Enclosed please find for the proper filing thereof the original and fourteen (14) copies of Cumberland Valley Electric's response to the Commission Staff's First Request for Information.

Thank you for your assistance in this matter.

Very truly yours

W. Patrick A

WPH/dd

Enclosures

Cc: Mr. Ted Hampton

Mr. Mark Abner Mr. Robert Tolliver

CERTIFICATION

Comes now Mark Abner, Engineering Manager for Cumberland Valley Electric, Inc., and being duly sworn states as follows with regard to those Responses filed by Cumberland Valley Electric, Inc. in Case No. 2012-00428, now pending before the Public Service Commission of the Commonwealth of Kentucky:

- I am the person supervising the preparation of the Responses on behalf of Cumberland Valley Electric, Inc.
- 2. The Responses are true and accurate to the best of my personal knowledge, information and belief formed after a reasonable inquiry.

Witness my hand as of this the 19th day of March, 2013.

Mark Abner

rack allener

COMMONWEALTH OF KENTUCKY

COUNTY OF KNOX

The foregoing Certification was subscribed, sworn to and acknowledged before me by Mark Abner, Engineering Manager for Cumberland Valley Electric, Inc., this the 19th day of March, 2013.

NOTARY PUBLIC, STATE AT LARGE, KY

MY COMMISSION EXPIRES: Oct. 5, 2014

JO 429286

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CONSIDERATION OF THE IMPLEMENTATION)	CASE NO.
OF SMART GRID AND SMART METER)	2012-00428
TECHNOLOGIES	1	

CUMBERLAND VALLEY ELECTRIC, INC. RESPONSE TO THE COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

Comes now Cumberland Valley Electric, Inc., and for its Response to the Commission Staff's First Request for Information states as follows:

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: CVE was an early adopter of AMR technology with deployment of AMR equipped meters in the mid 1990's. In 2004 and 2005, AMI equipment was installed at CVE substations that provided two-way communication capability and subsequent deployment of AMI equipped meters. Since that time and during the subject time period, CVE has been migrating from the original AMR system to AMI through its meter testing program. CVE believes that its AMI project qualifies as a Smart Meter initiative primarily because of two-way communication capability with meters and other devices. Two-way communication provided the means for remote connection and disconnection, participation in EKPC's Direct Load Control Program, remote read-out/read-in, automatic reading and reset of demand

meters, scheduled reads, and future prepay options. All the above are benefits to the cooperative and some, if not all, are beneficial to the member. Members have benefited from the availability of daily reads to monitor and analyze usage, from participation in EKPC's Direct Load Control Program, and improved efficiency of cooperative operations. CVE invested approximately \$3.5 million in its AMI program during the subject time period.

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: CVE does not anticipate implementation of any Smart Grid or Smart Meter initiatives during the next five years. It is expected that CVE will phase out its original AMR system in 2013 with the replacement of approximately 300 AMR meters. No other metering initiatives are anticipated.

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:

- a. Zero. CVE has not deployed any DA systems prior to December 31, 2012.
- b. Zero. CVE has no current plans to deploy any DA systems in the next five years.
- c. Zero. CVE has no current plans regarding DA systems.

- 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.
 - The total number of Volt/VAR Optimization systems to be installed when the Volt/VAR
 Optimization system is completely deployed.

RESPONSE:

- Zero. CVE has not deployed any Volt/VAR Optimization systems prior to December
 31, 2012.
- b. Zero. CVE has no current plans to deploy any Volt/VAR Optimization systems in the next five years.
- c. Zero. CVE has no current plans regarding Volt/VAR Optimization.
- 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.
 - The total number of SCADA systems to be installed when the SCADA system is completely deployed.

RESPONSE:

- a. CVE had 14 SCADA systems installed as of December 31, 2012, one at each of 14 substations. These systems are limited to the substation only and therefore do not include equipment on distribution feeders. Benefits realized include:
 - the ability to monitor voltage, current, load, power factor and equipment status in real-time
 - ii. the ability to remotely control distribution equipment
 - iii. the ability to retrieve historical data
- b. There are three substations in CVE's system that do not currently have SCADA deployed but are candidates. SCADA has thus far not been deployed at these three because of lack of suitable communications. Presumably, they will, or may, be deployed within the next five years but have no forecasted in-service date.
- c. Seventeen.
- 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:

- a. Zero. CVE does not currently or ever have had Dynamic Pricing or TOU tariffs in place.
- b. Not applicable.
- c. Not applicable
- d. Not applicable.
- 104. Describe precautions taken and/or standards developed by the utility to address concerns regarding cyber-security and privacy issues.

