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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 Attorney General's Initial Requests for Information to the Companies.

Thank you for your assistance in this matter.

Very truly yours, any W. Patrick Hauser

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 1. 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 Abres

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.

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NOTARY PUBLIC, STATE AT LARGE, KY MY COMMISSION EXPIRES: Oct. 5, 2014 429286 dt

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID AND SMART METER TECHNOLOGIES

CASE NO. 2012-00428

CUMBERLAND VALLEY ELECTRIC'S RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUESTS FOR INFORMATION TO THE COMPANIES

Comes now Cumberland Valley Electric, Inc., and for its Response to the

Attorney General's Initial Requests for Information to the Companies states as follows:

1. Since the Commission initiated Consideration of *the New Federal Standards of the Energy Independence and Security Act of 2007,* Administrative Case No. 2008-00408, has the company changed its position regarding Smart Grid? If so, how?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #1 submitted by EKPC and adopts that response as its own.

2. Are the technologies pertaining to the implementation of Smart Grid definitely known and proven?

a. If yes, explain in detail every aspect from the use of each technology from the company to the end-user.

b. If not, explain in detail what technologies are already advancing/improving as well as those that are envisioned on the immediate time horizon.

RESPONSE:

Cumberland Valley only has experience with Smart Metering and SCADA, both of which are known and proven, and has not undertaken any other Smart Grid projects. Aside from those, it is difficult for CVE to say with certainty whether any particular technology is known and proven.

3. In light of resent catastrophic storms over the past ten years (for example, the various ice storms, tornadoes, and strong winds), which electric companies have experienced, and for which the company may ultimately have sought regulatory assets, can the company affirmatively state that its basic infrastructure, including all of its generation, transmission and distribution facilities, have proven to be reliable 24 hours a day, seven days a week, 365 days a week? If not, for each and every storm that it affected the utility in excess of two days, please provide the following:

- a. The number of days before the company's last ratepayer's electricity was restored for each storm.
- b. The average number of days, or hours if applicable, that the average ratepayer's outage lasted for each storm.
- c. The average financial loss for the average ratepayer for each storm, if known.

RESPONSE by Witness Mark Abner:

Cumberland Valley has not experienced any catastrophic events during the subject time period for which it sought regulatory assets.

To the best of the Company's understanding, knowledge and belief, no electric system has ever proven to be 100% reliable, generally speaking. Therefore, CVE cannot affirmatively state that its distribution facilities are reliable to the extent expressed above.

- a) February 2009 wind storm: 5 days December 2009 snow storm: 4 to 5 days
- b) Unknown
- c) Unknown

4. Does the company agree with the Attorney General that electricity is not considered a luxury service but a necessary commodity of modern life? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley does generally agree with the AG regarding electricity as being a necessity in support of the modern lifestyle.

5. Does the company agree that the fundamental reliability of its electric grid - i.e., the delivery of electricity to the end-user 24/7/365 - is paramount to the end-user's ability to monitor and/ or conserve his/her demand or electricity consumption? If not, why not?

RESPONSE by Witness Mark Abner:

The Company does not agree as the two ideas do not seem to be related. The end-user always has the ability to monitor and/or conserve electricity usage regardless of electric grid availability. When the grid is available, the end-user can make use of the electric meter to monitor usage during any period he/she chooses and use that information to make whatever adjustments deemed necessary. When the grid is unavailable, he/she should reasonably be aware that his/her usage is zero.

6. Please state whether the company is aware of any cybersecurity breaches effecting the electric and gas industries that have either occurred in the United States or internationally. If the answer is in the affirmative, please explain the details of the breaches without exposing information that is not already in the public domain.

RESPONSE by Witness Jonathan Grove:

Cumberland Valley is aware of the phishing attacks taking place between December 2011 and June 2012 targeting 23 natural gas pipeline operators, as was reported in the Christian Science Monitor. Cumberland Valley has no information on the attack save what has been made generally available in the media. That is that the attacks were in the form of phishing attacks, which are a common cyber-attack that involves sending employees emails crafted to trick them into clicking on malicious links embedded in the email.

Cumberland Valley is also aware of the attack targeting Hudson Central Gas and Electric that took place in February 2013. Cumberland Valley has no details of the attack other than what has been reported in the news media. That is, that such an attack took

place and that there is no evidence that any information was compromised but that the utility was contacting its customers as a precautionary step.

7. Please confirm that the company is aware that the prior United States Secretary of Defense Leon Panetta, in speaking on the vulnerability of the nation's electric grid with the consequential safety and security concerns that ensue, warned the Senate Appropriations Committee on Defense that the risk to the United States could even be considered the equivalent of a "digital Pearl Harbor¹.

a. Is this concern of the vulnerability of the nation's electric grid shared by the company? If not, why not?

