Grayson Rural Electric Cooperative Corporation

109 Bagby Park • Grayson, KY 41143-1292 Telephone 606-474-5136 • 1-800-562-3532 • Fax 606-474-5862 March 22, 2013

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MAR 27 2013 PUBLIC SERVICE COMMISSION

Mr. Dennis Howard II Assistant Attorney General Commonwealth of Kentucky 1024 Capital Center Drive Frankfort, KY 40601-8204

RE: Consideration of the Implementation of Smart Grid And Smart Meter Technologies Case No. 2012-00428

Dear Mr. Howard:

Please find enclosed the responses of Grayson Rural Electric to the Commission's Order "Attorney General's First Request for Information" dated February 27, 2013, in the above referenced case.

Please contact me at (606) 474-5194 or Carol Fraley at (606) 474-5136 with any questions regarding this filing.

Respectfully submitted,

W. Jeffrø / See

Counsel for Grayson Rural Electric Cooperative Corporation

Enclosure

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of :

Consideration of the Implementation Of Smart Grid and Smart Meter Technologies

Case No. 2012-00428

APPLICANTS RESPONSES TO ATTORNEY GENERAL STAFF'S FIRST REQUEST FOR INFORMATION

The applicant, Grayson Rural Electric, makes the following responses to the" Attorney General Staff's First Request for Information", as follows:

- 1. The witnesses who are prepared to answer questions concerning each request are Carol Fraley, Don Combs, and Brian Poling.
- 2. Don Combs, Manager of Finance and Accounting, is the person supervising the preparation of the responses on behalf of the applicant.
- 3. The responses and Exhibits are attached hereto and incorporated by reference herein.

W. Jeffery Stort, Attorney at Law P O Box 608 Grayson, KY 41143 Attorney for Grayson Rural Electric Cooperative Corporation Telephone: (606) 474-5194 The undersigned, Don M. Combs, as Manager of Finance and Accounting of Grayson Rural Electric, being duly sworn, states that the responses herein are true and accurate to the best of my knowledge and belief formed after reasonable inquiry.

Dated: March 22, 2013

Grayson Rural Electric Cooperative Corporation By:

Don M. Combs

Subscribed, sworn to, and acknowledged before me by Don M. Combs, as Manager of Finance and Accounting for Grayson Rural Electric Cooperative Corporation on behalf of said corporation the 22nd day of March, 2013.

Marsha a. Shackor

Notary Public, State at Large My Commission Expires: 1-9-2015

The undersigned counsel certifies that the foregoing responses have been served upon the following:

Original and fourteen copies

Mr. Jeff Derouen, Executive Director Kentucky Public Service Commission

Mr. Dennis Howard, II Assistant Attorney General

This 22nd day of March, 2013

Attorney for Grayson Rural Electric Cooperative Corporation

COMMONWEALTH OF KENTUCKY

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 ATTORNEY GENERAL'S INTIAL DATA REQUESTS TO THE COMPANIES DATED FEBRUARY 27, 2013 Request 1.Since the Commission initiated Consideration of the New FederalStandards 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:

Grayson Rural Electric references the response to AG Request # <u>1</u> submitted by EKPC and adopts that response as its own.

<u>Request 2.</u> 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:

a. It has provided the needs of Grayson, which are meter readings, remote disconnects, and time of use data.

Grayson Rural Electric 2012-00428 AG 1st Request or Information

Request 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:

This information is not known.

Item # <u>4</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

<u>Request 4.</u> 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:

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Grayson Rural Electric references the response to AG Request # <u>4</u> submitted by EKPC and adopts that response as its own.

Request 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:

Grayson Rural Electric references the response to AG Request $\# _S$ submitted by EKPC and adopts that response as its own.

Item # <u>6</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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:

Grayson is not aware of any cybersecurity breaches.

Request 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 Harbor".

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

Response:

Somewhat.

Item # <u>8</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

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

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

Response:

We believe efforts can be made toward cybersecurity, but to state, unequivocally not vulnerable, is not reality

Request 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:

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We do not prescribe to any particular standards, protocols or policies other that our best efforts.

Grayson Rural Electric 2012-00428 AG 1st Request or Information Item # \underline{IO} Page \underline{I} of \underline{I} Witness: Brian Poling

Request 10.Please provide copies of the standards, protocols or policies which thecompany observes and/or implements in its maintaining its system reliability fromcybersecurity threats.

Response:

n/a

Item # <u>//</u> Page <u>/</u> of <u>/</u> Witness: Brian Poling

Request 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:

No. The impact of ssmart grid data would cause the company and its ratepayers the same potential issues as a hack into any other company's data. It is dependent on the hackers intent as to its impact.

Item # **12** Page <u>1</u> of <u>1</u> Witness: Brian Poling

<u>Request 12.</u> 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:

Grayson Rural Electric's policy is not to provide ratepayers private info to any 3rd party.

Grayson Rural Electric 2012-00428 AG 1st Request or Information Item # <u>13</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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:

NONE

Grayson Rural Electric 2012-00428 AG 1st Request or Information Item # $\underline{/4}$ Page $\underline{/}$ of $\underline{/}$ Witness: Brian Poling

<u>Request 14.</u> 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:

N/A

Item # \underline{IS} Page \underline{I} of \underline{J} Witness: Brian Poling

<u>Request 15.</u> Given the vulnerability of the electric grid to cyberattacks, 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:

Not aware of areas on our system subject to cyberacttacks on our system as to our smart grid data.

Request 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:

Grayson Rural Electric references the response to AG Request # <u>16</u> submitted by EKPC and adopts that response as its own.

