Shelby Energy Cooperative
Your Touchstone Energy® Partner

March 29, 2013

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P. O. Bopx 615
211 Sower Boulevard
Frankfort, KY 40602

RE: PSC Case No. 2012-00428

Dear Mr. Derouen:

Please find enclosed for filing with the Commission in the above-referenced case an original and fourteen (14) copies of the responses of Shelby Energy Cooperative, Inc. to the Commission Staff's First Request for Information dated February 27, 2013 and to the Attorney General's Initial Requests for Information, also 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. Jack Conway, Attorney General

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Shelby Energy Cooperative

Your Touchstone Energy® Partner

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

Responses from Shelby Energy Cooperative, Inc. to
Commission Staff's First Request for Information

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, President & CEO
Shelby Energy Cooperative, Inc.

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

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#464181

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
AND SMART METER TECHNOLOGIES
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60. Refer to the Direct Testimony of Isaac S. Scott ("Scott Testimony"), page 6. Describe Mr. Scott's understanding of the Commission's experience with technological obsolescence in the telecommunications industry.

Response 60:

Shelby Energy Cooperative references the response to PSC Request #60 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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61. Refer to the Scott Testimony, page 13, lines 20-24 which refers to customer education. Explain whether Mr. Scott is familiar with the customer education efforts undertaken by Owen Electric in conjunction with its Energy Innovation Vision program and, if so, whether those efforts are consistent with the type of effort to which he refers.

Response 61:

Shelby Energy Cooperative references the response to PSC Request #61 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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62. Refer to the Scott Testimony, page 14, lines 17-19 which indicate that EKPC and its members believe the Commission should consider cost recovery through a rate case or "through a rider mechanism." To date, EKPC and its members have expressed a preference for recovery of DSM and energy efficiency program costs through base rates rather than through a DSM surcharge. Explain whether this statement indicates a different position by EKPC and its members concerning Smart Grid and Smart Meter cost recovery than their position concerning DSM and energy efficiency cost recovery.

Response 62:

Shelby Energy Cooperative references the response to PSC Request #62 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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63. Refer to Page 15 of the Scott Testimony, at lines 15-17. Provide a general framework concerning how EKPC and its Members would engage and educate their customers on customer risks, responsibilities, and benefits associated with the implementation of smart technology, include in this discussion whether EKPC and its Members are conducting similar consumer education programs in connection with any of their current demand side management, or energy efficiency, programs.

Response 63:

Shelby Energy Cooperative references the response to PSC Request #63 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
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64. Refer to the Scott Testimony, page 17, lines 22 through 24 which states "especially in deployments of Smart Meters, the achievability of the benefits is significantly dependent upon customer response and participation, which often is not determinable prior to deployment." Explain how Smart Grid investments differ from Demand-Side Management ("DSM") investments in that regard. Include in the explanation whether experiences of other utilities and cost/benefit tests similar to those used in determining the cost effectiveness of DSM programs could be used in making the Smart Grid investment decision

Response 64:

Shelby Energy Cooperative references the response to PSC Request #64 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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65. Refer to the Scott Testimony, page 20, item 4 Basic Consumer Protections; Disconnects. Explain what changes EKPC and its member-owners would make to how remote disconnects are handled.

Response 65:

Shelby Energy Cooperative references the response to PSC Request #65 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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AND SMART METER TECHNOLOGIES
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66. Refer to the Scott Testimony, page 33, lines 3-23 and the statement that ""...groups of customers have and are resisting these deployments and insisting on "opt-out" provisions..."" Describe in detail the experience of EKPC's member-owners regarding opt out requests.

Response 66:

Shelby Energy Cooperative references the response to PSC Request #66 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
AND SMART METER TECHNOLOGIES
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67. Explain the extent to which EKPC has implemented Smart Grid technology pertaining to its transmission system and substations. Include in the explanation whether the technology is reliability related, security related, or efficiency related. Also include whether EKPC believes further investment in such technology could be beneficial, and if so, its plans for future implementation.