RESPONSE by Witness Jonathan Grove:

Cumberland Valley is aware that that former secretary made such a statement.

a. Cumberland Valley does not agree, as Pearl Harbor represented a single point of vulnerability; a single high value target with a single unified defensive system. Whereas, the nation's electric grid is not a single target, but is in fact a multitude of highly diverse targets, each of which represents a separate defense strategy and set of obstacles to any attacker. Further, the nation's Electric Grid is by its very nature a highly distributed, decentralized, and redundant system that would be highly difficult to damage with any form of cyber-attack.

8. With regard to cybersecurity in general, can the company unequivocally confirm that its system reliability is not vulnerable to a cybersecurity attack? If not, what could be the consequences? Please explain in detail as much as possible for the following:

- a. the company, and
- b. the company's ratepayers.

RESPONSE by Witness Jonathan Grove:

As long as any computer systems are in use in any fashion at a company, they are subject to the vulnerabilities that are inherent to those systems. That having

^{1 1} Comments by Secretary of Defense, Leon Panetta, U.S. Senate Appropriations Subcommittee on Defense, Hearing on FY 13 DoD Budget, June 13, 2012.

http://www.appropriations.senate.gov/webcasts.cfm?method=webcasts.view&id=08e51d6c-4a32-4fa4-b09c-a006fa63c976

been said, Cumberland Valley has taken every step that it considers prudent to ensure the reliability of its system and to guard against cyber-attacks. The consequences of any such attack would be the same for Cumberland Valley and its ratepayers as for any other company in the United States, regardless of industry. These consequences include, but are not limited to, financial loss to the company in the form of overtime and expenditures necessary to properly document any attack and report it to law enforcement, expenditures intended to mitigate future attacks, loss of personal identifying information of the ratepayers stored by the company, and financial loss to the ratepayers stemming from the loss of such confidential information. The actual interruption of service or damage to electric system infrastructure is an extremely unlikely scenario, but cannot be completely ruled out.

9. Please provide the names of the standards, protocols or policies which the company observes and/or implements in its maintaining its system reliability from cybersecurity threats.

RESPONSE by Witness Jonathan Grove:

Cumberland Valley models its policies on practices detailed in NERC 1300 CIP-002-1 through CIP-002-9, NIST 800-12 and 800-26, and the Standard of Good Practice.

10. Please provide copies of the standards, protocols or policies which the company observes and/or implements in its maintaining its system reliability from cybersecurity threats.

RESPONSE by Witness Jonathan Grove:

Cumberland Valley is in the process of drafting a new security policy, to supplement the existing Acceptable Use policy, which is attached (Please see Exhibit 10). Since the NERC CIP, NIST, and Standard of Good Practice are all quite large and widely available, they are not attached as their inclusion would make the return of this data request problematic.

11. With regard to cybersecurity in general, can the company unequivocally confirm that its ratepayers' privacy of data cannot be compromised or otherwise divulged to any individual or entity not associated with the company, or a qualified third-party

which has issues a non-disclosure statement or the ratepayers? If not, what could be the consequences? Please explain in detail as much as possible for the following:

- a. the company, and
- b. the company's ratepayers.

RESPONSE by Witness Jonathan Grove:

As long as any computer systems are in use in any fashion at a company, it is subject to the vulnerabilities that are inherent to those systems. That having been said, Cumberland Valley has taken every step that it considers prudent to ensure the protection of confidential data and personal identification information and to guard against cyber-attacks. Cumberland Valley's data systems are as at least as secure as any other industry that collects and maintains such information, such as banking or health care systems. The consequences of any such attack would be the same for Cumberland Valley and its ratepayers as for any other company that maintains such data in the United States, regardless of industry. These consequences include, but are not limited to, financial loss to the company in the form of overtime and expenditures necessary to properly document any attack and report it to law enforcement, expenditures intended to mitigate future attacks, loss of personal identifying information of the ratepayers stored by the company, and financial loss to the ratepayers stored by the company attaction.

12. If a qualified third-party that has agreed to a non-disclosure statement and obtains ratepayers' private information, what guarantees exist that the information will not be disclosed, whether intentionally or unintentionally?

RESPONSE by Witness Jonathan Grove:

While no guarantee exists that such information will not be disclosed, either intentionally or unintentionally, various regulations and standards exist that reduce that possibility. These include, but are not limited to, NERC CIP, NIST, the Standard of Good practice, and the laws of the United States and the States and possessions thereof.

13. Please provide the names of the standards, protocols or policies which the company observes and/or implements in its maintaining its ratepayers' privacy data from cybersecurity threats.

RESPONSE by Witness Jonathan Grove:

Cumberland Valley complies with the Patriot Act and the Fair and Accurate Credit Transactions Act.

14. Please provide copies of the standards, protocols or policies which the company observes and/or implements in its maintaining its ratepayers' privacy data from cybersecurity threats.

