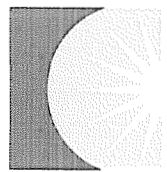



RECEIVED

MAR 20 2013

PUBLIC SERVICE
COMMISSION



CLARK ENERGY

A Touchstone Energy Cooperative 

**COMMONWEALTH OF KENTUCKY BEFORE THE
PUBLIC SERVICE COMMISSION**

In re the Matter of:

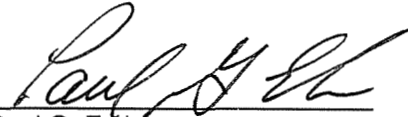
**CONSIDERATION OF THE IMPLEMENTATION)
OF SMART GRID AND SMART METER)
TECHNOLOGIES)**

**CASE NO.
2012-00428
AG Questions**

Clark Energy Cooperative, Inc. ("Clark Energy"), pursuant to the Public Service Commission's (PSC) information request dated February 27, 2013, hereby submits the following response dated March 20, 2013 regarding Case No. 2012-00428

DATE: March 20, 2013

ATTEST:


Paul G. Embs
President & CEO

CERTIFICATE OF PREPARATION

STATE OF KENTUCKY)

COUNTY OF CLARK)

This letter is to certify that I, Scott Sidwell, Sr. V.P. of Engineering & Operations for Clark Energy Cooperative in Winchester, Kentucky, completed this report and do attest the information contained within this response is true, accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

This 19 day of March, 2013

Scott Sidwell

Scott Sidwell

Witnessed by

Alyson Kurty

Notary Public, KY State at Large

My Commission Expires 9/7/2016

My Commission Expires _____

Notary ID 471829

March 20, 2013

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
INITIAL DATA REQUESTS TO THE COMPANIES
DATED FEBRUARY 27, 2013

March 20, 2013

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

March 20, 2013

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

Response to 2: Clark Energy maintains that sufficient data has been gathered in the field of DA and AMR/AMI as to make the use of such technologies viable.

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

Response to 2 a: Taking into consideration the considerable amount of research information currently available along with the pilot projects being done around the country we believe it would be reasonable to say that technologies pertaining to the implementation of Smart Grid are viable.

Clark Energy has been entering the world of Smart Grid with caution, only selecting technologies that we feel have value to our members. This value comes through improving their service reliability by using SCADA or DA and AMR/AMI which will make us more efficient and potentially offer our members options on energy efficiency, TOU or prepaid metering.

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 to 2 b: Not applicable

March 20, 2013

Request 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:

Response to Request 3: Clark Energy strives to deliver reliable service to our members with the least amount of outage time possible but the inherent nature of power lines make it impossible to provide service without some power outages.

a. The number of days before the company's last ratepayer's electricity was restored for each storm.

Response to 3 a: We track each outage individually and as a group 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 our current outage reporting format. Attached is a chart showing the dates for the number of "Major Event Days" (MED's) or days each year that were considered extreme in nature and for the most part caused by extreme weather conditions.

March 20, 2013

	2006	2007	2008	2009	2010	2011	2012
Dates	None	None	None	27-Jan	None	None	29-Jun
				28-Jan			30-Jun
				29-Jan			
				30-Jan			
				31-Jan			
				1-Feb			
				2-Feb			
				3-Feb			
				4-Feb			
				11-Feb			
				12-Feb			
				25-Jun			
				26-Jun			
				27-Jun			

b. The average number of days, or hours if applicable, that the average ratepayer's outage lasted for each storm.

Response to 3 b: This information is not available with our current outage reporting format.

c. The average financial loss for the average ratepayer for each storm, if known.

Response to 3 c: The average financial loss for the average ratepayer for each storm is unknown by Clark Energy.

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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 to Request 6: Clark Energy is not aware of any cybersecurity breaches of any size or impact affecting the electric industry that has occurred in the US or internationally in recent years.

March 20, 2013

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".

Response to Request 7: Clark Energy is aware of prior United States Secretary of Defense Leon Panetta's comments

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

Response to Request 7 a: Rather than speculate and speaking with only the experience of an electric distribution cooperative about our physical and cyber security we believe that for Clark Energy the impact of a cyber-attack upon our system would be minimal. Any DA or SCADA equipment affected by a cybersecurity breach could be manually bypassed and re-energized. Our AMI information is protected with the latest technology and we will be vigilant in addressing any kind of attacks that might come through our system. We cannot be held hostage to cyber terrorists.

