OWEN Electric



Case No. 2012-00428

ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE INC
8205 Hwy 127 N
PO Box 400
Owenton, KY 40359
502-484-3471

CRAWFORD & BAXTER, P.S.C.

ATTORNEYS AT LAW

523 Highland Avenue P.O. Box 353 Carrollton, Kentucky 41008

James M. Crawford Ruth H. Baxter Phone: (502) 732-6688 1-800-442-8680 Fax: (502) 732-6920 Email: CBJ523@AOL.COM

March 20, 2013

Mr. Jeff Derouen, Executive Director Kentucky Public Service Commission 211 Sower Boulevard P.O. Box 615 Frankfort, Kentucky 40602-0615 RECEIVED MAR 20 2013

PUBLIC SERVICE COMMISSION

RE: Owen Electric Cooperative, Inc. PSC Case No. 2012-00428

Dear Mr. Derouen:

Please find enclosed the original and fourteen (14) copies of the responses of Owen Electric Cooperative, Inc., to the Attorney General's Order "Initial Data Requests to the Companies" posted on February 27, 2013, in Case No. 2012-00428.

Please contact me with any questions regarding this filing.

Respectfully yours,

CRAWFORD & BAXTER, P.S.C.

Attorney for Owen Electric Cooperative, Inc.

JMC/mns

cc: Attorney General

Utility Intervention and Rate Division

1024 Capital Center Drive Frankfort KY 40601

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the above Responses to Attorney General's Order "Initial Data Requests to the Companies" was served via e-mail to all parties on the _____day of March, 2013, to the following:

Allen Anderson, President & CEO South Kentucky R.E.C.C. 925-929 N. Main Street P.O. Box 910 Somerset, Kentucky 42502-0910

Kerry K. Howard, CEO Licking Valley R.E.C.C. 271 Main Street P.O. Box 605 West Liberty, Kentucky 41472

Anthony S. Campbell, President & CEO East Kentucky Power Cooperative, Inc. 4775 Lexington Road P.O. Box 707 Winchester, KY 40392-0707

James L. Jacobus, President & CEO Inter-County Energy Cooperative Corporation 1009 Hustonville Road P.O. Box 87 Danville, KY 40423-0087

Mike Williams, President & CEO Blue Grass Energy Cooperative Corp. 1201 Lexington Road P.O. Box 990 Nicholasville, KY 40340-0990

Paul G. Embs, President & CEO Clark Energy Cooperative, Inc. 2640 Ironworks Road P.O. Box 748 Winchester, KY 40392-0748

Debbie J. Martin, President & CEO Shelby Energy Cooperative, Inc. 620 Old Finchville Road RECEIVED

MAR 20 2013

PUBLIC SERVICE COMMISSION

Shelbyville, KY 40065

Carol Wright, President & CEO Jackson Energy Cooperative Corporation 115 Jackson Energy Lane McKee, KY 40447

David Estepp, President & General Manager Big Sandy R.E.C.C. 504 11th Street Paintsville, KY 41240-1422

Michael L. Miller, President & CEO Nolin R.E.C.C. 411 Ring Road Elizabethtown, KY 42701-6767

Carol Ann Fraley, President & CEO Grayson R.E.C.C. 109 Bagby Park Grayson, KY 41143

Barry L. Myers, Manager Taylor County R.E.C.C. 625 West Main Street P.O. Box 100 Campbellsbville, KY 42719

Ted Hampton, Manager Cumberland Valley Electric, Inc. Highway 25 E P.O. Box 440 Gray, KY 40734

Christopher S. Perry, President & CEO Fleming-Mason Energy Cooperative, Inc. 1449 Elizaville Road P.O. Box 328 Flemingsburg KY 41041

Larry Hicks, President & CEO Salt River Electric Cooperative Corp. 111 West Brashear Avenue P.O. Box 609 Bardstown, KY 40004 Bill Prather, President & CEO Farmers R.E.C.C. 504 South Broadway P.O. Box 1298 Glasgow, KY 42141-1298

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Judy Cooper, Manager Regulatory Services Columbia Gas of Kentucky, Inc. 2001 Mercer Road P.O. Box 14241 Lexington, Kentucky 40512-4241

Rocco D'Ascenzo Senior Counsel Duke Energy Kentucky, Inc. 139 East 4th Street, R 25 at II P.O. Box 960 Cincinnati, OH 45201