RESPONSE by Witness Jonathan Grove:

Cumberland Valley's Identity Theft Prevention Policy is attached (Please see Exhibit 14). As the Patriot Act and the Fair and Accurate Credit Transactions Act are both quite large and widely available, they are not attached but are referenced here, as their inclusion would make the return of this data request problematic.

15. Given the vulnerability of the electric grid to cyber-attacks, describe what analog (non-digital) means the company will have in place to insure reliability, including but not limited to the maintenance of legacy systems.

RESPONSE by Witness Jonathan Grove:

Legacy systems deemed vital to the reliability of the system will not be replaced by systems that may be vulnerable to attack unless doing so would result in a significant benefit to the Company in the form of increased reliability or decreased maintenance, or a significant befit to the ratepayers.

16. What are the company's estimated costs to invest in order to fully implement Smart Grid?

a. Do any cost estimates include results of any modeling that may show the degree of exposure to the following risks: (a) hacking; (b) electronic magnetic pulses (EMPs, whether related to solar flares or otherwise); and/or (c) weather events? If so, provide a list of the modeling software used to produce any estimates, the scenarios and sensitivities examined, and any and all such results.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #16 submitted by EKPC and adopts that response as its own.

17. Please explain in detail what benefits, if any, the company expects its ratepayers to realize because of Smart Grid?

a. Does the company believe that societal benefits are to be considered in evaluating benefits? If so, detail those societal benefits and how they may be used in evaluations? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #17 submitted by EKPC and adopts that response as its own.

18. Would the company agree to strict limits and/or caps on ratepayer costs? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #18 submitted by EKPC and adopts that response as its own.

19. Would the company agree to allow ratepayers to opt-out of smart meter deployment? If not, why not?

RESPONSE by Witness Mark Abner:

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.

20. Can the company quantify measureable and significant benefits that the ratepayers will realize, including a monetary quantification of net savings (if any) to ratepayers?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #20 submitted by EKPC and adopts that response as its own.

21. Please explain in detail what detriments, if any, the company expects its ratepayers to realize because of Smart Grid? Include in the explanation both new costs as well as stranded costs.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #21 submitted by EKPC and adopts that response as its own.

22. What are the company's estimated costs which the company expects the ratepayers to realize?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #22 submitted by EKPC and adopts that response as its own.

23. What are the company's estimated costs which the company expects its shareholders, if any, to realize? Include in the explanation both new costs as well as stranded costs.

RESPONSE by Witness Mark Abner:

Cumberland Valley is a member owned cooperative and as such, has no shareholders.

24. Does the company agree that its costs to invest and implement Smart Grid will be different than other utility companies? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley agrees that its costs to invest in Smart Grid will be different than other electric utilities.

25. Does the company agree that its ratepayers' benefits, whether financial or otherwise, may differ from one utility to another upon implementation of any Smart Grid technology? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley agrees that benefits to its ratepayers will likely differ from those of other utilities.

26. Can the company guarantee that the deployment of Smart Grid will not interfere with the regulatory compact whereby the ratepayers will receive safe, adequate and reliable service at fair, just and reasonable costs? If not, why not? Explain in detail.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #26 submitted by EKPC and adopts that response as its own.

27. Answer the above question with the definition of "fair, just and reasonable costs" as being economically feasible for the end-user.

a. Provide any cost-benefit analysis that the company has run or will run to make the determination of economically feasible to the end-user.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #16 submitted by EKPC and adopts that response as its own.

28. Regarding time of use (TOU) rates, can the company confirm that low-income ratepayers will not be disproportionately affected more than non-low-income customers? If not, why not? (Provide in the answers in any studies, reports, analyses and relevant data.)

RESPONSE by Witness Mark Abner:

Cumberland Valley cannot confirm or deny that low-income ratepayers will not be disproportionately affected more than higher income ratepayers. Cumberland Valley does not offer TOU rates to its members, has no approved TOU tariffs in place and has not conducted any studies/analyses or developed any reports on the matter.

29. With regard to TOU rates, does the company have any history with any such programs? If so, explain in detail with particular facts as to:

- a. the number of customers who participated;
- b. whether they remained on the program;

- c. whether they saved money on their bills; and
- d. whether the customers ultimately reduced their usage.

RESPONSE by Witness Mark Abner:

As noted in response to question 28 above, Cumberland Valley does not have experience with TOU rates.

- a) Not applicable.
- b) Not applicable.
- c) Not applicable.
- d) Not applicable.

30. What proposals will the company present to deal with technological impediments to the broad use of Smart Grid, including but not limited to the following:

- a. low and fixed-income individuals who do not have Internet resources at their home;
- b. multiple forms of telecommunications technology used to access information (i.e., analog, cellular, VOIP); and
- c. multiple and proprietary technology and software options in the market that may lead to issues of compatibility?