Response 67:

Shelby Energy Cooperative references the response to PSC Request #67 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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AND SMART METER TECHNOLOGIES
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98. Between calendar years 2007 and 2012, explain what Smart Grid and/or Smart Meter initiatives the utility implemented. The explanation should include but not be limited to why each initiative qualifies as a Smart Grid and/or Smart Metering initiative; the date of installation; the total cost of installation; and any benefits resulting from the initiatives, quantifiable or otherwise, received by both the utility and the customers.

Response 98:

In March 2011, Shelby Energy completed implementation of a two-way, power-line carrier automated metering infrastructure (AMI) system which included changing out all meters at a cost of $2,871,160. The AMI system reads each meter daily, which allows Shelby Energy to better answer customer questions on high bill concerns, power quality issues (voltage and blinks), and other usage information. Also, with daily meter reads, a malfunctioning meter is detected much quicker and these meters are changed in a timelier manner which practically eliminates estimated bills. The AMI system allows Shelby Energy to verify communication with each meter to determine an outage or outage restoral and the AMI system permits performance of troubleshooting functions that save unnecessary trips to service locations for issues that are on the customer's side of the service such as a main breaker being tripped in the customer's panel.

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The technology that Shelby Energy chose with the AMI system allows for a daily reading of voltage at each meter and also counts blinks that the meter encounters. With this data, Shelby Energy is able to address system issues, many times, far in advance of it becoming a service quality issue for the customer. Another feature of the AMI system is the ability to connect/disconnect services remotely which helps save time, money and provides better customer service. In addition, it provides a safer work environment for Shelby Energy employees, because on-site visits regarding disconnects for non-payment are no longer necessary and during emergency situations involving power outages, dispatchers can better isolate the cause preventing employees from having to unnecessarily patrol multiple line sections on foot during extreme weather .

Witness:
David Graham

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99. Between calendar years 2013 and 2018, explain what additional Smart Grid and/or Smart Meter initiatives the utility has forecasted to be implemented. The explanation should include but not be limited to why each forecasted initiative qualifies as a Smart Grid and/or Smart Metering initiative; the forecasted date of installation; the forecasted total cost of installation; and any forecasted benefits to result from the initiatives, quantifiable or otherwise, received by both the utility and the customers.

Response 99:

In 2013, Shelby Energy will be implementing an Outage Management System (OMS) which will integrate with the AMI system to more accurately predict total customers affected during outage situations on the distribution system in addition to streamlining the dispatching functions whereby the monitoring of 4-5 technical systems may be reduced to 1-2 systems. This permits more safe, effective and efficient dispatching of crews and system outages. The OMS system will cost approximately $15,500 for installation.

Another project Shelby Energy will be implementing in 2013 is a Meter Data Management (MDM) system. This will allow the customer access to their personal metering data so they can monitor more closely their Kwh usage and provide a tool to the customer to assist with conservation of electricity. With the implementation of MDM, Shelby Energy will file for approval of a Prepay Metering program. The MDM and Prepay Metering program will cost approximately $21,000 for installation.

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Shelby feels there are multiple benefits to our members from these 2 (two) projects. Customers will be able to monitor their usage allowing for them to make sound decisions concerning electric consumption and in turn promote energy conservation for customers in Shelby's service territory. The MDM system will allow members to perform many of the functions that generally require a trip to the office to be handled remotely on Shelby's customer portal. The members can log into their account with a secure password and request changes to their address, telephone number, e-mail address, initiate budget billing, Bank Draft (ACH) service and other general information. A customer will be provided the opportunity to review financial information concerning their account such as the balance, payments, monthly bills and other miscellaneous transactions that have been made on the account.

Witness:
Jason Ginn

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100. With regard to DA Smart Grid Initiatives provide the following:

a. The number of DA systems installed as of December 31, 2012 along with the associated benefits realized.

b. The number of DA systems to be installed in the next five years.

c. The total number of DA systems to be installed when the DA system is completely deployed.

Response 100(a):

Refer to the answer to question #99

Response 100(b):

Refer to the answer to question #99

Response 100(c):

Unknown

Witness:
Jason Ginn

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101. With regard to Volt/VAR Optimization, provide the following:

a. The number of Volt/VAR Optimization systems installed as of December 31, 2012 along with the associated benefits realized.

b. The number of Volt/VAR Optimization systems to be installed in the next five years along with the forecasted in service date.

