

### SALT RIVER ELECTRIC

111 West Brashear Avenue • Bardstown, Kentucky 40004 (502) 348-3931 • (502) 955-9732 • Fax (502) 348-1993

RECEIVED

JAN 1 2 2007

PUBLIC SERVICE COMMISSION

January 11, 2007

Ms. Beth O'Donnell, Executive Director Public Service Commission of Kentucky PO Box 615 Frankfort KY 40602-0615

Re: Administrative Case No. 2006-00494

An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices

Dear Ms. O'Donnell:

Enclosed are the original and seven (7) copies of the information requested in the above-numbered administrative case for Salt River Electric Cooperative Corporation.

Please contact our offices if you require further information or have any questions.

Sincerely,

Larry Hicks

President and CEO

kb

**Enclosures** 





## ADMINISTRATIVE CASE NO. 2006 – 00494

### SALT RIVER ELECTRIC COOPERATIVE CORPORATION

111 West Brashear Avenue Bardstown Kentucky 40004-1645

### APPENDIX A

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 2006-00494 Dated December 12, 2006

- Does utility management measure, monitor, or track distribution reliability?

  Yes.
  - a. If so, describe the measures used and how they are calculated.

Salt River ECC uses SAIDI (System Average interruption Duration Index) and averages these values over a five-year period. It is broken into four categories:

- i. Outages that are the responsibility of the Power Supplier
- ii. Outages caused by extreme storms, defined as events that cause customers to be out for more than 24 hours
- iii. Scheduled outages
- iv. All others

SAIFI is also tracked for use on a year-by-year basis.

### **Methods of Calculation:**

• SAIFI (System Average Interruption Frequency Index)

• SAIDI (System Average Interruption Duration Index)

**b.** If reliability is monitored, provide the results for the past 5 years for system-wide reliability.

SAID						
	Power					
Year	Supplier	Extreme Storm	<b>Prearranged</b>	All Other	<u>Total</u>	
2005	0.33	0.00	0.06	1.47	1.86	
2004	0.37	10.49	0.13	2.28	13.27	
2003	0.44	4.38	0.06	1.59	6.47	
2002	0.38	0.00	0.03	1.74	2.15	
2001	0.02	0.00	0.06	1.40	1.48	
5-yr Avg.	0.31	2.97	.07	1.70	5.05	

2. Are any outages excluded from your reliability measurement? If so, what criteria are used to exclude outages?

Salt River excludes outages caused by customer equipment failure, i.e. a customer's breaker or meter base fails. Also, momentary outages are not included.

- 3. Does the utility differentiate between momentary and sustained outages? Yes.
  - a. What criteria are used to differentiate?

Outages of more than one minute duration are considered sustained outages. Outages of less than one minute are momentary.

b. Is information about momentary interruptions recorded?

Yes, but this information is not considered reliable as it is obtained through a combination of substation System Control and Data Acquisition (SCADA) and automated meter reading monitoring (AMR) and therefore does not adequately record all momentary interruptions. Therefore we do not track any indices for this. It is used only for informational purposes.

4. At what level of detail does the utility record customer outages (by individual customers, by re-closer, by circuit, by substation, etc.)?

Salt River records customer outages by individual customer, circuit and substation.

5. How does the utility detect that a customer is experiencing an outage?

Salt River detects customer outages through a combination of substation System Control and Data Acquisition (SCADA), automated meter reading (AMR) and customer phone calls, with SCADA and customer calls being the primary methods.

6. How does the utility know when a customer is restored?

Salt River assumes all customers associated with any one event are restored when the situation is corrected. If a customer requests a call back, the utility will call back and verify power restoration.

7. Are the causes of outages categorized and recorded? If they are, provide a list of the categories used.

Yes. The categories are:

No cause code Ice, sleet, frost Power supplier Trees and ice

Construction Tree

Scheduled Weather, other

Major storm Small animals or birds

Equipment Large animals

Installation Vehicles or machinery

Conductor sag Aircraft

Faulty equipment Public accidents
Decay Vandalism

Moisture Fire

Electrical overload Telephone company
Deterioration Other utilities
Lightning Member caused

Wind, not trees Unknown

8. Can the utility record outage information for each circuit in the system including for each customer outage?

### Yes.

a. Length of disruption? **Yes**.

- b. Number of customers affected by each disruption? **Yes**.
- c. Number of customers served by each circuit? **Yes**.
- d. Cause of each interruption? When known, yes.
- 9. If the answer to any part of Item 8 is no, what would be required to enable the utility to collect this level of data?

#### N/A

- a. Provide an estimated cost to obtain this level of detail.

  N/A
- b. Provide an estimated timeline to implement such upgrades. **N/A**
- 10. Does the utility follow any type of standard (e.g., ANSI A300) for trimming trees in or near to the distribution right-of-way?

Yes. Salt River attempts to follow ANSI A300 standards when trimming trees. However, we do take customer requests into account and try to trim

in a manner that is mutually acceptable to both the customer and Salt River.

11. What criteria does the utility use to determine when vegetation maintenance or tree trimming is required?

Salt River trims on a four-year cycle and also spot trims based on system inspection and customer contacts.

12. Is the tree trimming performed by utility personnel or by contractor? If by contractor, describe the controls management uses to ensure trees are trimmed per utility requirements.

The majority of vegetation and tree maintenance is performed by contractors with only occasional spot trimming by Salt River employees. Salt River has a consultant who is responsible for directing and inspecting all tree trimming performed by the contractors. Salt River personnel also perform spot checks to ensure tree trimming is being adequately performed.

13. Is any portion of the utility system subject to local codes or ordinances regarding tree trimming or vegetation management?

No; not of which we are aware.

14. How often does the utility clear its distribution easements?

Salt River clears its distribution easements every four years or as needed.

15. How much has the utility spent on distribution easement clearing for each of the last 5 years? Include the cost per mile expended.

<u>Amount</u>
\$ 829,969.44
728,603.24
581,552.54
907,685.91
<u>607,775.27</u>
<u>\$3,655,586.40</u>

16. What annual amount of money is included in the current retail rates for distribution easement clearing?

Salt River's last rate case was 1992-00560. The test year was the 12 months ending November 30, 1992. During the test year Salt River spent \$271,880 on right-of-way expenses. The kWh used in the test year was 504,666,437.