RESPONSE by Witness Jonathan Grove:

Cumberland Valley disagrees with the assumption in the question that there is a clearly defined and established group of projects and investments that constitute "Smart Grid". Therefore, the "broad use" of Smart Grid is yet undetermined. However, this question appears to address the means by which Cumberland Valley will or may provide usage information to low-income members.

a) Recent federal studies show that the overwhelming majority of Americans have regular access to the internet, and that local community centers and libraries as well as internet cafes provide such service to those that do not. ("Broadband Access and the Digital Divide: Federal Assistance Programs" from the

Congressional Research Service by Lennard G. Kruger, published September 7, 2012. Available online at <u>http://www.fas.org/sgp/crs/misc/RL30719.pdf</u>.) However, while such lack of access is statistically unlikely, it cannot be completely ruled out, as such Cumberland Valley intends to use multiple communication channels to make smart metering information and options available to rate payers, including but not limited to, traditional phone lines, SMS messaging, and internet.

- b) As multiple methods of communication are routinely used to access any information service provided in this country, Cumberland Valley does not consider this an impediment so much as an expected and planned for situation that arises during the normal course of business. It is common practice to plan for multiple forms of communication and adopt communication technology agnostic solutions.
- c) Technology and software options in the marketplace that do not come with a high degree of confidence regarding compatibility will not be considered for deployment in CVE's system.

31. Assume: Full deployment of Smart Grid at the residential ratepayer level consisting of a household with only Energy Star appliances, an HVAC system with at least a 15 SEERS rating, etc. and any smart grid apparatuses/equipment for interconnectivity with the electricity provider (including generation, transmission and distribution).

- a. Does the company agree that if full deployment of the magnitude described in the above question occurs, the average residential ratepayer could experience a significant capital outlay?
- b. If so, what are the projected costs?
- c. If no costs are anticipated by the electric provider, why not?

RESPONSE by Witness Mark Abner:

- a. Cumberland Valley agrees that the residential ratepayer could experience a significant capital outlay.
- b. Since there is no clearly defined group of projects that constitute Smart Grid, Cumberland Valley is not in a position to determine the projected costs of the scenario outlined above.

c. Cumberland Valley has no duty to bear any cost associated with equipment chosen, owned and operated by any of its members.Costs associated with equipment placed at the member's premise expressly for connectivity with the electric provider may be borne by either or both parties depending upon the Commission approved design of that particular program.

32. In regard to appliances, such as refrigerators or lighting, does the company agree that in the long run, it is cheaper for the end-user himself/herself to make that capital outlay for the purchase of the appliance or lighting than have the company provide the appliance(s) and build the costs into the company's rate base which would then include a profit component for the company on an-going basis?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #32 submitted by EKPC and adopts that response as its own.

33. Confirm that the Smart Grid depends, at least in part, if not exclusively, on telephony (whether landline, fiber optic, wireless or VOIP) at the end-user level for the end-user to participate in his/her altering his/her electricity usage patterns or behavior.

RESPONSE by Witness Mark Abner:

Cumberland Valley contends that the end-user always has the ability to monitor his/her usage by making use of the electric meter on their premise. As it relates to a Smart Grid technology that the end-user could have access to, CVE would agree that the end-user must have some form of communication capability to receive usage information from the utility.

34. If the answer to the above question is in the affirmative, confirm that limited access or even complete absence of access to telephony will interfere with, if not prevent, the deployment of the Smart Grid at the end-user level.

RESPONSE by Witness Jonathan Grove:

While the lack of telephony communications would prevent the member or ratepayer from realizing many of the direct benefits of smart grid technology, it does not prevent the member or ratepayer from realizing indirect benefits, such as reduced outage restoration time or increased reliability of the electric grid. Further, as such communication can be added by the member or ratepayer at any time, it does not present a significant impediment to installation of the technology from the utility's

point of view. As the capability to access any information must, by necessity, allow for multiple forms of communication access, it becomes a simple matter for the member or ratepayer to add such a capability at a future date with little or no additional assistance from the utility.

35. If the company intends to install infrastructure / software allowing for the transmission of Smart Grid / Smart Meter data over its distribution / transmission conductors and networks, provide estimates, or actual numbers, for the costs of doing so.

RESPONSE by Witness Mark Abner:

\$587,481.35

36. Is there a standard communications' protocol that the company will deploy in its Smart Grid that will be interoperable regardless of the communications provider?

a. If not, explain how the company plans on addressing any problems that might arise.

RESPONSE by Witness Mark Abner:

Cumberland Valley has not adopted a standard communications protocol for Smart Grid technologies.

a. Individual Smart Grid applications will be fully evaluated, including their communications requirements in light of any necessity for interoperability in regards to communication and/or communication providers. This process should insure that no problems arise, but in the event they do, Cumberland Valley will work with its vendor(s) to remedy such problems.