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

Response 101(a):

Shelby Energy does not have a Volt/Var Optimization System. Capacitors and regulators are controlled at the individual unit locations. Shelby Energy has had good success with fixed and switched capacitors and voltage regulators settings without the costs of communications and the need to upgrade controls.

Response 101(b):

None planned at this time.

Response 101(c):

None planned at this time.

Witness:
David Graham

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102. With regard to Supervisory Control and Data Acquisition ("SCADA") Smart Grid Initiatives, provide the following:

a. The number of SCADA systems installed as of December 31, 2012 along with the associated benefits realized.

b. The number of SCADA systems to be installed in the next five years along with the forecasted in service date.

c. The total number of SCADA systems to be installed when the SCADA system is completely deployed.

Response 102(a):

Shelby Energy currently has SCADA installed at all fourteen (14) of its distribution substations. Shelby finds the SCADA system to have many benefits that go un-noticed by members on the distribution system. The SCADA system allows insight into what the feeders are doing at the substations without having an employee in the station. When working on outage restorations, Shelby is able to re-energize a line without having an employee present inside the station. This assists from a safety standpoint by limiting the line technician's exposure to any issue that may occur in the substation. The SCADA system also allows Shelby to monitor station loading and voltages on a real-time basis.

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Response 102(b):

N/A

Response 102(c):

N/A

Witness:
Jason Ginn

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103. As it relates to Dynamic Pricing (where rates are established hourly throughout the day) Tariffs or Time of Use ("TOU") Tariffs, provide the following:

a. The number of customers the utility has or had on these types of tariffs, identified separately by specific tariff.

b. Whether these customers shifted load from high-price time periods to lower-priced time periods

c. Whether these customers consumed more, less or the same amount of kWh.

d. Whether the utility reached any findings or conclusions based on its experience with customers on Dynamic Pricing and/or TOU Tariffs.

Response 103(a):

Shelby Energy currently has seventy-five (75) customers utilizing the Electric Thermal Storage (ETS) tariff.

Shelby has an Optional TOD Demand rate for accounts with KW demand greater than 200 KW but has no customers using this tariff.

Response 103(b):

The ETS tariff provides time clocks that are programmed to use kWh during off-peak hours as follows:

May-September	10:00 p.m. to 10:00 a.m.
October-April	12:00 Noon to 5:00 p.m. and 10:00 p.m. to 7:00 a.m.

The TOD tariff has the following hours applicable for demand billing based on EST:

May-September	10:00 a.m. to 10:00 p.m.
October-April	7:00 a.m. to 12:00 Noon and 5:00 p.m. to 10:00 p.m.

Response 103(c):

The ETS unit is normally used in addition to an existing heating source, and it is unknown if the customers using this tariff consumed more or consumed less kWh.

Response 103(d):

Shelby Energy has reached no findings or conclusions based on its experience with the ETS tariff.

Witness:
Debra Martin

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104. Describe precautions taken and/or standards developed by the utility to address concerns regarding cyber security and privacy issues.

Response 104:

Shelby Energy has policies in place regarding security and privacy issues.

Please refer to Exhibit 1 and 2 which are made part of this response.

SHELBY ENERGY COOPERTIVE, INC.
Shelbyville, Kentucky

POLICY NO. 324

INFORMATION TECHNOLOGY

I. OBJECTIVES:

A. Provide employees with information regarding the policies and procedures in place that affect their access to Information Technology (IT) resources as needed and required for the performance and fulfillment of job responsibilities and duties.

B. Identify the acquisition, maintenance, management and distribution of IT resources and to provide both general and specific guidelines for effective management, control and security of the IT resources.

C. Provide assurance to the Board that Shelby Energy is adequately planning for the effective utilization of its IT resources.

D. Define user responsibilities for Shelby Energy systems, software, hardware, equipment and other technologies.

II. CONTENT:

A. Information Resources Management

1. Types of IT resources; technologies that create records, and those that do not.

a. Those that create records include, but may not be limited to, the Internet, the Intranet, e-mail, fax, voice mail, text messages, software applications and other technologies.

b. Those that do not create records include, but may not be limited to computer hardware, pagers, two-way radios, other communication devices and various equipment.

