


Shelby Energy Cooperative

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PUBLIC SERVICE
COMMISSION

March 29, 2013

Mr. Jack Conway
Attorney General
1024 Capital Center Drive, Suite 200
Frankfort, KY 40601-8204

RE: PSC Case No. 2012-00428

Dear Mr. Conway:

Please find enclosed an original of the responses of Shelby Energy Cooperative, Inc. to the Attorney General's Initial Requests for Information to the Companies and to the Commission Staff's First Request for Information dated February 27, 2013.

Should you have any questions or need further information, please let me know.

Sincerely,




Debra J. Martin
President & CEO

Enclosures

cc: 2012-00428 Service List
Mr. Jeff Derouen, Public Service Commission



Shelby Energy Cooperative

Your Touchstone Energy® Partner 



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CONSIDERTION OF THE IMPLEMENTATION OF
SMART GRID AND SMART METER TECHNOLOGIES

) CASE NO.
) 2012-00428

Responses from Shelby Energy Cooperative, Inc. to
Attorney General's Initial Request for
Information to the Companies

Dated February 27, 2013

March 30, 2013

BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2012-00428

VERIFICATION

I, Debra J. Martin, President & CEO, of Shelby Energy Cooperative, Inc., declare that the statements contained in this response are true to the best of my information and belief.

Debra J. Martin

Debra J. Martin, President & CEO
Shelby Energy Cooperative, Inc.

Subscribed and sworn to before me by Debra J. Martin, this 27th day of March, 2013.

Farran Cox

Notary Public, State-At-Large

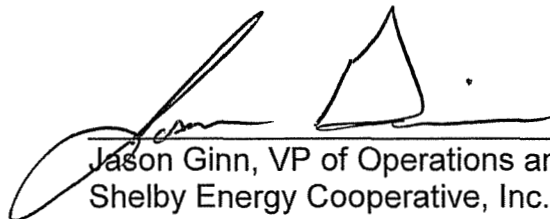
My commission expires: 10/2/15

ID # 451416

BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2012-00428

VERIFICATION

I, Jason Ginn, Vice President of Operations and Engineering, of Shelby Energy Cooperative, Inc., declare that the statements contained in this response are true to the best of my information and belief.



Jason Ginn, VP of Operations and Engineering
Shelby Energy Cooperative, Inc.

Subscribed and sworn to before me by Jason Ginn, this 28th day of March, 2013.



Notary Public, State-At-Large

My commission expires: 10/30/2016.

BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2012-00428

VERIFICATION

I, Nicholas Morris, Manager of Engineering, of Shelby Energy Cooperative, Inc., declare that the statements contained in this response are true to the best of my information and belief.

Nicholas S. Morris
Nicholas Morris, Manager of Engineering
Shelby Energy Cooperative, Inc.

Subscribed and sworn to before me by Nicholas Morris, this 27th day of
March, 2013.

Mary Gay Tennill
Notary Public, State-At-Large
ID 415621

My commission expires: March 28, 2014.

BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2012-00428

VERIFICATION

I, David Graham, System Engineer, of Shelby Energy Cooperative, Inc., declare that the statements contained in this response are true to the best of my information and belief.



David Graham, System Engineer
Shelby Energy Cooperative, Inc.

Subscribed and sworn to before me by David Graham, this 28th day of March, 2013.



Notary Public, State-At-Large

My commission expires: 4-18-16 ID 464,181

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
AND SMART METER TECHNOLOGIES
PSC CASE NO. 2012-00428
SHELBY ENERGY COOPERATIVE'S RESPONSES
TO ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES
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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 1:

Shelby Energy Cooperative references the response to AG Request #1 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 2:

There is not enough information, at this time, to determine if the technologies pertaining to the implementation of Smart Grid are definitely known and proven.

Shelby's experience with supervisory control and data acquisition (SCADA) and more recently with automated metering infrastructure (AMI) has been satisfactory and the systems thus far have been found to be accurate and efficient.

Response 2(a):

N/A

Response 2(b):

N/A

Witness:
Jason Ginn

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3. In light of recent 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 3:

Shelby Energy has not requested a regulatory asset for recovery of any costs for catastrophic storms.

Shelby's distribution system has proven to be reliable, but we continue to work on improving service reliability to customers.

Shelby is unaware of any generation, transmission or distribution facilities that have proven to be reliable 24 hours a day, seven days a week, 365 days a year in the state of Kentucky or across the nation.

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Response 3(a):

Shelby tracks each outage manually but we are unable to provide data on the number of days before the company's last ratepayer's electricity was restored for each storm with the current outage tracking method. The chart below shows the number and the dates of "Major Event Days" (MED's) or days each year that were considered extreme in the number of outages and their duration. This annual report is on file with the PSC in Shelby Energy's Reliability File for Case No. 2006-00494.