March 20, 2013

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

- a. the company, and

Response to Request 8a: We can never state unequivocally that our system isn't vulnerable to cyber-attacks but we have implemented industry safeguards, tools, and processes such as firewalls, configuration of equipment to limit access and router ACL's. Backup copies of all our data are kept off site and it would be a matter of taking the time to find and fix the problem that allowed the initial attack before reinstalling the software and data.

- b. the company's ratepayers.

Response to Request 8b: It would be less than honest to say a breach of information would not affect our members but Clark Energy has no real way of determining the consequences since each scenario would be different. Our members credit card information is not stored on site by Clark Energy and the latest implemented industry safeguards, tools, and processes such as firewalls, configuration of equipment to limit access and router ACL's are used to safeguard this information.

March 20, 2013

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 to Request 9: Clark Energy observes and/or implements the following protocols in maintaining system reliability. NERC(North American Electric Reliability Corp) CIP-002-1 through CIP 009-2 and NIST as they pertain to our segment of the electrical supply chain. They are listed below:

- CIP-002 Cybersecurity – Critical Cyber Asset Identification
- CIP-003 Cyber CIP-002 Cyber Security – Critical Cyber Asset Identification
- CIP-003 Cyber Security – Security Management Controls
- CIP-004 Cyber Security – Personnel and Training
- CIP-005 Cyber Security – Electronic Security Perimeters
- CIP-006 Cyber Security – Physical Security of Critical Cyber Assets
- CIP-007 Cyber Security – System Security Management
- CIP-008 Cyber Security - Incident Reporting and Response Planning
- CIP-009 Cyber Security – Recovery Plans for Critical Cyber Assets

March 20, 2013

Request 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 to Request 10: All of the protocols listed are easily accessed on the internet and would require considerable paper to reprint and include with this document.

March 20, 2013

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:

Response to Request 11: When it comes to computer information systems it is impossible to unequivocally confirm that our member's privacy of data cannot be compromised or divulged.

a. the company, and

Response to Request 11a: We have implemented industry safeguards and processes such as firewalls, configuration of equipment to limit access, router ACL's, system offsite data backup in an attempt to prevent cyber-attacks or breach of our DA or AMR/AMI data. It is difficult to predict what the consequences might be without knowing the extent of the intrusion. In the worst case scenario all systems would be compromised and would need to be taken out of service and manually operated until problems could be resolved and replacement software could be installed. Outages may occur but only until personnel could respond and manually disconnect and restore service.

b. the company's ratepayers.

Response to Request 11b: As discussed in Request 8b, it would be less than honest to say a breach of information would not affect our members but Clark Energy has no real way of determining the consequences since each scenario would be different. Our members credit card information is not stored on site by Clark Energy and the latest implemented industry safeguards, tools, and processes such as firewalls, configuration of equipment to limit access and router ACL's are used to safeguard this information.

March 20, 2013

Request 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 to Request 12: Clark Energy knows of no way to guarantee such a scenario.

March 20, 2013

Response 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 to Request 13: Clark Energy has an internal operational policy (Operations Policy 303.9) that deals with internal email, internet, hardware and software guidelines. National Information Solutions Cooperative (NISC) is a billing software company that services many of the cooperatives across the nation maintains our in-house member information and meter data. Some of the standards and practices that NISC uses is listed here:

Configuration standards for operating systems, web servers and database servers are consistent with those established by The Center for Internet Security (CIS.) General Linux server configuration is based upon the CIS SuSE Linux Enterprise Server Benchmark 10 v2.0. Web server configuration is based upon the CIS Apache HTTP Server Benchmark 2.4 v1.0.0. Database server configuration is based upon the CIS Oracle Benchmark v2.01.