2. Responsibilities

a. Shelby Energy has the right to monitor and review employee use of IT resources at any time and for any reason at Shelby Energy's sole and absolute discretion.

b. Only minimal personal use of Shelby Energy's IT resources is allowed, and must not interfere with the business of Shelby Energy, including but not limited to the matters referred to in SEC's Board Policy No. 922 "Use of Electronic Communications".

c. Access to Shelby Energy-provided IT resources may be denied or revoked at any time, for any reason and without notice.

d. Access and privileges on Shelby Energy systems and various resources are assigned and managed by the administrators of specific systems. Eligible individuals may become authorized users of a resource or system and be granted appropriate access and privileges by following the approval steps for that resource or system.

e. Employees are prohibited from using Shelby Energy-provided IT resources and systems in such a way that they pose a risk of disrupting SEC activities.

f. Employees will be informed about confidentiality, privacy, and acceptable use of Shelby Energy-provided IT resources and resources as defined in this policy.

3. Privacy and Accessibility

a. Employees should have no expectation of privacy while using Shelby Energy-provided equipment, software and other electronic devices. E-mail and other electronic files create a record and may be accessible through the discovery process in the event of litigation, an internal audit process, or otherwise.

b. Although employees may create a password for daily use of equipment, the equipment and password are property of Shelby Energy, and Shelby Energy may access the equipment or cancel the password at any time.

c. Shelby Energy may elect to use software specifically created for computer monitoring to assure the proper use of IT systems.

4. Oversight

The Information Technology Specialist (ITS) is the employee designated to monitor and maintain Shelby Energy's information security program and IT policies.

5. Violations and Disciplinary Action(s)

a. Shelby Energy employees are accountable for their actions relating to IT resources.

b. Violations of this policy will be reported to the applicable VP/Manager and to the President and CEO.

c. Employees who violate or abuse the provisions of this policy may be subject to disciplinary action as outlined n Board Policy No. 901 "Employment Practices" or applicable criminal prosecution.

B. Systems Integrity and Security

1. Passwords

a. Passwords shall not be shared with others not authorized to have access.

b. Passwords will be changed every six months.

c. New passwords must be a minimum of 8 characters, contain at least one capital alpha character, one numeric and/or one special character, (!@#$%^&*?~).

d. Passwords should not contain common phrases, parts of the user's name, telephone number or date of birth.

e. Passwords should be easy to remember and not placed in writing.

f. Employees are individually responsible for keeping passwords secure and current with the above criteria.

2. Security

a. Workstation computers will be logged-off and left in the "desktop" mode when leaving for the day.

b. Workstation computers will be locked or logged-off when left unattended during lunch, breaks or other extended periods of time.

c. Confidential information shall be kept secure at workstations, including but not limited to data displayed on monitors, payment receipts, bill stubs, checks or other documents and information.

d. Employees must comply with IT security policies and procedures.

e. Software applications must be updated promptly, by IT qualified employees, when security upgrades become available.

f. Employees will be provided information on procedures regarding security.

g. Employees will be responsible for assigned computers and for actions that may be associated with the assigned computer.

h. Programmable computing devices must contain active virus protection software and will be subject to Shelby Energy security controls when remotely connecting to Shelby Energy network.

3. Virus Prevention, Detection, and Removal

Shelby Energy regularly monitors the network servers, but it may be possible for a virus to infect Shelby Energy computers. Should this occur, it is important that employees follow these guidelines:

a. **Using the telephone**, immediately contact IT personnel.

b. **Do not** send any emails.

c. **Do not** open any applications or save files to the workstation or server.

d. **Do not** log off workstation until IT has given permission.

4. Information Technology Asset Protection

The supervising VP/Manager of information technology and IT personnel are responsible for the management, operation, and security of the Shelby Energy network and to ensure that IT assets are protected.

C. Network Architecture and Performance

1. Access to network resources will be controlled and limited to authorized employees only.

2. Networks spanning Shelby Energy's boundaries will have defined multiple points, each protected by the appropriate security parameters and access control mechanisms.

3. The network access firewall and/or secure gateway will be configured to deny all incoming services unless explicitly permitted.