RESPONSE: CVE has a privacy policy reviewed by a privacy committee that reports to the board of directors. The policy was guided primarily by the standards set forth in the 2003 FACT Act. Employees receive refresher training on the policy and FACT Act requirements every 6 months. CVE's cyber-security practices are modeled on the Standards of Good Practice and incorporate portions thereof as considered appropriate by CVE IT staff.

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: CVE is aware that the issue of interoperability standards of Smart Grid equipment and software has been discussed at some level. However, from a practical standpoint as a distribution cooperative, Cumberland Valley does not have grave concerns regarding the matter. If and when CVE considers a new technology as may be manifested in a device and/or software, the issue of interoperability with existing systems is regarded as a primary consideration. Any technology deemed incompatible with existing systems are not considered when compatibility is of high importance.

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: Cumberland Valley references the response to PSC Request #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.

RESPONSE: CVE does not favor such a reporting requirement for distribution cooperatives.

Projects such as Smart Grid and/or Smart Metering initiatives would typically be included in cooperative Work Plans. The Commission has held that a cooperative shall not commence work included in a new Work Plan until the Cooperative receives a CPCN from the Commission. This process already provides the Commission an investigation opportunity of proposed Smart Grid and/or Smart Meter initiatives.

Presumably, this process also provides the Commission with an oversight opportunity of any particular proposed Work Plan project, Smart Grid or otherwise, if the Commission chooses.

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: Cumberland Valley references the response to PSC Request #108 submitted by EKPC and adopts that response as its own.

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: Cumberland Valley references the response to PSC Request #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: CVE has not directly commissioned such a study for its service territory because it has not identified or come to be aware of need for it. However, CVE and some of its members currently participate in EKPC's Direct Load Control Program, which is a DSM program. If such a study was performed, it would have been conducted by EKPC.

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: CVE does not participate in the Green Button initiative.

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: Not applicable. CVE does not offer any time-differentiated rates to its members.

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.

RESPSONE: CVE has two types of meters on its system, electro-mechanical and solid state meters. New meters purchased by CVE, both single and poly-phase, are of the solid state variety, as electro-mechanical type meters are no longer manufactured. In 2013, all CVE meters will be equipped with AMI endpoints. CVE has no plans for metering configuration changes.

- 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:
 - 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.

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: CVE is not aware of having received any consumer complaints specifically related to AMR or AMI equipped meters.

implementation of Smart Grid technologies. Provide and describe your company's policy regarding cyber-security or the standard your company has adopted governing cyber-security. 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.

RESPONSE: CVE has no specific cyber-security policy, but the general Computer Use policy addresses several cyber-security concerns, including firewalls, adequate anti-virus and malware protection, remote network access, and limited access via user restrictions and passwords. CVE IT staff is aware of and has reviewed NERC 1300, NIST, and the Standard of Good Practices. Portions of the Standard of Good Practice are implemented as CVE IT staff deems appropriate given CVE's infrastructure and resources. New security measures are incorporated as they become available and as deemed appropriate and justified. In general, Cumberland Valley follows a least access policy, providing equipment and users only the minimum required access to network and computer resources as is needed for daily business activity and limiting or blocking all other access using a mixture of firewalls, encryption, passwords, access control lists, and network routing.

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

RESPONSE: CVE is not aware of any issues that warrant an opt-out provision regarding Smart Meter deployment. Therefore, CVE does not believe an opt-out provision is warranted, CVE has not offered such an option to any member in the past, nor does it plan to offer such a provision in the future. Furthermore, CVE is not aware of having received any complaints, objections or refusals specifically related to Smart Meter deployment.

