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February 14, 2013

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

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FEB 14 2013

PUBLIC SERVICE
COMMISSION

RE: **Owen Electric Cooperative, Inc.**
Case No 2012-00468

Dear Mr. Derouen:

Please find enclosed the responses of Owen Electric Cooperative, Inc. to information requested at the informal conference held on February 6, 2013 in the above referenced case.

Respectfully yours,

CRAWFORD & BAXTER, P.S.C.



James M. Crawford / J.M.C.
Counsel for Owen Electric Cooperative, Inc.

Enclosures



Steven L. Beshear
Governor

Leonard K. Peters
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
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David L. Armstrong
Chairman

James W. Gardner
Vice Chairman

Linda Breathitt
Commissioner

February 8, 2013

PARTIES OF RECORD

RE: Informal Conference for
Case No. 2012-00468

Enclosed is a memorandum that has been filed in the record of the above-referenced case. Any comments regarding the content of this memorandum should be submitted to the Commission within seven days of receipt of this letter. Questions regarding this memorandum should be directed to Chris Whelan at (502) 782-2644.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Derouen".

Jeff Derouen
Executive Director

Enclosure

**OWEN ELECTRIC COOPERATIVE'S COMMENTS RELATING TO QUESTIONS
ADDRESSED AT INFORMAL CONFERENCE ON FEBRUARY 6, 2013.**

1. Prior to the installation of its AMI system, Owen had installed an AMR system. How were the meters read for the six customers who wish to opt out of the AMI system when they were using the AMR system?

Response:

Owen has installed only one system—an AMI system. It has not migrated from an AMR to an AMI system*. Of the six members who have discussed opting out of the AMI system, five meters have been read with the AMI system from the inception of the program. One member refused installation of meter.

**AMR (Automated Meter Reading) and AMI (Advanced Meter Infrastructure) are early terms used in the industry to describe the use of solid state metering and power line carrier and/or radio frequency to transmit data remotely between the meter and the utility. While some use the terms interchangeably, Owen has used AMI because it more accurately reflects the broader capabilities of the system. Owen's system has two way communication capabilities and provides more than "automated meter reading" in that it also provides demand, voltage, blinks counts, outage/service restoration verification, and the ability to connect/disconnect service remotely.*

2. Did the six customers complain about the AMR meters?

Response:

The six members expressed concerns about Owen AMI meters. See answer #1. Since filing for this tariff, Owen has had three (3) additional members comment regarding the AMI technology, for a total of nine (9) members expressing some concerns. Please refer to Exhibit A for a summary of the concerns and a brief status update.

3. What is the difference between the Owen AMR system and its AMI system?

Response:

See answer #1

4. What type of AMI meters has Owen installed for residential service?

Response:

Sensus Icon, Itron Centron, and L+G Focus solid state meters.

5. Are the meters installed under the AMI system different from those installed under the AMR system?

Response:

N/A See answer #1

6. What are the capabilities of Owen's AMI system?

Response:

Owen's system provides energy use 'kWh' data, demand, voltage, blinks counts, outage/service restoration verification, the capability to connect/disconnect services remotely, provides the communication mode to control load switches for Owen's Simple Saver DSM program, and facilitates measurement and verification (M&V) for Owen's energy innovation pilot projects.

7. What information can the AMI meters provide Owen?

Response:

Owen's AMI meters provide the following information: kWh total and time-of-day energy use, KW (5minute interval on demand), KW (load profile hourly demand), voltage (1minute interval on demand), voltage (5 minute profile), blink count, outage logs (past six events).

8. What information is Owen collecting from its residential customers?

Response:

Typically, five (5) kWh readings per month. Other data (above) is polled when needed.

9. Can the currently installed meters be read manually? If not, will it be necessary for Owen for Owen to change out the meters if it is granted the authority to impose this charge?

Response:

Yes, the current meters have a digital display of the kWh reading.

Important note: The old mechanical meters are no longer commercially available—any replacement meter would be a solid state meter. Misconceptions persist among some groups that equate any solid state meters with 'smart' meters.

10. If Owen is required to change meters, what will be the related cost?

Response:

Actual cost to change the meter is \$50.85, which includes the labor, benefits, and transportation expense of the Field Service Representative doing the change out. The cost of a solid state meter without AMI capability is approximately \$40. The average cost of an AMI meter is

approximately \$140 and any meter removed from service under this proposal would be returned to inventory to be re-installed when needed.