D. Software Acquisition

1. All software programs or applications must be submitted to IT for approval prior to installation.

2. Third party applications and software must meet certain criteria prior to being used on company equipment and on Shelby Energy premises.

3. IT personnel are responsible for keeping the network secure and maintaining required licensing for applications used on Shelby Energy equipment.

E. Continuity, Retention and Recovery

1. IT personnel is responsible for the backup and continuity of IT resources and infrastructure.

2. Shelby Energy will follow the procedures provided in the "Emergency Restoration Plan" regarding loss of operating systems at the main office.

3. E-mail will be retained online for no less than one year with periodic copies in addition to the routine backup procedure unless otherwise required by litigation or investigation.

F. Purging of Records and Equipment

1. The supervising VP/Manager of information technology will notify IT personnel at the appropriate time to purge any electronic equipment that is to be replaced or transferred to another user including but not limited to computers or cellular telephones.

a. Leased office equipment that is returned to a vendor will be purged of any information that may be stored on the machine(s) and requires written certification from the vendor(s) stating that all stored files or data of Shelby Energy has been removed.

b. Hard drives will be purged multiple times to the "bit level" on obsolete company's computer(s) and laptops. Hard drives will be stored until notified to be disposed of by the supervising VP/Manager of information technology.

III. RESPONSIBILITY

The President and CEO is responsible for the administration of this policy

Reference: BP 922 and Safety Manual

Adopted: February 22, 2011
Reviewed: November 21, 2012

SHELBY ENERGY COOPERATIVE

Shelbyville, Kentucky

POLICY NO. 930

IDENTITY THEFT PREVENTION PROGRAM

I. OBJECTIVE

A. To protect the identity/financial data of our member-consumer and minimize the possibility of identity theft of consumer information.

B. To comply with the requirements of the FTC and the "Red Flags" Rule.

C. To establish a program to detect, prevent and mitigate identity theft.

II. POLICY

A. The Information Technology (IT) & System Engineer and Office Services Manager will be responsible for the ongoing involvement in and oversight, development, implementation and administration of the Identity Theft Program.

B. Training for the employee will be provided.

C. Third party software will provide oversight and assure that the program is properly used.

D. An annual report will be prepared and presented to the Board of Directors on compliance with the program and any incidents experienced during the year. The report will include:

a. The effectiveness of the policies and procedures in addressing the risk of identity theft.
b. Significant incidents that have occurred and managements' response.
c. Recommendations for changing the program.

E. As risk factors are discovered, such as identity theft, member information breach, etc., the policy will be reviewed and revised to address any future risks.

F. An investigation will be conducted when any of the following "Red Flags" are discovered:

   a. Incidents of identity theft.
   b. Methods of identity theft that reflect identity theft risks.
   c. Alerts, notifications, or other warnings received from a consumer reporting agency or service provider.
   d. The presentation of suspicious documents, such as altered or forged documents.
   e. The presentation of suspicious personal identification information
   f. The unusual use of an account.
   g. Notice from consumers, victims of identity theft, law enforcement authorities, or other persons regarding possible identity theft.
   h. A fraud of active duty alert is included with a consumer report.
   i. A consumer reporting agency provides a notice of address discrepancy.
   j. Identification photo that does not match the person.
   k. Invalid Social Security Number.
   l. Mail sent to a consumer is frequently returned.

G. When establishing service for a new consumer or changing an address for an existing consumer, every effort should be made to verify the information given. This will include visual examination of documents presented by the consumer and verification with consumer reporting agencies, including verification of Social Security number.

H. Monitoring the security of consumer identity data must be an ongoing process. When a consumer's information has been jeopardized the following procedure will be followed:

   a. Contact the consumer.
   b. Eliminate the breach of information, such as change passwords, etc.
   c. Notify law enforcement.

I. The IT & System Engineer and Office Services Manager will provide ongoing oversight of third party software providers and service providers that utilize consumer information to assure that consumer identity information is secure and utilized properly.

III. RESPONSIBLIITY

The President and CEO is responsible for the administration of this policy.

Adopted: April 23, 2009

Revised: March 18, 2010

Witness:
David Graham

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105. Provide a discussion and details of progress made regarding the concern raised by the utilities as it relates to the interoperability standards for Smart Grid equipment and software.