<u>Major Event Days</u>					
<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
1/21/2007	2/6/2008	1/27/2009	6/29/2010	4/20/2011	3/2/2012
3/25/2007	2/12/2008	1/28/2009	7/17/2010	4/23/2011	7/1/2012
3/28/2007	5/11/2008	1/29/2009	8/5/2010	5/5/2011	7/26/2012
11/8/2007	7/3/2008	1/30/2009		5/23/2011	7/27/2012
	7/20/2008	1/31/2009		8/13/2011	
	9/14/2008	2/1/2009			
	9/15/2008	2/11/2009			
	9/16/2008	6/1/2009			
		7/25/2009			
		10/9/2009			

Response 3(b):

This information is not currently tracked but will be in the future with the implementation the Outage Management System.

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Response 3(c):

We are unable to obtain or provide this information.

Witness:
Jason Ginn

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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 4:

Shelby Energy Cooperative references the response to AG Request #4 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 5:

Shelby Energy Cooperative references the response to AG Request #5 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 6:

Shelby Energy is unaware of any cyber security breaches that have affected the electric or gas industries in the US.

Witness:
David Graham

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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"¹.
- a. Is this concern of the vulnerability of the nation's electric grid shared by the company? If not, why not?

Response 7:

Shelby Energy is aware of the importance of cyber security.

Response 7(a):

Yes

Witness:

David Graham

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>

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8. With regard to cyber security 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 8:

Shelby Energy cannot unequivocally confirm that its system is not vulnerable to a cyber-security attack. Shelby relies on entities such as NERC (North America Electric Reliability Corporation), SERC Reliability Corporation, and East Kentucky Power (G&T) that can determine system reliability. If any one of these companies experiences a cyber-attack that affects their system reliability, then Shelby Energy's distribution system could also be affected.

Response 8(a):

The consequences could range from a virus or worm on the network to outages caused from hacking into a system. Since Shelby Energy is unaware of any successful cyber security attack in the US, the consequences are undetermined. Shelby Energy would follow the policies and procedures in place to deal with the situation if one arose.

Response 8(b):

It is uncertain of detailed consequences that would apply to the ratepayer.

Witness:

David Graham

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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 9:

Refer to Shelby Energy's response to Question #104 of the commission staff's first request for information on PSC case 2012-00428.

Witness:
David Graham

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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 10:

Refer to Shelby Energy's response to Question #104 of the commission staff's first request for information on PSC case 2012-00428.

Witness:
David Graham

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 11:

Shelby Energy cannot unequivocally confirm that its ratepayers' privacy of data cannot be compromised. Shelby believes we have taken reasonable precautions with the understanding continued awareness follows as technologies evolve.

Response 11(a):

The consequences are undetermined, but Shelby Energy would follow the policies and procedures in place to deal with the situation if one arose.

Response 11(b):

The consequences are undetermined, but Shelby Energy would follow the policies and procedures in place to deal with the situation if one arose.

Witness:

David Graham

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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 12:

There are no guarantees. Shelby takes reasonable steps when conducting business with a third-party to protect ratepayers' information through support of a contract, non-disclosure statement and/or confidentiality statement.

Witness:
David Graham

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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 13:

Refer to Shelby Energy's response to Question #104 of the commission staff's first request for information on PSC case 2012-00428.

Witness:
David Graham

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 14:

Refer to Shelby Energy's response to Question #104 of the commission staff's first request for information on PSC case 2012-00428.

Witness:
David Graham

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 15:

If a cyber-attack occurred which included the loss of SCADA, remote communications, or office systems the individual devices can be manually controlled via a front panel located at each device. The devices on the distribution system, normally, function normally even when communications are lost.

Witness:
David Graham

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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16. What are the companies' 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 16:

Shelby Energy Cooperative references the response to AG Request #16 submitted by EKPC and adopts that response as its own.

Response 16(a):

Shelby Energy Cooperative references the response to AG Request #16a submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 17:

Shelby Energy Cooperative references the response to AG Request #17 submitted by EKPC and adopts that response as its own.

Response 17(a):

Shelby Energy Cooperative references the response to AG Request #17a submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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

Response 18:

Shelby Energy Cooperative references the response to AG Request #18 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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

Response 19:

Shelby Energy Cooperative references the response to AG Request #19 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 20:

Shelby Energy Cooperative references the response to AG Request #20 submitted by EKPC and adopts that response as its own.

.....
.....
Witness:
Jason Ginn

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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 21:

Shelby Energy Cooperative references the response to AG Request #21 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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

Response 22:

Shelby Energy Cooperative references the response to AG Request #22 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 23:

Shelby Energy Cooperative references the response to AG Request #23 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 24:

Shelby Energy Cooperative references the response to AG Request #24 submitted by EKPC and adopts that response as its own.

Witness:

Jason Ginn

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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 25:

Shelby Energy Cooperative references the response to AG Request #25 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 26:

Shelby Energy Cooperative references the response to AG Request #26 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 27:

Shelby Energy Cooperative references the response to AG Request #27 submitted by EKPC and adopts that response as its own.

Response 27(a):

Shelby Energy Cooperative references the response to AG Request #27a submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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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 28:

Shelby Energy has one residential TOU rate, the Electric Thermal Storage (ETS) tariff. Refer to Shelby Energy's response to Question #103 of the commission staff's first request for information on PSC case 2012-00428.