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Billie J. Richert CFO, VP Accounting, Rates Big Rivers Electric Corporation 201 Third Street Henderson, KY 42419-0024

Gregory Starheim, President & CEO Kenergy Corp. P.O. Box 18 Henderson KY 42419

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Ronnie Wohnhas Managing Director, Reg & Finance Kentucky Power Company 101 A Enterprise Drive P.O. Box 5190 Frankfort, KY 40602

Hon. Mark David Goss Goss Samford, PLLC 2365 Harrodsburg Road, Suite B130 Lexington, KY 40504

Hon. Michael L. Kurtz Boehm, Kurtz & Lowry 36 East Seventh Street, Suite 1510 Cincinnati, OH 45202

Hon. Jennifer B. Hans Assistant Attorney General's Office 1024 Capital Center Drive, Suite 200 Frankfort, KY 40601-8204 Hon. David S. Samford Goss Samford, PLLC 2365 Harrodsburg Road, Suite B130 Lexington KY 40504

Hon. Iris G. Skidmore 415 W. Main Street, Suite 2 Frankfort KY 40601

Hon. James M. Crawford

Crawford & Baxter, P.S.C.

P.O. Box 353

Carrollton, Kentucky 41008

Phone: (502) 732-6688

Attorney for Owen Electric Cooperative, Inc.

FEB 27 2619 PUBLIC SERVICE

COMMISSION

Commonwealth of Kentucky

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

| A | | |
|-------------------------------------|---|---------------------|
| CONSIDERATION OF THE IMPLEMENTATION |) | |
| OF SMART GRID AND SMART METER |) | CASE NO. 2012-00428 |
| TECHNOLOGIES | | |

In the Matter of:

ATTORNEY GENERAL'S INITIAL REQUESTS FOR INFORMATION TO THE COMPANIES

The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, submits his Initial Requests for Information to the Companies.

- (1) In each case where a request seeks data provided in response to a staff request, reference to the appropriate request item will be deemed a satisfactory response.
- (2) Please identify the witness who will be prepared to answer questions concerning each request.
- (3) Please repeat the question to which each response is intended to refer.

 The Office of the Attorney General can provide counsel for the Companies with an electronic version of these questions, upon request.
- (4) These requests shall be deemed continuing so as to require further and supplemental responses if the company receives or generates additional information

within the scope of these requests between the time of the response and the time of any hearing conducted hereon.

- (5) Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.
- (6) If you believe any request appears confusing, please request clarification directly from Counsel for the Office of Attorney General.
- (7) To the extent that the specific document, workpaper or information as requested does not exist, but a similar document, workpaper or information does exist, provide the similar document, workpaper, or information.
- (8) To the extent that any request may be answered by way of a computer printout, please identify each variable contained in the printout which would not be self evident to a person not familiar with the printout.
- (9) If the company has objections to any request on the grounds that the requested information is proprietary in nature, or for any other reason, please notify the Office of the Attorney General as soon as possible.
- (10) As used herein, the words "document" or "documents" are to be construed broadly and shall mean the original of the same (and all non-identical copies or drafts thereof) and if the original is not available, the best copy available. These terms shall include all information recorded in any written, graphic or other tangible form

and shall include, without limiting the generality of the foregoing, all reports; memoranda; books or notebooks; written or recorded statements, interviews, affidavits and depositions; all letters or correspondence; telegrams, cables and telex messages; contracts, leases, insurance policies or other agreements; warnings and caution/hazard notices or labels; mechanical and electronic recordings and all information so stored, or transcripts of such recordings; calendars, appointment books, schedules, agendas and diary entries; notes or memoranda of conversations (telephonic or otherwise), meetings or conferences; legal pleadings and transcripts of legal proceedings; maps, models, charts, diagrams, graphs and other demonstrative materials; financial statements, annual reports, balance sheets and other accounting records; quotations or offers; bulletins, newsletters, pamphlets, brochures and all other similar publications; summaries or compilations of data; deeds, titles, or other instruments of ownership; blueprints and specifications; manuals, guidelines, regulations, procedures, policies and instructional materials of any type; photographs or pictures, film, microfilm and microfiche; videotapes; articles; announcements and notices of any type; surveys, studies, evaluations, tests and all research and development (R&D) materials; newspaper clippings and press releases; time cards, employee schedules or rosters, and other payroll records; cancelled checks, invoices, bills and receipts; and writings of any kind and all other tangible things upon which any handwriting, typing, printing, drawings, representations, graphic matter, magnetic or electrical impulses, or other forms of communication are recorded or produced, including audio and video recordings, computer stored information (whether or not in printout form), computerreadable media or other electronically maintained or transmitted information, and all other rough drafts, revised drafts (including all handwritten notes or other marks on the same) and copies of documents as hereinbefore defined by whatever means made.