Response 105:

Shelby Energy has worked with our vendors to ensure that all smart grid equipment that has been purchased has the "multi-speak" capabilities to help ensure that all components involved will communicate properly.

Witness:
Jason Ginn

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106. Provide a discussion concerning how the costs (investment and operating and maintenance costs) associated with the installation of Smart Grid facilities should be recovered from the ratepayers.

Response 106:

Shelby Energy Cooperative references the response to PSC Request #106 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

CONSIDERATION OF THE IMPLEMENTATION OF SMART GRID
AND SMART METER TECHNOLOGIES
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107. Explain whether the utility would be in favor of a reporting requirement to the Commission so that the Commission is aware of the jurisdictional Smart Grid and/or Smart Meter activities within the Commonwealth. As a specific example, the reporting requirement could be a report provided each September regarding the Smart Grid and/or Smart Meter activities the utility is planning to perform the upcoming calendar year, followed by an April report of the Smart Grid and/or smart Meter activities the utility completed the preceding calendar year.

Response 107:

Shelby Energy Cooperative references the response to PSC Request #107 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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108. Explain whether the utility believes KRS 278.285 is an appropriate approach to recovering the costs (investment and operation and maintenance) associated with Smart Grid investments.

Response 108:

Shelby Energy Cooperative references the response to PSC Request #108 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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109. Explain whether the utility believes a tracking mechanism as described beginning on page 3 of the Wathen Testimony on behalf of Duke Kentucky is an appropriate approach to recovering the costs associated with Smart Grid investments.

Response 109:

Shelby Energy Cooperative references the response to PSC Request #109 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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110. Explain whether the utility has commissioned a thorough DSM and Energy Efficiency ("DSM-EE") potential study for its service territory. If so, provide the results of the study. If not, explain why not.

Response 110:

Shelby Energy Cooperative references the response to PSC Request #110 submitted by EKPC and adopts that response as its own.

Witness:
Jason Ginn

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111. Refer to the Munsey Testimony on behalf of Kentucky Power, page 10, lines 11-19 regarding the Green Button initiative. Describe the extent of your utility's participation in this industry-led effort.

Response 111:

Shelby Energy supports the philosophy behind the Green Button initiative. With implementation of the AMI system along with the MDM system, mentioned in Response #98, Shelby Energy's customers will have access to data about their household energy use through the website and customer portal.

Witness:
Jason Ginn

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112. Refer to the Roush Testimony on behalf of Kentucky Power, DMR Exhibit 1. Provide a similar exhibit containing a list of time differentiated rates available to your customers.

Response 112:

Tariff/Rider	Description	Comm. Case	Order Date
ETS	Off Peak Retail Marketing Rate	2010-00509	6/1/2011
Rate 22	Optional T-O-D Demand	2010-00509	6/1/2011

Rate 22: Available to all consumers whose kW demand shall be greater than 200 kW Interruptible: this schedule shall be made available to any member where that member will contract for an interruptible demand of not less than 250 kW and not more than 20,000 kW subject to a maximum number of hours interruption per year and a specified notice period.

Witness:
Nick Morris

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113. Provide a description of the type of meters (mechanical, electro-mechanical, AMR [One way communication], AMI [Two way communication]) currently used by the utility. Include in the description the reasons the current meters were chosen and any plans to move to a different type of metering configuration.

Response 113:

Shelby Energy deployed solid state AMI meters on the distribution system between October, 2011 and March, 2012. Meters were chosen based on the compatibility with the two-way communication abilities of the ACLARA Universal Metering Transponder (UMT) modules. This included the L+G Focus AL, GE I-210+, and the GE KV2C meters. The UMT module allows voltage reads, blink counts, along with usage data, and the ability to push firmware/software updates to these meter modules. Shelby Energy has no plans to move to a different type of metering configuration.