11. Does Owen plan to require the customers that opt for manual meter reading to bear the cost of changing the meters?

Response:

There are no current plans to charge the member the cost of changing out the meter. It is anticipated that the number of members opting out of AMI technology to be minimal. If this assumption proves to be invalid, and there are a significantly higher number of op-outs than expected, Owen will need to re-evaluate our desire to recover the cost of changing the meters. If it is determined that such a charge is appropriate and necessary, Owen will submit a tariff requesting the charge at a later date.

12. How does allowing customers to voluntarily opt out of the AMI system impact the cost/benefit analysis for the AMI system?

Response:

The impact is dependent on the number of opt-outs. The impact would be minimal if only a few members opt out and would increase if Owen has to begin manually reading meters for a larger number of members. A fully allocated cost per member of the AMI system is approximately \$37 annually. Shifting the cost for these six members would result in a cost shifting of \$222 to all of Owen's other members.

In addition to a cost shifting impact, having a significant number of members opt-out would diminish Owen's ability to leverage the overall cost/benefit of its AMI system, would increase Owen's monthly costs to obtain metering readings, and would diminish Owen's outage prediction capabilities, and engineering studies/planning analysis capabilities.

13. Will the customers that opt out still benefit from the AMI system? If yes, how? If no, why not?

Response:

Yes. The members will receive benefit from outage prediction and engineering analysis.

14. Why should any customer be allowed to opt out?

Response:

Owen does not support and will not encourage its members to opt out. However, a small group of members have expressed concerns regarding the use of AMI technology. It is Owen's strategy to give our members choices in order to foster positive member satisfaction.

15. Discuss or describe in detail the information Owen has provided to the customers who wish to opt out.

Response:

Please refer to Exhibit B for a sample of the communication Owen has provided in the last year to members expressing concerns with Owen's AMI system. In summary the communication states the following:

Owen's system is not RF based – rather it is powerline carrier based

Owen's system operates at a very low frequency (12.5 kHz)

Owen's system only polls for reads five (5) times per month // two (2) seconds/poll

Owen's meter system meets and exceeds all FCC regulations on RF levels –well below FCC Maximum Permissible Exposure Levels

Owen's meter system has no surveillance capability. The meter simply measures electric energy usage as the previous electro-mechanical meter did. The new meter technology is also able to record blinks, outages, and other power quality issues which aid the Cooperative in improving the overall reliability of our system.

16. Has Owen developed a standardized packet of information or plan to address future opt-out requests from other customers?

Response:

Owen has not developed a standardized packet of information. Should the PSC authorize an opt-out provision, Owen will develop an informational/educational packet for its members who express an interest in opting out.

17. For the customers that opt out, will Owen manually read each meter monthly?

Response:

Yes.

18. Are there any of the six customers that have requested to opt out of the AMI system included among the approximately 600 customers for whom Owen is unable to read the AMI meters on a consistent basis?

Response:

No.

19. What is the cost to read the meters for 600 customers?

Response:

The cost of reading these meters depends upon their location, whether more than one reading per trip is needed, as well as whether the reading can be done by personnel already in the area performing other tasks. Owen's metering reading expense for the 12 month period ending December 31, 2012 is approximately \$170,500 dollars.

20. Does Owen intend to provide notice to its customers of the proposed \$30.00 charge?

Response:

Yes, Owen will provide notice of the meter reading tariff and the resulting manual meter reading fee to the members who have expressed interest in opting out of AMI technology.