- Services, applications, scripts and drivers that will not be used must be disabled/removed (where practical)
- Implement only one primary function per server
- Privileged access must be performed over secure channels, (e.g., encrypted network connections using SSH or IPSec)
- Access to services should be logged and/or protected through access-control
- Critical security patches should be installed on the system within 90 days of release, the only exception being when immediate application would interfere with business requirements. In the event that a patch breaks the system, it can be rolled back using:
 - The Install Server for the original RPMs (and)
 - The Distribution Server for any additional patches that may need to be applied
- Trust relationships between systems are a security risk, and their use should be avoided. Do not use a trust relationship when some other method of communication will do

March 20, 2013

- Always use standard security principles of least required access to perform a function
- Anti-virus must be installed, active and automatically updated on all systems commonly affected by viruses (e.g., Microsoft Windows)
- System clocks must be synchronized with central time server via NTP
- Sensitive data at rest must be encrypted with Triple DES (TDES) at a minimum

March 20, 2013

Request 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 to Request 14: A copy of our internal policy is included with this document. The standards and polices outlined by NISC are too large in volume to include with this report.

March 20, 2013

CLARK ENERGY COOPERATIVE, INC.

WINCHESTER, KENTUCKY

OPERATIONS POLICY # 303.9

SUBJECT: E-MAIL, INTERNET , HARDWARE AND SOFTWARE GUIDELINES

OBJECTIVES

- A. To establish guidelines for e-mail, internet hardware and software use in conjunction with accomplishing job duties and the protection of information that resides within cooperative databases.

II. CONTENT

- A. Cooperative employees shall use e-mail, the internet, computer software, hardware and computer network services as set forth in this policy as a guide to conducting themselves in professional and ethical manner whenever they access the cooperative's electronic data communications systems.

III. POLICY CONTENT AND PROVISIONS

- A. Employees should conduct themselves in a professional manner when using e-mail and internet services. Employees are expected to:
- Act in a courteous, respectful manner when using these services
 - Never use broadcast e-mail for distribution of personal notices
 - Limit personal use of e-mail and internet services in order to ensure that it does not interfere with Cooperative business
- B. Accessing chat rooms, using instant messaging programs, weather bug type programs, internet radio, news groups and the sending of chain letters "emails that ask you to forward to all your friends" is not permitted. Intentional accessing web sites that have a pornographic content or using the system to transmit materials of a pornographic content is prohibited and will be grounds for corrective action up to and including termination.
- C. E-mail and internet access are provided as tools to meet the business needs of the Cooperative. They belong to Clark Energy Cooperative and employees should not

March 20, 2013

have any expectation of privacy regarding their use. Clark Energy Cooperative reserves the right to access, review, audit, intercept, copy, disclose or delete messages created, received or sent through the e-mail system, including those stored on individual employee computers and related media. The data and information stored, transmitted or received through the cooperative-supplied e-mail and internet access systems are also cooperative property and employees should not have any expectation of privacy in the use of the systems.

Operations Policy # 303.9
Page 2

III. POLICY CONTENT AND PROVISIONS

- D. Care should be taken to maintain the security of the computing network and cooperative confidential information. Passwords should not be given to anyone and sensitive cooperative information should be encrypted before sending via the internet. Passwords will be changed monthly. Files from any external source (downloaded, e-mail attachment, from a diskette, etc.) should be checked for viruses before using.
- E. PC users may not duplicate any licensed software or related documentation for use on or off premises unless expressly authorized to do so by agreement with the licensor. Unauthorized duplication of software may subject users and/or the cooperative to both civil and criminal penalties under the United States Copyright Act. Users may not give software to any outside personnel including, but not limited to, clients, contractors or members, without the approval of the President and CEO. Software must only be used in accordance with applicable license agreements.
- F. All software and hardware must be approved by IT personnel before purchase and must be installed by the IT personnel, including downloaded software. This restriction is to ensure that the cooperative has a complete record of all software purchased, assure it is properly installed, registered and can be supported and upgraded accordingly and also for the protection of our system.
- G. All software is to be delivered to the IT personnel for inventory and proper completion of registration cards which are returned to the publisher. Software must be registered in the name of Clark Energy Cooperative along with the user's title or department of intended use. Software should never be registered in the name of an individual user.
- H. Users are not permitted to download and install software from the internet (except Adobe Acrobat Reader). This includes, but is not limited to instant messaging, screen savers, wallpaper and music. IT personnel will remove any unauthorized software. Streaming audio or video is not permitted except as approved for occasional presentations for a short period of time.
- I. Any employee, vendor, contractor or guests are not permitted to connect non Clark Energy hardware or other devices to Clark Energy network infrastructure without IT personnel review.
- J. All PC and Tablet software and hardware setting modifications will be performed by IT personnel.