Witness:
David Graham

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114. If either AMR or AMI metering is in use, explain whether the utility has received any customer complaints concerning those meters. If so, provide the following:

a. The number of complaints, separated by gas and electric if a combination utility, along with the total number of customers served.

b. How the complaints were addressed by the utility.

c. A detailed explanation as to whether customers should have the ability to opt out of using either AMR or AMI metering.

d. If customers were to be given the opportunity to opt out of using either AMR or AMI metering, provide:

i. An explanation as to whether the utility should establish a monthly manual metering reading tariff or charge applied to the opt out customers to recover the costs associated with manually reading the non-AMR or -AMI accounts.

ii. An explanation as to whether these opt out customers could still receive benefit from the utility using either AMR or AMI metering.

iii. An explanation addressing the point at which opt out customers, either in terms of number of customers or a percent of customers; affect the benefits of the utility using either the AMR or AMI metering.

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Response 114(a):

Electric meters:	2 complaints
Gas meters:	N/A
Total customers served:	15,378

Response 114(b):

One complaint was received during the implementation process of the AMI system. This member was concerned about spying by government agencies and/or Shelby Energy through the use of the utility's AMI meter. It was explained to the member that the meter was used for the purpose of obtaining energy usage in order to issue a bill each month and to provide more reliable service to members through monitoring momentary blinks and other issues. The customer was not completely satisfied that future privacy would not be an issue but understood Shelby's purpose for using the AMI system.

The second member with a concern asked to have the AMI meter removed from his residence due to health and privacy issues. He had discussed a number of issues referring to radio frequency communications and related health concerns, how readings were taken every two seconds, how it could be known when people were home and even determine what television program was being viewed. It was explained to the member that the AMI meters on Shelby's distribution system use power-line carrier communications and not radio frequency communications, meters were routinely read once each day with individual readings taken to assist members or evaluate service issues as needed and

Shelby had no capabilities based on a daily reading of the meter to know when a member was home or to know what television program was being viewed. It was shared, with the customer that at this time; Shelby had no opt-out provision regarding the AMI meter.

Response 114(c):

Shelby Energy feels that there should not be an opt-out provision based on information that can be obtained concerning the customer's account and the impact, as a whole, for maintaining or improving service on the distribution system. Information regarding momentary service interruptions/blinks, actual voltage and other load data is invaluable when working outages, monitoring service reliability and planning line conversion and construction projects. Allowing customers to opt-out would not permit the entire system to be handled in a uniform manner and would inadvertently result in not being able to provide the same level of service to all customers.

Response 114(d)(i):

Should an opt-out provision opportunity provided, then there should definitely be a flat fee for the cost and installation of the meter, if applicable, in addition to a monthly fee applied to recover all costs associated with servicing the accounts in regards to meter reading. This could be costly, due to most utilities not having a meter reader(s) on staff resulting in the work being performed by more specialized employees paid at higher rates such as line technicians.

Response 114(d)(ii):

Some peripheral benefits would be received in regards to restoration during outages since surrounding meters would indicate an outage in the area. However; no conservation, load control or "Green Button" initiatives would be available in addition to possible estimation of meter readings due to access to the meter resulting from weather and other possible issues.

Response 114(d)(iii):

Any op-opt will impact the benefits of the AMI system. However; it is unknown, at this time, what number or percent would off-set the benefits of original implementation and in the end create costs to other members.

Witness:
Jason Ginn

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115. In testimony, each utility cited cyber security as an area of concern related to the implementation of smart-grid technologies. Provide and describe your company's policy regarding cybersecurity or standard your company has adopted governing cyber security. If your company has not adopted any policy or standard, identify and describe any industry or nationally recognized standards or guidelines that you may be aware of that the Commission should consider relating to cyber security issues and concerns.

Response 115:

Refer to the response for question # 104.

Shelby Energy tries to make all data connections secure by using firewall technology and password protection. In addition the following protocols are used:

- Central internet gateway to protect the network.
- Anti-Spam/Anti-Virus filter on e-mail prior to entry into the network.
- Intrusion detection and prevention, Anti-Spyware, Anti-Virus software and content filter at the internet gateway.
- A secure, centrally managed server for remote traffic via an SSL encrypted gateway.
- Anti-Malware software updated every four (4) hours or less.
- Update systems on a regular basis.

- Backup all critical data daily.
- Remove employee access immediately when leaving the organization.
- Domain joined, password protected network with the least privileges needed.

Witness:
David Graham

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

Response 116:

Refer to **Response 114(c).**

Witness:
Jason Ginn