37. If improved reliability is the goal of Smart Grid / Smart Meter, would it not be more cost-effective to invest in infrastructure hardening (for example, utilizing protocols and standards developed and implemented by many utilities in hurricane-prone regions)?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #37 submitted by EKPC and adopts that response as its own.

38. Describe the company's plans to avoid obsolescence of Smart Grid / Smart Meter infrastructure (both hardware and software) and any resulting stranded costs. (This question and the subparts should be construed to relate to both the Smart Grid Investment Standard as well as the Smart Grid Information Standard.)

- a. Describe who would pay for stranded costs resulting from obsolescence.
- b. With regard to the recovery of any obsolete investment, explain the financial accounting that should be used (as in account entry, consideration of depreciation, time period involved, etc.).

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #38 submitted by EKPC and adopts that response as its own.

39. With regard to interoperability standards, does the company agree that Smart Grid equipment and technologies as they currently exist, and are certain to evolve in the future, are not a one size fits all approach to the Commonwealth?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #39 submitted by EKPC and adopts that response as its own.

- 40. Is dynamic pricing strictly defined as TOU?
 - a. If not, explain why not.
 - b. Is the company requesting that dynamic pricing be voluntary or involuntary, if at all?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #40 submitted by EKPC and adopts that response as its own.

41. Please explain in detail whether the company has any dynamic programs in place in Kentucky.

a. For each program, provide the number of participants.

- b. For each program, state whether those participants on aggregate have saved costs on their bills.
- c. For each program, state whether those participants on aggregate have saved costs on their bills.
- d. For each program, state whether each participant has saved costs on his/her/its bills. (The question is not intended to request any private identifier information.)

RESPONSE by Witness Mark Abner:

Cumberland Valley does not have any dynamic programs in place in Kentucky.

- a. Not applicable.
- b. Not applicable.
- c. Not applicable.
- d. Not applicable.

42. Does the company recommend the Commission to formally adopt the EISA 2007 Smart Grid Investment Standard? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #42 submitted by EKPC and adopts that response as its own.

43. Does the company recommend the Commission to formally adopt the EISA 2007 Smart Grid Information Standard? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #43 submitted by EKPC and adopts that response as its own.

- 44. Does the company recommend issuing an IRP Standard?
 - a. If so, what concerns does the company have with a standard, including "priority resource," especially as it relates to cost-effectiveness?
 - b. What concerns would the company have with a standard as it affects CPCN and rate applications?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #44 submitted by EKPC and adopts that response as its own.

45. Does the company agree that any investment in grid modernization infrastructure should be done before deploying TOU rates or dynamic pricing? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #45 submitted by EKPC and adopts that response as its own.

46. Regarding the Kentucky Smart Grid Roadmap Initiative (KSGRI), does the company believe that it provides the fundamental basis for the Commonwealth as a **whole** to proceed with Smart Grid given its lack of incorporating all electric utilities such as municipalities and the TVA, along with its distribution companies? If yes, please explain why. If not, please explain why not.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #46 submitted by EKPC and adopts that response as its own.

47. Does the company believe that the Commonwealth's electric industry is, or will become, so interconnected that all electric entities in any way involved or associated with the generation, transmission and / or distribution of electricity should be included and participate to some degree with Smart Grid if it is to come to fruition? If yes, please explain why. If not, please explain why not.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #47 submitted by EKPC and adopts that response as its own.

48. Does the company believe that any Smart Grid Investment will trigger a CPCN case? If not, why not?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #48 submitted by EKPC and adopts that response as its own.

49. Does the company believe that Dynamic Pricing should be economically feasible for the end-user and be supported by a cost- benefit analysis?

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #49 submitted by EKPC and adopts that response as its own.

50. If additional education is contemplated with the deployment of the Smart Grid, please explain in detail if known or contemplated.

RESPONSE by Witness Mark Abner:

Cumberland Valley references the response to AG Request #50 submitted by EKPC and adopts that response as its own.

CERTIFICATE OF SERVICE

I hereby certify that true and correct photocopies of the foregoing Cumberland Valley Electric, Inc., Response to the Attorney General's Initial Requests for Information to the Companies were served via hand-delivery and/or mailing a true and correct copy of the same, first class postage prepaid on the $\underline{Iq}^{\tau \#}$ 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

