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MAR 282014 PUBLIC SERVICE COMMISSION

March 28, 2014

HAND DELIVERED

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Mr. Jeff Derouen Executive Director Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40602

Dear Mr. Derouen:

Pursuant to the Commission's final Order in Case No. 2011-00037, dated February 29, 2012, please find enclosed for filing an original and ten (10) copies of Owen Electric Cooperative's Annual Report of DSM and Energy Efficiency Programs.

If you have any questions regarding this filing, please feel free to contact me.

Very truly yours, OWEN ELECTRIC COOPERATIVE, INC.

Mark A. Stallons President & CEO

Enclosures

MAS/skc

# Request (a)

Number of customers and sales volumes for all residential rate schedules and the small commercial schedule for 2013:

## Response (a)

- Schedule 1 Farm and Home Base Rate Number of customers: 54,012 Sales volume (kWh): 734,822,156
- Schedule 1 Farm and Home Off-Peak ETS Rate Number of customers: 7 Sales volume (kWh): 16,196
- Schedule 1-B1 Farm & Home Time-of-Day (5 days a week) Number of customers: 3 Sales volume (kWh): 47,511
- Schedule 1-B2 Farm & Home Time-of-Day (7 days a week) Number of customers: 3 Sales volume (kWh): 22,607
- Schedule 1-B3 Farm & Home Time-of-Day (7 days a week with shoulder) Number of customers: 4 Sales volume (kWh): 38,512
- Schedule 1-B4 Smart Home Pilot Time-of-Day Number of customers: 185 Sales volume (kWh): 3,419,319
- Schedule 1-D Farm & Home Inclining Block Number of customers: 656 Sales volume (kWh): 1,038,431
- Schedule NM Net Metering Number of customers: 5 Sales volume (kWh): 69,135
- Schedule 1 Small Commercial Number of customers: 2,417 Sales volume (kWh): 53,710,291
- Schedule 1-C Small Commercial Time-of-Day Number of customers: 26 Sales volume (kWh): 424,692

# Request (b)

Recap of Owen's customer awareness and education efforts, plus the number of individual inquiries by members about the optional rate schedules and the number of contacts by customer service representatives concerning these same rate schedules with members who make contact with them in person or by telephone.

## **Response (b)**

Owen Electric has made a consistent effort to include information and reminders about its voluntary rates through its member newsletter and social media.

The member newsletter is sent membership-wide within the monthly issue of *Kentucky Living* magazine. Publication and promotion of Inclining Block and Time-of-Day rates are as follows:

April 2013: Kentucky Living offered a recap of the initial article that introduced the Inclining Block and Time-of-Day rates in 2012. It explained what lifestyle/scenario each new rate would be beneficial to—the low kWh user or someone willing to shift their electric-consuming tasks to non-peak hours—and included graphical charts to display the rates.

April 2014: Kentucky Living will include a mention/reminder of the rate options and also will encourage members to call a customer service representative who can pull up the account in question, answer questions, and recommend the best rate for a member to be on given their particular circumstances.

May 2014: Kentucky Living will feature full article reminiscent of the April 2013 article, which is more in-depth and includes graphical representation of the rate options.

Throughout 2013 and thus far in 2014, periodic social media messages via the Owen Electric Facebook and Twitter pages have promoted Inclining Block and Time-of-Day rates. These social media campaigns have encouraged members to call customer service and speak to a representative about whether they could benefit from switching to an optional rate.

From early to mid-2013, Owen Electric hosted five 'WATTS for Lunch' events throughout its service area. The luncheons were designed to be centrally located and to provide lunch to accommodate members who work during the day. Over lunch, presentations from Owen Electric's Residential Services Manager were given to promote the co-op's free energy audits; home energy efficiency incentive programs and rebates; the SimpleSaver Direct Load Control Program; as well as Inclining Block and Time-of-Day rates. The floor was open to questions at any time during the presentation, as well as at the end of all presentations to field any questions members had concerning Owen Electric's programs to specific questions about their home and its systems.

In additional to the above mentioned newsletter and social media educational efforts, Owen Electric directly mailed letters to 3,102 of its members who were identified as candidates for the Inclining Block rate tariff.