- (11) For any document withheld on the basis of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.
- (12) In the event any document called for has been destroyed or transferred beyond the control of the company, please state: the identity of the person by whom it was destroyed or transferred, and the person authorizing the destruction or transfer; the time, place, and method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.
- (13) Please provide written responses, together with any and all exhibits pertaining thereto, in one or more bound volumes, separately indexed and tabbed by each response, in compliance with Kentucky Public Service Commission Regulations.

Respectfully submitted,

JACK CONWAY

ATTORNEY GENERAL

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Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of the foregoing were served and filed by hand delivery to Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; counsel further states that true and accurate copies of the foregoing were mailed via First Class U.S. Mail, postage pre-paid, to:

Allen Anderson President & CEO South Kentucky R.E.C.C. 925-929 N. Main Street P. O. Box 910 Somerset, KY 42502-0910

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Ranie Wohnhas Managing Director, Reg & Finance Kentucky Power Company 101 A Enterprise Drive P. O. Box 5190 Frankfort, KY 40602

this 47 day of February, 2013.

Assistant Attorney General

- 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?
- 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.
- 3. In light of resent catastrophic storms over the past ten years (for example, the various ice storms, tornadoes, and strong winds), which electric companies have experienced, and for which the company may ultimately have sought regulatory assets, can the company affirmatively state that its basic infrastructure, including all of its generation, transmission and distribution facilities, have proven to be reliable 24 hours a day, seven days a week, 365 days a week? If not, for each and every storm that it affected the utility in excess of two days, please provide the following:
 - a. The number of days before the company's last ratepayer's electricity was restored for each storm.
 - b. The average number of days, or hours if applicable, that the average ratepayer's outage lasted for each storm.
 - c. The average financial loss for the average ratepayer for each storm, if known.
- 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?
- 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?

- 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.
- 7. Please confirm that the company is aware that the prior United States Secretary of Defense Leon Panetta, in speaking on the vulnerability of the nation's electric grid with the consequential safety and security concerns that ensue, warned the Senate Appropriations Committee on Defense that the risk to the United States could even be considered the equivalent of a "digital Pearl Harbor".
 - a. Is this concern of the vulnerability of the nation's electric grid shared by the company? If not, why not?
- 8. With regard to cybersecurity in general, can the company unequivocally confirm that its system reliability is not vulnerable to a cybersecurity attack? If not, what could be the consequences? Please explain in detail as much as possible for the following:
 - a. the company, and
 - b. the company's ratepayers.
- 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.
- 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.

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

- 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.
- 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?
- 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.
- 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.
- 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.
- 16. What are the company's estimated costs to invest in order to fully implement Smart Grid?
 - a. Do any cost estimates include results of any modeling that may show the degree of exposure to the following risks: (a) hacking; (b) electronic magnetic pulses (EMPs, whether related to solar flares or otherwise); and/or (c) weather events? If so, provide a list of the modeling software used to produce any estimates, the scenarios and sensitivities examined, and any and all such results.

- 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?
- 18. Would the company agree to strict limits and/or caps on ratepayer costs? If not, why not?
- 19. Would the company agree to allow ratepayers to opt-out of smart meter deployment? If not, why not?
- 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?
- 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.
- 22. What are the company's estimated costs which the company expects the ratepayers to realize?
- 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.
- 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?
- 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?
- 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.

- 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.
- 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.)
- 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.
- 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?

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

- 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)?
- 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.).
- 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?
- 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?
- 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.)