AMI Member Issue Log

Case #	Date:	Name:	Issue:	Status:
1	08/07/08	XXXXXXXXXXXXXX	Electromagnetic Hypersensitivity Syndrome (refused installation of meter)	Refused installation of AMI meter. Old meter in use.
2	10/23/08	XXXXXXXXXXXXXX	Sensitive to power line carrier signal (hears signal with or without AMI meter)	On-site visit with meter tech to discuss concerns. AMI meter in use.
3	09/08/11	XXXXXXXXXXXXXX	Electro sensitivity aggravates allergies / can't sleep (removed meter)	Member presented letter from doctor. AMI meter replaced with old meter.
4	09/10/11	XXXXXXXXXXXXXX	Unlicensed FCC radio signal	Phone call with member to discuss concerns. Explained no FCC license required for Power line carrier system. AMI meter in use.
5	08/03/12	XXXXXXXXXXXXXX	Chemically Sensitive	Phone calls and letter explaining Owen's AMI system and discuss concerns. AMI meter in use.
6	11/06/12	XXXXXXXXXXXXXX	AMI is part of a "cosmic conspiracy" that is interfering with master design (harmony) of universe	Phone calls and emails explaining Owen's AMI system and discuss concerns. AMI meter in use.
7	11/26/12	XXXXXXXXXXXXXX	Electromagnetic Hypersensitivity Syndrome	Phone calls and emails explaining Owen's AMI system and discuss concerns. AMI meter in use.
8	01/15/13	XXXXXXXXXXXXXX	General health concerns	Phone call and email explaining Owen's AMI system and discuss concerns. Member was satisfied with system. AMI meter in use.
9	02/01/13	XXXXXXXXXXXXXX	Generally opposed to smart meter technology and utility/government intervention.	Phone call and email explaining Owen's AMI System and discuss concerns. AMI meter in use.

Mike Cobb

From: Mike Cobb
Sent: Tuesday, November 06, 2012 9:00 AM
To: [REDACTED]
Subject: Smart Meter Information
Attachments: doc20121012154744.pdf.pdf

Dear Mr. [REDACTED]

Per our discussion regarding concerns over the Cooperative's use of advanced metering infrastructure (AMI) and smart meters. Owen values our members and their concerns. The following provides important information regarding radio frequency exposure (RF) levels from smart meters.

The Federal Communications Commission (FCC) has adopted and used recognized safety guidelines for evaluating RF environmental exposure since 1985. Federal health and safety agencies such as the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Safety and Health (NIOSH), and the Occupational Safety and Health Administration (OSHA) have also been actively involved in monitoring and investigating issues for RF exposure. In 1996, the FCC adopted the National Council on Radiation Protection (NCRP's) recommended Maximum Permissible Exposure limits for RF exposure. The FCC also adopted the specific absorption rate (SAR) limits for devices operating within close proximity to the body as specified within the American National Standards Institute (ANSI)/Institute of Electrical and Electronics Engineers (IEEE) guidelines.

There has been considerable research* conducted on the health impacts of RF exposure levels from smart meters. This research has demonstrated that there is no health threat from RF exposure levels below those designated by the FCC.

***California Council on Science and Technology:** *"Wireless smart meters, when installed and maintained properly, result in much smaller radio frequency (RF) exposure than many existing common household electronic devices"*

"The current FCC standard provides an adequate factor of safety against known thermally induced health impacts of existing common household electronic devices and smart meters"

***Maine Center for Disease Control:** concluded there is *"no consistent or convincing evidence to support a concern for health effects related to the use of radio frequency in the range frequencies and power used by smart meters"*

Additionally, Owen's AMI/Smart Meter system has some unique characteristics that further mitigate health concerns:

Owen's system is not radio frequency or wireless-based like many other systems. Owen's communication signal travels over the electric power line and is not transmitted through the open air.

Owen's system operates at an extremely low frequency of 12.5 kHz. A kHz (kilohertz) is a relatively low unit of frequency. Most radio frequency based smart meters operate in the 900+ MHz (megahertz) frequency range which is approximately 72,000 times greater than Owen's system. Additionally, many commonly used household devices operate at much higher frequency levels (see attached chart).

A common misconception about smart meters is that they are always "on" or transmitting 100% of the time. This is far from the case. In fact, **Owen's meter transmits only five (5) times per month for approximately two (2) seconds per transmission.** This equates to only ten (10) seconds per month or 0.0004% of the time.

In regards to any privacy concerns, rest assured that Owen's meter has no surveillance capability, the meter simply measures electric energy usage as the previous electro-mechanical meter. The new technology also allows us to capture blinks, outages, and other power quality issues.

In summary, **Owen's meter system meets and exceeds all Federal Communications Commission (FCC) regulations regarding acceptable ranges of RF exposure limits.** I hope that this information is helpful in answering questions you may have regarding Owen's AMI/smart meter program. As I mentioned yesterday, Owen has requested approval from the Kentucky Public Service Commission for a tariff to address instances where our members object to the use of smart meters and do wish to be metered using AMI. I will let you know when the Commission rules on our request. Please let me know if you would like to discuss this further or if I can assist you in any way.