Furthermore, Owen Electric's member service representatives have made 1,691 contacts to members concerning these optional rate offerings, and 68 members have contacted Owen Electric about the optional rate schedules.

Owen Electric will continue to engage its members in these and additional awareness and education efforts.

Request (c)

2013 Budgets, actual expenditures, number of participants, and the estimated impact on sales of each DSM and energy efficiency program approved.

Response (c)

Program	<u>Budget</u>	<u>Actual</u> Expenditures	<u>Participants</u>	<u>Impact on Sales</u> (Reduction kWh/Yr)
<u>RESIDENTIAL</u> Button Up			23	50,716
Button Up with Air Seal			3	9,135
Heat Pump			35	260,183
TSE Home			4	10,272
Simple Saver DLC			3,918	26,320
Energy Audits			178	Undetermined
Smart Home	\$0	\$8,974	185	To be determined
CFL's	\$4,500	\$4,200	800	82,800
<u>COMMERCIAL</u> Lighting	\$60,000	\$42,850.50	11	2,746,150
Compressed Air	\$20,000	\$0	0	0
<u>OTHER</u> Volt Var Pilot				To be determined

Estimated implementation date for any program not implemented as of that report and, ultimately, an explanation of the "slippage" in any implementation dates in subsequent reports.

## Response (d)

<u>Smart Home</u> – The pilot project was launched in 2012 and serves 185 member homes. It is presently in the measurement and verification phase and will come to a close in 2014. In the few short years since the pilot was begun, there have been significant changes in advanced meter technology, availability of new member engagement tools such as smart phones, smart applications, Green Button, and commercially available smart thermostats. Any future development of a Smart Home tariff will reflect these changes and will be dependent on the results of the M & V phase.

<u>Volt Var Optimization Pilot</u> – Owen Electric is evaluating technology from the RF and Cellular AMI pilots to function as a dual purpose backbone to communicate with downline devices to improve situational awareness as part of a VVO demonstration. We have chosen a primarily residential, rurally located, substation with three feeders for this pilot project. Owen Electric will analyze of the impact of advanced voltage and Var control on the overall distribution system, and we anticipate to benefit through demand reduction, line loss reduction, improved voltage regulation and reactive power management.

Owen Electric plans to implement the following programs in 2014:

<u>Meter Data Management (MDM</u>) – In early 2014, MDM was enabled and allows Owen Electric to safely and securely store our member's meter data and permit us to move forward with Pre-pay metering and advanced billing strategies such as critical peak pricing. The (MDM) system enables members to view their usage via a member portal.

<u>Pre-Pay Metering Program</u> – Owen Electric recently gained Commission approval (Case 2013-00403, order dated 2/7/14) to offer a pre-pay metering program to its members. By offering members access to their usage in a more timely and convenient manner, Owen Electric believes that members will be better equipped to monitor and manage their energy consumption.

<u>Conservation Voltage Reduction Program</u>- The 1987 vintage SCADA system was replaced by a system equipped with advanced substation and down line automation capabilities. In addition to increased situational awareness provided by the SCADA upgrade, we have begun utilizing substation bus voltage reduction in coordination with our engineering model and verified end of line voltages from our AMI system to execute an initial Conservation Voltage Reduction (CVR) program. This has allowed us to reduce our monthly peak demand and operate more cost effectively for our membership. Our voltage reduction capabilities were advantageous during a recent system wide emergency conservation request from EKPC and PJM to reduce energy utilization for the overall electrical grid stability.

<u>Wireless Communication AMI Pilot</u> – Owen Electric is investigating alternative methods to remotely read meters on a quarter hour, hourly, and daily basis to support our long term Smart Home deployment efforts.

Owen Electric is also considering the following program for future implementation:

<u>How \$mart Kentucky</u> – Owen Electric is monitoring the How \$mart Kentucky program and may consider duplicating this program in the Owen Electric service area.

Owen Electric is committed to investigating and prudently evaluating DSM and Energy Efficiency opportunities and deploying those systems that add value to our members' quality of service, and ability to manage their energy usage.