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PUBLIC SERVICE
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Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	<u>Clark Energy Cooperative</u>
REPORT PREPARED BY	1.2	<u>Scott Sidwell</u>
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SECTION 2: REPORT YEAR

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

	TMED	3.1	<u>8.36</u>
FIRST DATE USED TO DETERMINE TMED		3.2	<u>1/1/2004</u>
LAST DATE USED TO DETERMINE TMED		3.3	<u>12/31/2008</u>
NUMBER OF MED IN REPORT YEAR		3.4	<u>16</u>

NOTE: Per IEEE 1366 TMED 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		<u>120</u>
SAIFI		<u>4.200</u>
CAIDI		<u>106</u>

Including MED (Optional)

SAIDI		<u> </u>
SAIFI		<u> </u>
CAIDI		<u> </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 TMED
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SECTION 5: OUTAGE CAUSE CATEGORIES

Excluding MED

CAUSE CODE DESCRIPTION	SAIDI VALUE	CAUSE CODE DESCRIPTION	SAIFI VALUE
Tree/Limb out of RW	5.1.1 0.305	Lightning	5.2.1 19.03
Lightning	5.1.2 0.178	Deterioration	5.2.2 12.61
Unknown	5.1.3 0.138	Unknown	5.2.3 8.47
Deterioration	5.1.4 0.097	Tree/Limb out of RW	5.2.4 7.39
Tree/Limb in RW	5.1.5 0.093	Tree/Limb in RW	5.2.5 4.45
Wood Cutters	5.1.6 0.061	Wood Cutters	5.2.6 3.41
Other	5.1.7 0.045	Vehicles	5.2.7 1.08
Squirrel	5.1.8 0.022	Other	5.2.8 1.07
Vehicles	5.1.9 0.012	Squirrel	5.2.9 0.96
Overload	5.1.10 0.010	Overload	5.2.10 0.63

SECTION 6: WORST PERFORMING CIRCUITS

CIRCUIT IDENTIFIER	SAIDI VALUE	MAJOR OUTAGE CATEGORY
MARIBA2	6.1.1 8.96	Trees out of R/W
FRNBURG4	6.1.2 8.30	Trees out of R/W
MTSTRLG2	6.1.3 8.22	Trees out of R/W
UNIONCITY2	6.1.4 6.94	Other
RDVILLAGE1	6.1.5 6.93	Lightning
HUNT4	6.1.6 5.52	Lightning
HOPE1	6.1.7 5.42	Trees out of R/W
HUNT3	6.1.8 5.33	Trees out of R/W
THRFRKS2	6.1.9 3.55	Other
JVILLE1	6.1.10 3.47	Trees out of R/W

CIRCUIT IDENTIFIER	SAIFI VALUE	MAJOR OUTAGE CATEGORY
MARIBA2	6.2.1 0.075	Lightning
MTSTRLG2	6.2.2 0.055	Lightning
UNIONCITY2	6.2.3 0.054	Lightning
HUNT4	6.2.4 0.054	Lightning
RDVILLAGE1	6.2.5 0.052	Lightning
JVILLE1	6.2.6 0.051	Lightning
FRNBURG4	6.2.7 0.049	Trees out of R/W
VANMTR3	6.2.8 0.046	Lightning
HOPE1	6.2.9 0.038	Trees out of R/W
HUNT3	6.2.10 0.037	Lightning

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Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

Clark Energy's 2010 Right-of-Way budget was increased by 20 percent over the 2009 budget to allow for additional clearing work to be done. We are currently bidding two of our substations by the circuit using reliability information to pick some of the worse performing circuits.

An updated vegetation management plan for Clark Energy includes a provision to inspect and take action on trees that are outside the corridor wall of our Right-of-Way but might present a hazard or cause outages by falling onto our lines during severe weather.

A remote mechanical trimmer crew was added in 2009 to increase productivity.

SECTION 8: UTILITY COMMENTS

The ice storm that began January 27th, 2009 and continued into February followed by a wind storm February 11th may have been the worst natural disasters to ever occur on our system since the formation of Clark Energy Cooperative. The outages caused by these two events cannot be overstated.

For the year 2009 there were 16 major event days recorded in our outage records, more than we have experienced since going to the IEEE reliability indice format but once those outages were removed by the use of MED's our SAIDI indice was very close to 2008's showing that without extreme weather to combat our system is in good condition and well maintained.

Here are some of the improvements we have made during 2009 until the present related to reliability. On our longest feeder of last years 10 worst performing circuits we have installed permanent fault indicators at key points to aid in locating both temporary faults and permanent outages.

We have installed SCADA in approximately half of our substations and plans are to continue the installation until all stations are covered. This will give us better reliability information so we can respond quicker to large outages. We are also starting the process of migrating from Turtle 1 meters to Turtle 2 starting this year which will not only give us access to our system voltage on a regular basis but it will also report to our outage management system to keep us better informed