




OWEN Electric

A Touchstone Energy Cooperative 

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COMMISSION

May 18, 2010

Mr. John Shupp
Director of Engineering
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602-0615

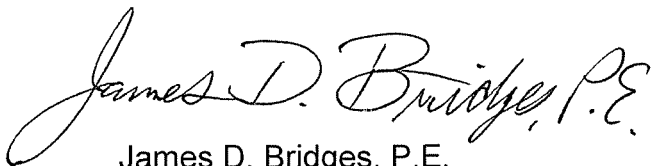
RE: Administrative Case No. 2006-00494

Dear Mr. Shupp:

Enclosed are the original and five (5) copies of the 2009 Distribution Reliability Report for Owen Electric Cooperative as requested in the above order.

Should you have any questions or need further information, please contact our office. I do apologize for my delay on this report.

Sincerely,



James D. Bridges, P.E.

Vice President of Engineering

Enclosures

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	<u>Owen Electric Cooperative</u>
REPORT PREPARED BY	1.2	<u>James D. Bridges</u>
E-MAIL ADDRESS OF PREPARER	1.3	<u>jbridges@owenelectric.com</u>
PHONE NUMBER OF PREPARER	1.4	<u>(800) 372-7612</u>

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	<u>2009</u>
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SECTION 3: MAJOR EVENT DAYS

	T_{MED}	3.1	<u>13.61</u>
FIRST DATE USED TO DETERMINE T_{MED}		3.2	<u>1/1/2004</u>
LAST DATE USED TO DETERMINE T_{MED}		3.3	<u>12/31/2008</u>
NUMBER OF MED IN REPORT YEAR		3.4	<u>5</u>

NOTE: Per IEEE 1366 T_{MED} should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

SECTION 4: SYSTEM RELIABILITY RESULTS

Excluding MED

SAIDI	4.1	<u>154.68</u>
SAIFI	4.2	<u>1.69</u>
CAIDI	4.3	<u>91.5</u>

Including MED (Optional)

SAIDI	4.4	<u>846.38</u>
SAIFI	4.5	<u>2.37</u>
CAIDI	4.6	<u>356.61</u>

Notes:

- 1) All duration indices (SAIDI, CAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of April of each year
- 3) Reports cover the calendar year ending in the December before the reports are due.
- 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, CAIDI, and T_{MED}

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SECTION 5: OUTAGE CAUSE CATEGORIES

Excluding MED

CAUSE CODE DESCRIPTION	SAIDI VALUE	CAUSE CODE DESCRIPTION	SAIFI VALUE
Weather 5.1.1	44.08	Weather 5.2.1	0.37
Power Supplier 5.1.2	18.08	Equipment/Installation 5.2.2	0.24
Member/Public 5.1.3	17.65	Member/Public 5.2.3	0.19
Equipment/Installation 5.1.4	16.28	Power Supplier 5.2.4	0.19
R.O.W. Unpreventable 5.1.5	15.48	R.O.W. Unpreventable 5.2.5	0.18
Birds/Animals 5.1.6	10.22	Birds/Animals 5.2.6	0.14
Major Storm 5.1.7	9.13	Unknown 5.2.7	0.14
Unknown 5.1.8	8.71	Scheduled 5.2.8	0.10
Scheduled 5.1.9	7.03	Major Storm 5.2.9	0.06
R.O.W. Preventable 5.1.10	5.74	R.O.W. Preventable 5.2.10	0.05

SECTION 6: WORST PERFORMING CIRCUITS

CIRCUIT IDENTIFIER	SAIDI VALUE	MAJOR OUTAGE CATEGORY
1503	6.1.1 209.8	Weather
5202	6.1.2 171.9	Power Supplier
802	6.1.3 152.9	Weather
1404	6.1.4 152.1	Member/Public
1103	6.1.5 142	Weather
1505	6.1.6 129.6	Scheduled
1102	6.1.7 129.5	Weather
2001	6.1.8 128.4	Power Supplier
2002	6.1.9 127.7	Power Supplier
2003	6.1.10 127.7	Power Supplier

CIRCUIT IDENTIFIER	SAIFI VALUE	MAJOR OUTAGE CATEGORY
1404	6.2.1 1.889	Birds/Animals
5202	6.2.2 1.577	Scheduled
1304	6.2.3 1.546	Equipment/Installation
1802	6.2.4 1.33	Weather
2501	6.2.5 1.129	Weather
1102	6.2.6 1.063	Weather
1706	6.2.7 1.057	Birds/Animals
2001	6.2.8 1.006	Birds/Animals
2002	6.2.9 1	Power Supplier
2003	6.2.10 1	Power Supplier

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Additional pages may be attached as necessary

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SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

In 2009, Owen Electric successfully completed 829 miles of right-of-way spraying and 712 miles of right-of-way trimming, in keeping with our 4-year cycle of maintenance. In 2009, we continued the very successful use of our cross-country "sky-trim" machine to greatly increase ROW trim clearance, speed, and safety. In late 2009, we discontinued the use of our hydro axe, feeling comfortable the ground brush in our rights-of-ways is now controlled adequately with our spray program. Our "mid-cycle" trim program, instituted in 2009, is working very well, and allows the inspection of the three phase line from the sub-station to the first set of breakers every two years to check clearance and ground brush. The 2010 portion of this mid-cycle trim has now been completed

SECTION 8: UTILITY COMMENTS

The January 2009 Ice Storm was an event that produced conductor ice loading that exceeded Owen Electric Cooperative's (OEC's) mechanical design criteria. When a storm of this magnitude occurs, not only are there immediate mechanical failures...but ongoing failures from a "storm-weakened" system. These storm-related weaknesses tend to drive up outage numbers for a period of months.

Although located in the NESC Medium Ice District, OEC will be designing all future three-phase feeder projects under the Heavy Loading rules of the NESC. Single-phase taps will continue to be designed under the Medium Load District rules - with ongoing performance-based reviews.

The Feeder Hardening program is in its second year. The 10-WPC's are the driver for the program. Costs, detailed improvements including the increase of pole-top BIL, feeder-specific corrections, operational feedback and 2010 forward-looking outage results are being analyzed to improve the program.

Distribution overcurrent protection, substation maintenance, and looped transmission sources are some of the programs under review in 2010. All of these areas are presently at an acceptable standing. However, these areas are key to system reliability and hence, will always be under close scrutiny.

A State-funded (DEDI) "smart-grid" self-healing project was granted to OEC in April 2010. This project will involve two distribution feeders in OEC's Scott County service area. The purpose of this project is to transfer a large number of interrupted customers to an automatically switched ("self-healed") energized feeder...thereby significantly reducing interruption times. Initial design preparations are underway at this time.