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

 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:

Grayson Rural Electric references the response to AG Request $\# \frac{17}{7}$ submitted by EKPC and adopts that response as its own.

Request 18Would the company agree to strict limits and/or caps on ratepayercosts? If not, why not?

Response:

Grayson Rural Electric references the response to AG Request # <u>18</u> submitted by EKPC and adopts that response as its own.

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

Response:

Grayson Rural Electric references the response to AG Request $\# \underline{/9}$ submitted by EKPC and adopts that response as its own.

Request 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:

Grayson Rural Electric references the response to AG Request # <u>20</u> submitted by EKPC and adopts that response as its own.

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Item # <u>Z</u> Page <u>I</u> of <u>I</u> Witness: Brian Poling

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

Response:

Grayson Rural Electric references the response to AG Request # **Z** submitted by EKPC and adopts that response as its own.

<u>Request 22.</u> What are the company's estimated costs which the company expects the ratepayers to realize?

Response:

Grayson Rural Electric references the response to AG Request # **22** submitted by EKPC and adopts that response as its own.

<u>Request 23.</u> 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:

Grayson Rural Electric references the response to AG Request # **23** submitted by EKPC and adopts that response as its own.

Item # **Z4** Page <u>1</u> of <u>1</u> Witness: Brian Poling

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

Response:

Grayson Rural Electric references the response to AG Request # **<u>24</u>** submitted by EKPC and adopts that response as its own.

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<u>Request 25.</u> 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:

Grayson Rural Electric references the response to AG Request # 25 submitted by EKPC and adopts that response as its own.

Grayson Rural Electric 2012-00428 AG 1st Request or Information Item # 26Page <u>1</u> of <u>1</u> Witness: Brian Poling

<u>Request 26.</u> 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:

Grayson Rural Electric references the response to AG Request # 26 submitted by EKPC and adopts that response as its own.

Request 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:

Grayson Rural Electric references the response to AG Request # 27 submitted by EKPC and adopts that response as its own.

<u>Request 28.</u> Regarding time of use (TOU) rates, can the company confirm that lowincome 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:

Low – income rate payers should not be disproportionately affected any more than non-low-income ratepayers.

Grayson Rural Electric 2012-00428 AG 1st Request or Information Item # 29 Page 1 of 1 Witness: Brian Poling

Request 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:

- a. 2
- b. Yes
- c. Yes
- d. Yes

Request 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:

Prepaid metering:

- a. Does not require internet, phone service required
- b. Will work with landline phones, cell phones, smartphones, as well as web interfaces.
- c. Our proposal does not cause compatibility issues.

Request 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:

Grayson Rural Electric references the response to AG Request # <u>31</u> submitted by EKPC and adopts that response as its own.

Item # <u>32</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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 ratebase which would then include a profit component for the company on an on-going basis?

Response:

Grayson Rural Electric references the response to AG Request # <u>32</u> submitted by EKPC and adopts that response as its own.
<u>Request 33.</u> 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:

A consumer could control their usage with web only access. A telephone connection is not required.

Item # <u>34</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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:

n/a

<u>Request 35.</u> 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:

We do not propose the installation of new infrastructure or software at this time.

Item # 36Page <u>1</u> of <u>1</u> Witness: Brian Poling

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

a.

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

Response:

We do not propose the implementation of any new smart grid equipment or communications.

<u>Request 37.</u> 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:

Grayson Rural Electric references the response to AG Request # <u>37</u> submitted by EKPC and adopts that response as its own.

Request 38.Describe the company's plans to avoid obsolescence of SmartGrid/Smart Meter infrastructure (both hardware and software) and any resulting strandedcosts. (This question and the subparts should be construed to relate to both the Smart GridInvestment 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:

Grayson Rural Electric references the response to AG Request # **38** submitted by EKPC and adopts that response as its own.

Item # <u>39</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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:

Grayson Rural Electric references the response to AG Request # <u>39</u> submitted by EKPC and adopts that response as its own.

<u>Request 40.</u>	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:

Grayson Rural Electric references the response to AG Request # 40 submitted by EKPC and adopts that response as its own.

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<u>Request 41.</u> 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:

Grayson has no dynamic programs in place.

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

Response:

Grayson Rural Electric references the response to AG Request $\# \underline{42}$ submitted by EKPC and adopts that response as its own.

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

Response:

Grayson Rural Electric references the response to AG Request # <u>43</u> submitted by EKPC and adopts that response as its own.

Item # <u>44</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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 affectsCPCN and rate applications?

Response:

Grayson Rural Electric references the response to AG Request # <u>44</u> submitted by EKPC and adopts that response as its own.

<u>Request 45.</u> 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:

Grayson Rural Electric references the response to AG Request # 45 submitted by EKPC and adopts that response as its own.

Item # <u>**46**</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

Request 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:

Grayson Rural Electric references the response to AG Request # <u>46</u> submitted by EKPC and adopts that response as its own.

Request 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:

Grayson Rural Electric references the response to AG Request # <u>47</u> submitted by EKPC and adopts that response as its own.

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

Response:

Grayson Rural Electric references the response to AG Request # <u>48</u> submitted by EKPC and adopts that response as its own.

Request 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:

Grayson Rural Electric references the response to AG Request $\# \underline{49}$ submitted by EKPC and adopts that response as its own.

Item # <u>50</u> Page <u>1</u> of <u>1</u> Witness: Brian Poling

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

Response:

Grayson Rural Electric references the response to AG Request # <u>50</u> submitted by EKPC and adopts that response as its own.