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EXHIBIT 10

POLICY STATEMENT NO. 102 Computer and Email Use

SUBJECT: Computer and Email Use

POLICY: Use of Electronic Mail

- 1. Cumberland Valley Electric owns the electronic mail service, and considers electronic mail to be private, direct communication between the sender and the recipient. However, employees cannot expect complete privacy. The contents of electronic mail will not be monitored, viewed, displayed, or reproduced in any form by anyone other than the sender and recipient unless authorized by an officer of Cumberland Valley Electric, a law enforcement representative, or by the Information Systems Administrator.
- 2. Electronic mail is considered official correspondence of Cumberland Valley Electric, and users must avoid the use of inappropriate or derogatory language in their messages. Electronic mail is maintained in computer systems and on backup media for variable lengths of time and may be recovered subsequent to deletion. Electronic mail message may be disclosed in the same manner as paper records. Reasons for the recovery of electronic mail messages may include legal discovery, external investigations by law enforcement personnel, and internal investigations.
- 3. Work-related email will be forwarded to the most appropriate employee in the case of termination or when an employee is absent for an extended length of time. A recipient may designate another employee to receive and read email for business purposes. Personal messages will be forwarded to the intended recipient. If it is not possible to forward personal messages to the intended recipient, they will be destroyed. Messages will not be examined further than is necessary to determine into which category they fall.

Electronic Mail Security

- 1. Hosts that run email routing applications must support and employ security such as authentication and logging at the system and e-mail administration levels. Administrators must employ these security features to prevent and detect unauthorized access to system and application administrative accounts.
- 2. Administrators must actively manage email hosts to minimize security risks.
 - Hosts will run the most current version of email routing applications. Minimally, routing software will incorporate applicable security patches.
 - Email gateways/mailers must not automatically execute attachments or message bodies, such as those found in Multipurpose Internet Mail Extensions (MIME), ActiveX, SML, or Java.
- 3. Email hosts and email users must be internet "good neighbors". Administrators who configure email hosts as relay hosts must take measures to detect and prevent the delivery of unsolicited broadcast email or "spam". Senders of email may not hide or disguise the origin of their messages for illegal or illicit purposes. Forging or altering email messages to impersonate other individuals or entities is strictly forbidden and violators will be subject to corrective action.
- 4. No employee may automatically forward mail outside of the company. For security reasons, it is inappropriate to indiscriminately route all incoming email from Cumberland Valley Electric email accounts outside of the intranet without permission. Retired, but not terminated, employees will maintain access to their internal email account for up to six (6) weeks as a courtesy.

Internet use

- 1. Use of the Internet via the network must be primarily for business or professional development. Limited personal use is acceptable, but discretion is necessary to ensure that individuals do not degrade Cumberland Valley Electric's public image through their actions or adversely affect the availability of network resources. Use of the internet via the network for personal business is prohibited.
- 2. All access and communication to or from the network must occur through an actively managed internet firewall. Use of software or

internet subscription based services intended to circumvent the firewall is prohibited.

- 3. Internet services available via the internal network will be limited to those required for business or professional development.
- 4. Access via the internet into the internal network must be approved by management or their designee. External organizations must have contractual agreements with Cumberland Valley Electric that address information security, confidentiality, and non-disclosure. Access methods must employ strong authentication methods and encryption. Access must be limited to the minimum systems and services required and must be logged.

Standards for Anti-virus

- 1. All systems connected to Cumberland Valley Electric's network, including wireless, VPN, and dial-up connections, are required to have anti-virus controls in place. This standard pertains to all applicable devices connected to the company network including desktops, laptops, handhelds, and servers, whether owned by Cumberland Valley Electric, private individuals, or law enforcement. Such controls may include realtime or periodic scans, and a consistent approach will be maintained throughout the company.
- 2. The Information Systems Administrator will maintain a list of approved anti-virus software and vendors. Approved software will have the capability to be centrally managed and automatically receive frequent updates of virus signatures from the vendor. Additionally approved software will have the capability of automatically cleaning files detected as infected or deleting the file in the event that it cannot be cleaned.
- 3. Users will employ approved anti-virus software. A technical and educational approach will be taken to raise user awareness of virus hazards in the computing environment and the proper actions to take in the event that a virus is detected.
- 4. If necessary, Cumberland Valley Electric will provide and maintain antivirus software on personal systems that are used to access the company's network.
 - Users are responsible for the integrity of their personally owned devices used to access the network.

- Users will employ adequate anti-virus software that is updated regularly via central security control, as practical, or via manual download.
- Cumberland Valley Electric will provide anti-virus protection, where necessary, for personally owned systems that are used for remote access to the company network.
- 5. Cumberland Valley Electric reserves the right to inspect any system attached to the company network for adequate anti-virus protection and the right to deny access to any system that is found to be inadequately protected.
- RESPONSIBILITY: Information Systems Administrator
- SOURCE: Adopted by the Board of Directors on November 9, 2006
- AMENDED: December 14, 2006