- 42. Does the company recommend the Commission to formally adopt the EISA 2007 Smart Grid Investment Standard? If not, why not?
- 43. Does the company recommend the Commission to formally adopt the EISA 2007 Smart Grid Information Standard? If not, why not?
- 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?
- 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?
- 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.
- 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.
- 48. Does the company believe that any Smart Grid Investment will trigger a CPCN case? If not, why not?
- 49. Does the company believe that Dynamic Pricing should be economically feasible for the end-user and be supported by a cost-benefit analysis?
- 50. If additional education is contemplated with the deployment of the Smart Grid, please explain in detail if known or contemplated.

| Affiant, Mark Stallons, | states that the answers | given by him to t | he foregoing | questions are tru | e |
|----------------------------|-------------------------|-------------------|--------------|-------------------|---|
| and correct to the best of | of his knowledge and be | elief. | | | |

Mark Stallons - CEO

Subscribed and sworn to before me by the affiant, Mark Stallons, this $\frac{19^{+h}}{}$ day of March, 2013.

Notary Shannon Kaye Chappell
State-at-Large

My Commission expires April 25, 2015

| Affiant, Michael Cobb, states that the answers given by him to the foregoing questions are tru and correct to the best of his knowledge and belief. | e |
|---|---|
| Mlulall | |
| Michael Cobb, Senior Vice President – Customer Service and Marketing | |

Subscribed and sworn to before me by the affiant, Michael Cobb, this 194 day of March, 2013.

Notary Shamm Kaye Chappell
State-at-Large

My Commission expires April 25, 2015

| Affiant, James Bridges, states that the answers given by him to the foregoing questions are true and correct to the best of his knowledge and belief. |
|---|
| James Bridges, Vice President of Engineering |
| Subscribed and sworn to before me by the affiant, James Bridges, this day of March, 2013. |
| Notary Shamm Kay Chappell State-at-Idarge |
| My Commission expires 4011 25, 2015 |

| Affiant, Charles Gill, states that the answers given by him to the foregoing questions are true and correct to the best of his knowledge and belief. |
|--|
| Churles Hill |
| Charles Gill – Manager of Information Systems and Technology |
| Subscribed and sworn to before me by the affiant, Charles Gill, this 19th day of March, 2013. |
| Notary Shamm Kayl Chappell State-at-Large |
| My Commission expires April 25, 2015 |

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Witness: Mark Stallons

Item 1 Page 1 of 1

OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 1.

Owen Electric Cooperative references the response to AG Request #1 submitted by East Kentucky Power Cooperative (EKPC) and adopts that response as its own.

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Witness: Mark Stallons

Item 2 Page 1 of 2

OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 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. a. & b.

Some Smart Grid technologies are known more than others while all technologies pertaining to the implementation of Smart Grid are dynamic, and are continually developing and reinventing themselves.

SCADA, communications and network technologies are well known and proven. Yet as with all technologies these two are continuing to evolve and reinvent themselves in a standard continual improvement manner.

AMI technology is known, proven, and has been used in the electric cooperative business since the early to mid 1990's. Some early adopters are now purchasing their second system, or have already upgraded their existing technology to a newer version with the same vendor/partner. However, AMI is continually evolving and advancing. Most AMI systems on the market today have more capability than those purchased and installed five years ago. Our strategy in regards to AMI is to continue to utilize our existing system while investigating and piloting new advanced technology.

Witness: Mark Stallons

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Self healing grid technology can be considered known. As in our Penn Self Healing Project, the technology works and is proving to be valuable. So in that regard we consider it proven. However, as stated earlier like all technologies self healing grid systems are continuing to evolve and improve.

Pre-pay metering technology is known and proven as demonstrated by electric cooperatives over the past ten or so years. Specifically, in the state of Kentucky, Jackson Energy's prepay program has been very successful and is the model we and other Kentucky cooperatives are following. While a newer technology than Pre-pay metering, Meter Data Management systems have been very successful at other electric cooperatives nationwide.

Solar Power offerings have been very successful in Berea Municipal as well as other utilities across the nation.

Distributed generation, likewise has been very successful in other states as well as at Jackson Energy in the Commonwealth of Kentucky.

Smart Home and Volt Var Optimization technology are not as well known as the above technologies and remain in the pilot stage.

Witness: James Petreshock

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 3.

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

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

Response 3.