Sincerely,
OWEN ELECTRIC COOPERATIVE, INC.

Mike
Michael L Cobb
Sr. VP-Customer Service & Marketing
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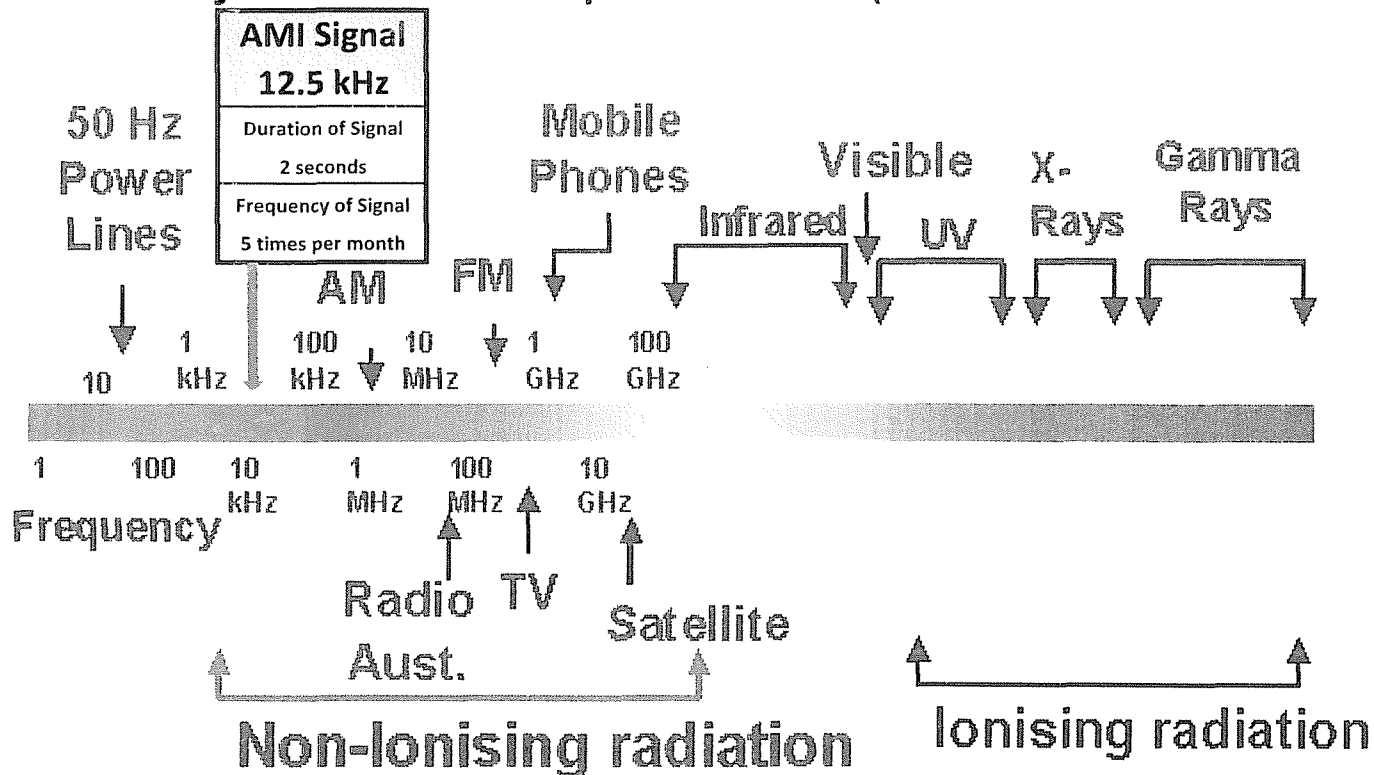
Footnotes:

California Council on Science and Technology, "[Health Impacts of Radio Frequency from Smart Meter](#)," January 2011

Maine Center for Disease Control, "[Executive Summary of Review of Health Issues Related to Smart Meters](#)," November 8, 2012

Radio Frequency (RF) Chart

Public Safety Communication Spectrum Table (OEC's AMI/Smart Meter Added)



Source: ACD Telecom, LLC & Public Safety Communications

ACD Telecom, LLC specializes in public safety communications and consulting services to public safety agencies.