EXHIBIT 14

POLICY STATEMENT NO. 110 Identity Theft prevention

PURPOSE:	The goal of this policy is to prevent identity theft. Cumberland Valley Electric recognizes the responsibility to safeguard personal customer information within the workplace. The purpose of this policy is to create an Identity Theft Prevention Program utilizing guides set forth in the FACT Act (2003).		
	The following represents a policy for the development of the identity theft prevention program and procedures that meet standards established by the Federal Trade Commission by November 1, 2008.		
POLICY:			
	Ι.	Definitions:	
		CRA – Credit Reporting Agency	
		CSR – Customer Service Representative	
		IT – Information Technology	
		Identity Theft - Financial identity theft occurs when someone uses another consumer's personal information (name, social security number, etc.) with the intent of conducting multiple transactions to commit fraud that results in substantial harm or inconvenience to the victim. This fraudulent activity may include opening deposit accounts with counterfeit checks, establishing credit card accounts, establishing line of credit, or gaining access to the victim's accounts with the intent of depleting the balances.	
		Cooperative - For the purposes of this policy, Cumberland Valley Electric is referred to as the Cooperative.	
		Red Flag – A pattern, particular or specific activity that indicates the possible risk of identity theft.	
	11.	Procedure:	
		A. Implementing the Program	

- An Identity Theft Prevention Protection Committee will be formed to create, drive and monitor the identity theft prevention program. Members of the committee will include representatives from Senior Management, Accounting, IT, Human Resources and Customer Service.
- A Privacy Officer will be appointed to function as the head of committee. The Privacy Officer will report to the General Manager regarding the outcomes and needs of the identity theft prevention program.
- 3. The Committee will meet bi-annually and review all reported incidents of possible Identity Fraud and Identity Theft. The Committee may suggest changes, additions, or modifications of this policy as well as related policies and procedures. The Privacy Officer will report any recommendations made by the committee to the General Manager.

III. Identity Theft Prevention Program

A. Identifying and responding to red flags.

Cumberland Valley Electric has developed the following procedures designed to detect, prevent and mitigate identity theft in connection with the opening of a covered account or accessing of any existing covered account. All procedures represent a typical but not absolute response. Each situation can and will have unique circumstances, which will be affected by a number of variables.

1. Alerts

a. Fraud or Active Duty Alert

In the event that a consumer report indicates fraud or an active duty alert, the CSR will collect additional information in an attempt to determine if the information was entered incorrectly or if the incident is a possible case of identity fraud. If identity fraud is suspected, the CSR will report the event to his/her supervisor. The event will be documented on the attached incident report form.

b. Credit Freeze

In the event that a consumer report indicates a credit freeze, the CSR will request that the applicant to "thaw" the account.

c. Notice of Address Discrepancy

In the event that a consumer report indicates an address discrepancy, the CSR will contact the CRA and provide address information to the CRA following the restrictions in this policy.

2. Presentation of Suspicious Documents

- a. <u>Identification documents appear altered or forged</u> In the event that identification documents appear altered or forged, service will be held until proper identification is shown and validated. The CSR will hold service until proper identification is provided. If the CSR will document the incident on the attached incident report form and report it to their supervisor. The supervisor will determine if the incident should be reported to law enforcement as a case of possible identity fraud or identity theft.
- b. <u>Photo or Physical description does not match applicant</u> In the event that the photo or physical description on the identification does not match the applicant, service will be held until proper identification is shown and validated. The CSR will hold service until proper identification is provided. The CSR will document the incident on the attached incident report form and report it to their supervisor. The supervisor will determine if the incident should be reported to law enforcement as a case of possible identity fraud or identity theft.
- c. <u>Other information on identification is inconsistent</u> In the event that other information on the identification provided is inconsistent, and the CSR cannot reconcile the information presented, service will be held until proper identification is shown and validated. The CSR will hold service until proper identification is provided. The CSR will document the incident on the attached incident report form and report it to their supervisor. The supervisor will determine if the incident should be reported to law enforcement as a case of possible identity fraud or identity theft.
- d. <u>Information in Cooperative files is inconsistent with</u> information provided

In the event that information provided by the applicant does not match information previously provided to the Cooperative regarding the applicant, the CSR will collect additional information in an attempt to reconcile the differences. If the information cannot be reconciled, the CSR will contact a supervisor for assistance.

- 3. Suspicious Personal Identifying Information
 - a. <u>Identification is inconsistent with external source</u> In the event that the identification provided by the applicant is inconsistent with an external source, such as a lack of correlation between date of birth and social security number, or a social security number that appears on the master death list, the CSR will collect addition information and attempt to resolve the inconsistency. If the inconsistency cannot be resolved, the CSR will direct the applicant to the appropriate agency, such as the social security office, and document the incident on the attached incident report form.
 - b. <u>Applicant fails to provide all personal identification required</u> In the event that the applicant fails to provide all of the personal identification required, service will be held until such time that all required identification is presented and verified.
 - c. Existing account with stable history shows irregularities In the event that an existing account with a previously stable history shows irregularities, the account will be investigated following standard procedures for unusual or suspicious usage.
 - Mail sent to customer is repeatedly returned In the event that mail sent to a customer is repeatedly returned, the account will be investigated and efforts will be made to contact the named account holder.
 - e. <u>The Cooperative is notified of unauthorized changes to an</u> <u>account</u>

In the event that the Cooperative is notified of unauthorized changes made to an account, the CSR will ask the member to file a Federal Trade Commission identity theft affidavit. The member will be asked to obtain and attach a copy of a police report to the affidavit and submit both documents to the Cooperative as detailed in part E of this policy.