Shelby has no data available to confirm low-income ratepayers are or are not disproportionately affected more than other customers.

Witness:
Jason Ginn

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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 29(a):

Refer to Shelby Energy's response to Question #103(a) of the commission staff's first request for information on PSC case 2012-00428.

Response 29(b):

The customers who have installed an ETS unit have historically remained on the tariff.

Response 29(c):

The ETS tariff currently provides an off-peak rate of \$0.06118 per kWh compared to the Residential Service – Rate 12 of \$0.08861 per kWh.

Response 29(d):

Refer to Shelby Energy's response to Question #103 of the commission staff's first request for information on PSC case 2012-00428.

Witness:
Jason Ginn

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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 30(a):

Those Shelby Energy customers who do not have internet resources will not be eliminated from participation in various programs provided by Smart Grid although options to utilize may not be as broad as those who do have internet resources.

Response 30(b):

Telephone applications, text messaging, emailing and other technologies will be taken into consideration, evaluated and applied as necessary to meet the needs of Shelby Energy's customers.

Response 30(c):

Shelby Energy will address new technology and software options for the future to best meet the needs of the customers.

Witness:
Jason Ginn

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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 31:

Shelby Energy Cooperative references the response to AG Request #31 submitted by EKPC and adopts that response as its own.

Response 31(a):

Shelby Energy Cooperative references the response to AG Request #31a submitted by EKPC and adopts that response as its own.

Response 31(b):

Shelby Energy Cooperative references the response to AG Request #31b submitted by EKPC and adopts that response as its own.

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Response 31(c):

Shelby Energy Cooperative references the response to AG Request #31c submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 32:

Shelby Energy Cooperative references the response to AG Request #32 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 33:

We confirm that in order for the end user to participate in altering their usage and being able to monitor usage in a convenient manner, the customer will have need of a communication method; be it landline, fiber optic, wireless, VOIP, in-home display or other options.

Witness:
Jason Ginn

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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 34:

Shelby Energy does feel that the lack of availability of telephony will interfere with the Smart Grid on the end-user level to some degree. However, Shelby disagrees that it will prevent the deployment of the Smart Grid at the end-user level regarding other benefits such as service reliability, outage restoration, etc.

Witness:
Jason Ginn

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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 35:

Refer to Shelby Energy's response to Question #98 and Question #99 of the commission staff's first request for information on PSC case 2012-00428. Shelby has no additional plans for investment in Smart Grid other than those provided in the above responses.

Witness:
Jason Ginn

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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 36:

Shelby Energy has not established a standard communications protocol at this time.

Response 36(a):

As Shelby Energy assesses new Smart Grid technology the integration of that system is evaluated to ensure proven protocols and communications standards are used before purchasing.

Witness:
David Graham

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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 37:

Shelby Energy Cooperative references the response to AG Request #37 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 38:

Shelby Energy Cooperative references the response to AG Request #38 submitted by EKPC and adopts that response as its own.

Response 38(a):

Shelby Energy Cooperative references the response to AG Request #38a submitted by EKPC and adopts that response as its own.

Response 38(b):

Shelby Energy Cooperative references the response to AG Request #38b submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 39:

Shelby Energy Cooperative references the response to AG Request #39 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 40:

Shelby Energy Cooperative references the response to AG Request #40 submitted by EKPC and adopts that response as its own.

Response 40(a):

Shelby Energy Cooperative references the response to AG Request #40a submitted by EKPC and adopts that response as its own.

Response 40(b):

Shelby Energy Cooperative references the response to AG Request #40b submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 41:

Yes, refer to Shelby Energy's responses to Question #103(a-d) of the commission staff's first request for information on PSC case 2012-00428 for responses to 41 (a-d).

Response 41(a):

N/A

Response 41(b):

N/A

Response 41 (c):

N/A

Response 41(d):

N/A

Witness:

Debra Martin

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

Response 42:

Shelby Energy Cooperative references the response to AG Request #42 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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

Response 43:

Shelby Energy Cooperative references the response to AG Request #43 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 44:

Shelby Energy Cooperative references the response to AG Request #44 submitted by EKPC and adopts that response as its own.

Response 44(a):

Shelby Energy Cooperative references the response to AG Request #44a submitted by EKPC and adopts that response as its own.

Response 44(b):

Shelby Energy Cooperative references the response to AG Request #44b submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 45:

Shelby Energy Cooperative references the response to AG Request #45 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 46:

Shelby Energy Cooperative references the response to AG Request #46 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 47:

Shelby Energy Cooperative references the response to AG Request #47 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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

Response 48:

Shelby Energy Cooperative references the response to AG Request #48 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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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 49:

Shelby Energy Cooperative references the response to AG Request #49 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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

Response 50:

Shelby Energy Cooperative references the response to AG Request #50 submitted
by EKPC and adopts that response as its own.

Witness:
Jason Ginn