No.

a. & b.

| Event Date | Time Until Final Restoration (dd:hh:mm) Answer 3.a | Average Outage Duration (Hrs) Answer 3.b | Event Description |
|---------------|---|--|---|
| 05/31/04 | 2:00:29 | 0.40 | Major Thunderstorm |
| 12/22/04 | 5:10:37 | 1.78 | Ice Storm |
| 09/14/08 | 5:14:18 | 8.41 | Windstorm from Hurricane Ike |
| 01/28/09 | 5:22:12 | 11.24 | Ice Storm |
| 03/02/12 | 5:10:33 | 2.17 | Major Thunderstorm \ EF3 & EF4 Tornados |
| 06/29/12 | 2:13:23 | 0.43 | Derecho Windstorm |

c. We do not track this information.

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Witness: Michael Cobb

Item 4
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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 4.

Owen believes that electricity is a necessary service that supports the modern lifestyle and has greatly improved our member's quality of life since 1937.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 5.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 6.

Yes, but all information we have is public knowledge. The only recent incident that we are aware of is at Central Hudson Gas and Electric in Poughkeepsie, New York where customer accounts were hacked into.

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CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE

Request 7.

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

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

Response 7.

a. We are relying on experts in the field of cybersecurity to determine the risks and are responding accordingly.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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
- b. the company's ratepayers.

Response 8.

No, vulnerabilities (risk) cannot be totally eliminated. Controls are put in place to mitigate these risks and reduce the threat or impact.

- a. The consequences could be compromised data, corrupted data, loss of computer systems, loss of control or some system, etc.
- b. The consequences could be outages and/or member data compromised.

Witness: Charles Gill Item 9

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 9.

OEC uses several frameworks and guidelines in implementing strategies and controls to maintain system reliability and reduce cybersecurity threats. Two of the primary sources are NIST (National Institute of Standards and Technology) and ISO 27001 (Information Security Management – Specification with Guidance for Use) / 27002 (Code of practice for information security management).

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 10.

The above information and documents are extensive and readily publicly available. NIST can be located on the internet at www.nist.gov and ISO publications at www.27000.org.

Witness: Charles Gill Item 11 Page 1 of 1

OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 11.

With regard to cybersecurity in general, can the company unequivocally confirm that its ratepayers' privacy of data cannot be compromised or otherwise divulged to any individual or entity not associated with the company, or a qualified third-party which has issues a non-disclosure statement or the ratepayers? If not, what could be the consequences? Please explain in detail as much as possible for the following:

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

Response 11.

No. Please refer to Response 8.

- a. Please refer to Response 8(a).
- b. Please refer to Response 8(b).

Witness: Michael Cobb

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 12.

While no guarantees exists that member information will not be disclosed, as part its compliance with the Federal Trade Commission's "Identify Theft Red Flags" initiative under the Fair and Accurate Credit Transaction Act (FACT Act), Owen goes to great lengths to protect its member's information. Owen strictly follows a series of policies and guidelines that focus on protecting our member's information. Furthermore, Owen mandates that all its third party service providers provide letters of assurance of their compliance with all FACT Act regulations.

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Witness: Charles Gill Item 13

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 13.

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

Response 13.

Please refer to Response 9.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 14.

Please refer to Response 10.

Witness: Charles Gill Item 15 Page 1 of 1

OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 15.

While Owen assures the Attorney General that it has developed plans and systems to address this possibility, because of the security issues disclosure of this information would raise, Owen must respectfully decline to provide descriptions requested.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 16.

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

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

Response 16.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 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.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 18

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

Response 18.

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

Witness: Michael Cobb

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 19.

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

Response 19.

Owen does not support and will not encourage its members to opt out. However a small number of members (nine to date) have expressed concerns regarding the use of AMI technology. In these cases, Owen has provided these members with communication and educational materials in an attempt to alleviate their concerns. For those members who continue to insist that AMI technology not be used, it is Owen's strategy to give our members choice in order to foster positive member satisfaction. Owen has filed an application with Kentucky Public Service Commission (Case 2012-00468) requesting that a manual meter reading fee be approved in instances where, due to member objection, the Cooperative is prohibited from obtaining remote meter readings via the use of its AMI system. Owen believes that this manual meter reading fee is justified to recover the additional costs that will be incurred to manually read the meters. It is Owen's contention that this additional cost should not be borne by its other members and should be borne by those members who cause the cost to be incurred.

Witness: Mark Stallons Item 20

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 20.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 21.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 22.

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

Response 22.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 23.

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

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Witness: Mark Stallons Item 24

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 24.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 25.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 26.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 27.