CERTIFICATE OF SERVICE

I hereby certify that true and correct photocopies of the foregoing Cumberland Valley Electric, Inc., Response to the Commission Staff's First Request for Information were served via hand-delivery and/or mailing a true and correct copy of the same, first class postage prepaid on the 19^{-7} day of March 2013 to the following:

Original and Fourteen (14) Copies hand-delivered to:

Mr. Jeff Derouen, Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40601

Copies were mailed to:

Mr. Allen Anderson President & CEO South Kentucky R.E.C.C. 925-929 N. Main Street P. O. Box 910 Somerset, KY 42502-0910

Mr. Mark Martin VP Rates & Regulatory Affairs Atmos Energy Corporation 3275 Highland Pointe Drive Owensboro, KY 42303

Hon. Mark David Goss Goss Samford, PLLC 2365 Harrodsburg Road, Suite B130 Lexington, KY 40504

Mr. John B. Brown Chief Financial Officer Delta Natural Gas Company, Inc. 3617 Lexington Road Winchester, KY 40391 Mr. Burns E. Mercer President & CEO Meade County R.E.C.C. P. O. Box 489 Brandenburg, KY 40108-0489

Mr. Michael L Miller President & CEO Nolin R.E.C.C. 411 Ring Road Elizabethtown, KY 42701-6767

Mr. Larry Hicks
President & CEO
Salt River Electric Cooperative Corp.
111 West Brashear Avenue
P. O. Box 609
Bardstown, KY 40004

Hon. Rocco D'Ascenzo Senior Counsel Duke Energy Kentucky, Inc. 139 East 4th Street, R. 25 At II P. O. Box 960 Cincinnati, OH 45201 Mr. G. Kelly Nuckols President & CEO Jackson Purchase Energy Corporation 2900 Irvin Cobb Drive P. O. Box 4030 Paducah, KY 42002-4030

Mr. Paul G. Embs President & CEO Clark Energy Cooperative, Inc. 2640 Ironworks Road P. O. Box 748 Winchester, KY 40392-0748

Mr. David Estepp President & General Manager Big Sandy R.E.C.C. 504 11th Street Paintsville, KY 41240-1422

Mr. Bill Prather President & CEO Farmers R.E.C.C. 504 South Broadway P. O. Box 1298 Glasgow, KY 42141-1298

Ms. Carol Wright
President & CEO
Jackson Energy Cooperative Corp.
115 Jackson Energy Lane
McKee, KY 40447

Honorable Iris G. Skidmore 415 W. Main Street Suite 2 Frankfort, KY 40601

Mr. Gregory Starheim President & CEO Kenergy Corp. P. O. Box 18 Henderson, KY 42419 Ms. Carol Ann Fraley President & CEO Grayson R.E.C.C. 109 Bagby Park Grayson, KY 41143

Mr. Lonnie E. Bellar VP - State Regulation Kentucky Utilities Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010

Ms. Debbie J. Martin President & CEO Shelby Energy Cooperative, Inc. 620 Old Finchville Road Shelbyville, KY 40065

Ms. Anthony S. Campbell
President & CEO
East Kentucky Power Cooperative, Inc.
4775 Lexington Road
P.O. Box 707
Winchester, KY 40392-0707

Ms. Judy Cooper Manager, Regulatory Services Columbia Gas of Kentucky, Inc. 2001 Mercer Road P. O. Box 14241 Lexington, KY 40512-4241

Mr. Barry L. Myers, Manager Taylor County R.E.C.C. 625 West Main Street P. O. Box 100 Campbellsville, KY 42719

Mr. Kerry K. Howard, CEO Licking Valley R.E.C.C. P. O. Box 605 271 Main Street West Liberty, KY 41472 Mr. James L. Jacobus
President & CEO
Inter-County Energy Cooperative Corporation
1009 Hustonville Road
P. O. Box 87
Danville, KY 40423-0087

Mr. Christopher S. Perry President & CEO Fleming-Mason Energy Cooperative, Inc. 1449 Elizaville Road P. O. Box 328 Flemingsburg, KY 41041

Honorable Michael L. Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

Ms. Billie J. Richert CFO, VP Accounting, Rates Big Rivers Electric Corporation 201 Third Street Henderson, KY 42419-0024

Hon. David S. Samford Goss Samford, PLLC 2365 Harrodsburg Road, Suite B130 Lexington, KY 40504

Mr. Mark Stallons President & CEO Owen Electric Cooperative, Inc. 8205 Highway 127 North P. O. Box 400 Owenton, KY 40359 Mr. Ed Staton
VP - State Regulation and Rates
Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40202

Mr. Ranie Wohnhas Managing Director, Reg & Finance Kentucky Power Company 101 A Enterprise Drive P. O. Box 5190 Frankfort, KY 40602

MARK ABNER

Cumberland Valley Electric, Inc.

P.O. Box 440

Gray, KY 40734