March 20, 2013

Operations Policy # 303.9

Page 3

IV. RESPONSIBILITY

A. The department managers are directly responsible to see that the policy is adhered to within their respective areas.

B. The President and CEO is responsible to the Board of Directors for overall compliance.

Adopted: 8/17/06

March 20, 2013

Request 15. 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 to Request 15: Clark Energy does not have any analog (non-digital) means to insure reliability and our research has not shown any advantage to pursuing it. We do not maintain any legacy systems since most of our technology is of recent purchase.

March 20, 2013

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

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

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 to Request 16 a,b,c: Clark Energy Cooperative references the response to AG Request #16 a,b,c submitted by EKPC and adopts that response as its own.

March 20, 2013

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

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

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

March 20, 2013

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

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

March 20, 2013

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

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

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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

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

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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

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

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

March 20, 2013

Request 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 to Request 28: TOU rates are not applicable to any tariffs that Clark Energy currently has in place.

March 20, 2013

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:

Response to Request 29: Clark Energy has no history with any such programs.

a. the number of customers who participated;

Response to Request 29 a: N/A

b. whether they remained on the program;

Response to Request 29 b: N/A

c. whether they saved money on their bills; and

Response to Request 29 c: N/A

d. whether the customers ultimately reduced their usage.

Response to Request 29 d: N/A

March 20, 2013

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;

Response to Request 30a: Clark Energy is currently studying this issue but has no proposal at this time..

b. multiple forms of telecommunications technology used to access information (i.e., analog, cellular, VOIP); and

Response to Request 30b: Clark Energy does not have a proposal to deal with having multiple forms of communications at this time. All of the technology mentioned is compatible with each other given the right interface so security would seem to be the only issues to deal with.

c. multiple and proprietary technology and software options in the market that may lead to issues of compatibility?

Response to 30 c: Most of the technology that Clark Energy has invested in is MultiSpeak compliant, a protocol that allows other manufacturers software to work together.

March 20, 2013

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?

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

b. If so, what are the projected costs?

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

c. If no costs are anticipated by the electric provider, why not?

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

March 20, 2013

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

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

March 20, 2013

Request 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 to Request 33: Based upon our current knowledge of Smart Grid, Clark Energy would agree that this statement is correct.

March 20, 2013

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 to Request 34: Complete absence of access to telephony would interfere with end-user level Smart Grid, but geographic areas without basic telephony service are becoming rarer.

March 20, 2013

Request 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 to Request 35: Clark Energy is in the process of installing a power line carrier AMR/AMI system. The pre-approved work plan budgeted costs for this system is \$1,559,000.

March 20, 2013

Request 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?

Response to Request 36: NRECA/CRN along with a group of Smart Grid vendors has developed a common protocol called MultiSpeak that will allow interoperability regardless of the provider.

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

Response to Request 36 a: N/A

March 20, 2013

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

March 20, 2013

Request 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.)

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

a. Describe who would pay for stranded costs resulting from obsolescence.

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

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

March 20, 2013

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

March 20, 2013

Request 40. Is dynamic pricing strictly defined as TOU?

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

a. If not, explain why not.

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

b. Is the company requesting that dynamic pricing be voluntary or involuntary, if at all?

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

March 20, 2013

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

Response to Request 41: Clark Energy does not have any dynamic programs in place in Kentucky.

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

Response to Request 41a: N/A

- b. For each program, state whether those participants on aggregate have saved costs on their bills.

Response to Request 41b: N/A

- c. For each program, state whether those participants on aggregate have saved costs on their bills.

Response to Request 14 c: N/A

- 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 to Request 41d: N/A

March 20, 2013

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

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

March 20, 2013

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

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

March 20, 2013

Request 44. Does the company recommend issuing an IRP Standard?

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

a. If so, what concerns does the company have with a standard, including "priority resource," especially as it relates to cost-effectiveness?

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

b. What concerns would the company have with a standard as it affects CPCN and rate applications?

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

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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

March 20, 2013

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

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

March 20, 2013

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

March 20, 2013

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

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