4. Notice of Theft

In the event that the cooperative is notified by law enforcement officials or others that a fraudulent account has been opened for an individual or group engaged in identity theft, the cooperative will fully cooperate with any reasonable request made by law enforcement regarding the account. The account will be closed or monitored at the direction of law enforcement.

- B. Preventing, Detecting and Mitigating Breeches in Security
 - 1. In the event of a breech in security, the following precautions will be taken to mitigate damage.
 - a. A potential breech in security will be immediately reported to a supervisor or the privacy committee if a supervisor is unavailable. All CSRs and other need to know employees will be warned to secure all sensitive information. The information that was compromised will be defined to the extent possible in order to determine the scope of the problem.
 - b. The supervisor will report the incident to the privacy committee if the committee has not already been informed.
 The privacy committee will report the incident, including time of the incident, if known, and the apparent scope of the incident to the General Manager.
 - Members affected by the incident will be contacted by phone or by writing depending on the scope of the incident.
 All notifications will take place in a timely fashion and will not exceed ten days.
 - d. In the event of a severe incident of contained scope or readily identifiable information loss, the cooperative may provide protection coverage to the affected members for a period of time not to exceed one year at the discretion of the General Manger.
- C. Responding to Notice of Address Discrepancies

- 1. Cumberland Valley Electric will furnish a confirmed address to the consumer reporting agency (CRA) under the following conditions:
 - a. The cooperative can form a reasonable belief the consumer report relates to the consumer about whom the user requested the report.
 - b. The consumer under review is a current member with an active account.
 - c. The request involves a consumer opening a new account.
 - d. The CRA provides the request in writing within 24 hours.
 - e. The cooperative has an established relationship with the CRA.
- 2. Confirmation of address will be provided by the cooperative to the CRA within 24 hours.
- D. Providing designated Employees with Identity Theft Prevention Training
 - 1. Designated employees will be trained on a need to know basis according to job responsibilities.
 - 2. Initial Training is to be provided on 3 levels
 - a. Committee members participated in a 12 hour professional association Identity Theft Prevention Program workshop covering principles of needs assessment, program design, development, implementation and evaluation. Strategies for revision and reporting were included. Committee members unable to attend will receive one on one training by a workshop attendee.
 - b. Supervisors will receive an initial 2 hour program that addresses supervisory role in preventing identity theft.
 - c. Employees will receive an initial 2 hour program that addresses the safeguarding of secured information.
 - 3. Annual Updates will be provided for all designated employees. Sessions to be a minimum of 30 minutes and will include, but not be limited to patterns of incidents, changes in information technology, changes in methods of identity theft, and will seek employee input on strategies for enhancing the identity theft prevention program.

- 4. Documentation of Training. The Privacy officer will maintain an attendance log of each training sessions as well as a session summary.
- 5. New employees hired into positions handling secured information will receive initial training within 10 days of the date of employment.
- E. Handling Reports of Suspected Identity Theft
 - When a member suspects identity theft, the member will be asked to notify the cooperative in writing, completing the Federal Trade Commission Affidavit. Instructions for completion are a part of the form. A copy of the affidavit is available at <u>http://www.ftc.gov/bcp/edu/resources/forms/affidavit.pdf</u>.
 - 2. The member will be requested to submit a copy of the affidavit to the cooperative with an attached police report.
 - 3. The cooperative will obtain a copy of the members photo ID and will attach the copy to the affidavit.
 - 4. The receipt of all documents will be recorded on the Notice of Identity theft form attached to this policy.
 - 5. Copies of the FTC affidavit, police report, photo ID, and receipt of documents will be submitted to the privacy committee.
 - 6. The privacy committee will determine whether to report the incident to local law enforcement and/or the General Manager.
- RESPONSIBILITY: The CEO is responsible for the provisions of this policy being carried out.

APPROVED: October 16, 2008

NOTICE OF IDENTITY THEFT (form)

Party Submitting the Informatic	on (Consumer)	
Name:		
Address:		
Date and Time or Receipt:		
	ty:	
I acknowledge receipt of this no identity theft:	otice. The information that has been re	eported as resulting from
Has been blocked		
Has not been blocked f	or the following reason(s):	