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

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

Response 27.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 28.

Owen does not believe that its low income members will be disproportionately harmed by participating in Time of Use (TOU) rates. This belief is based primarily on the following two facts. First, Owen's TOU rates are designed to be revenue neutral at the average consumption level and offer a decrease for members who use more than the average. Secondly, Owen's average low income member uses more energy than Owen's average non-low income member. This conclusion is based on a study conducted comparing the energy use of Owen Electric members who received Low Income Home Energy Assistance Program (LIHEAP) assistance from 2008 through 2010. The study found that LIHEAP recipients used on average 1,609 kWh per month while all our remaining residential members used on average 1,273 kWh per month. A summary this report is attached (see page two of this response).

Additionally, Owen's TOU rates are voluntary, optional rates. Prior to a member going on these rates, with each member's inquiry, our member service representatives thoroughly review the members energy usage history and assist each member in making a wise rate choice.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

April 20, 2011

Mike Cobb Owen Electric

Subject: LIHEAP Analysis for 2008-2010

At Owen Electric's request, EKPC calculated average kWh usage from data that Owen provided. The first data provided was their 2008, 2009 and 2010 annual billing file and the second data provided was a list of those residential customers designated as LIHEAP customers. From this data, a calculation was done on residential average usage for the two groups.

As a result of the analysis completed, the results showed that for Owen, the 3-Yr average usage for the LIHEAP group was about 1,609 kWh and for the other group of residential customers not designated as LIHEAP, the average usage was 1,273 kWh.

The exhibit below shows a comparison by year.

Sandy Mollenkopf Load Forecasting EKPC

Avg kWh

| Owen EC | 2008 | 2009 | 2010 | 3 Yr Avg kWh |
|--|-------|-------|-------|--------------------|
| LIHEAP Avg kWh | 1,615 | 1,578 | 1,635 | 1,609 |
| Resid Avg kWh exc LIHEAP | 1,245 | 1,213 | 1,361 | 1,273 |
| Number of residential members receiving LIHEAP | 950 | 1,492 | 1,466 | |

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 29.

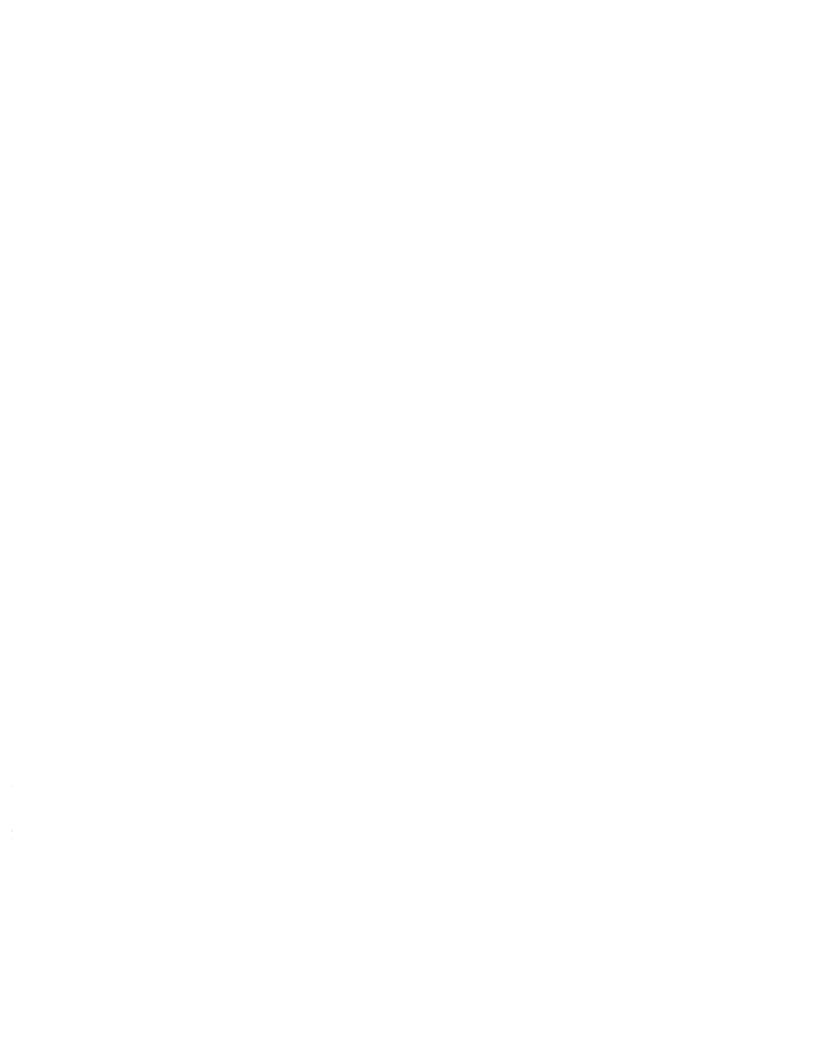
With regard to TOU rates, does the company have any history with any such programs? If so, explain in detail with particular facts as to:

- a. the number of customers who participated;
- b. whether they remained on the program;
- c. whether they saved money on their bills; and
- d. whether the customers ultimately reduced their usage.

Response 29.

| a. | # Members | Tariff | Sheet No. |
|----|-----------|--|-----------|
| | 2 | Schedule 1-B1 – Farm & Home Time-of-Day | 23A |
| | 1 | Schedule 1-B2 – Farm & Home Time-of-Day | 23B |
| | 1 | Schedule 1-B3 – Farm & Home Time-of-Day | 23C |
| | 165 | Schedule 1-B4 – Smart Home Pilot Time-of-Day | 23D |
| | 2 | Schedule 1-C – Small Commercial Time-of-Day | 24 |
| | 12 | Schedule 2-A – Large Power Time-of-Day | 25 |

- b. For the most part, Owen's members who have chosen to participate in its TOU rates have remained on these rates.
- c. The information is not available at this time. The measurement and verification process will commence with the smart home pilot which began in late 2012 and is scheduled to conclude in late 2014. The pilot is designed to provide energy use data (demand and energy) by Time of Day for the Smart Home Pilot participants.
- d. See Response 29(c).



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CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE

Request 30.

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

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

Response 30.

- a. Owen Electric plans to offer Pre-Pay Metering in 2013.
- b. Owen is pursuing a strategy to evaluate and consider a broad array of communication options.
- c. Owen Electric supports the electric cooperative effort to employ Multi-Speak to resolve compatibility issues.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 31.

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

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

Response 31.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 32.

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

Witness: Charles Gill Item 33 Page 1 of 1

OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 33.

Yes, Smart Grid systems depend in part upon telephony.

Witness: Charles Gill Item 34 Page 1 of 1

OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 34.

Yes, limited or absence of access to telephony would interfere with the use of SmartGrid at the end-user level.

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Witness: Charles Gill

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 35.

OEC has no current plans on installing significant infrastructure/software for the transmission of Smart Grid/Smart Meter data in the near future outside of routine maintenance and upgrades. However, we are always investigating options as technology continues to develop.

Witness: Charles Gill

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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?

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

Response 36.

TCP/IP (Transmission Control Protocol/Internet Protocol) – Is the set of communications protocols used for the Internet and similar networks, and generally the most popular protocol stack for wide area networks.

a. Not applicable.

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 37.

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

Response 37.

Hardening works to resolve reliability issues in many substation and feeder applications. However, in some cases self healing may be required as well. Deployment of either strategy is on a case by case basis.

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CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE

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.)

- 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.

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

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CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE

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 39.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 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.

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

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CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE

Request 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.

- a. Please refer to Response 29(a).
- b. Please refer to Response 29(c).
- c. Please refer to Response 29(c).
- d. Please refer to Response 29(c).

Witness: Mark Stallons Item 42

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 42.

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

Response 42.

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

Witness: Mark Stallons

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CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

OWEN ELECTRIC COOPERATIVE

Request 43.

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

Response 43.

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

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Witness: Mark Stallons

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 44.

Does the company recommend issuing an IRP Standard?

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

Response 44.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 45.

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

Witness: Mark Stallons

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 46.

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

Witness: Mark Stallons Item 47

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 47.

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

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Witness: Mark Stallons Item 48

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 48.

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

Response 48.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

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 49.

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

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OWEN ELECTRIC COOPERATIVE CASE 2012-00428 RESPONSE TO THE ATTORNEY GENERAL'S INITIAL REQUEST FOR INFORMATION TO THE COMPANIES

Request 50.

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

Response 50.

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