

BEFORE THE
LOUISIANA PUBLIC SERVICE COMMISSION
GENERAL ORDER

Docket No. U-22389. In re: Ensuring Reliable Electric Service.

(Decided at the April 15, 1998 Open Session)

This proceeding was initiated at the March 19, 1997 Business and Executive Session of the Louisiana Public Service Commission ("Commission") to address reliability and propose a general order relative to service quality standards. The Commission voted to publish for comments a proposed General Order. Notice of the Commission's action was published in the Commission's March 21, 1997 Official Bulletin.

The Commission believed that action in this docket would have industry-wide implications and, therefore, it was treated as a rule-making proceeding. All Louisiana electric utilities were invited to participate in the docket. Parties taking active roles in this docket included: the Commission through its Legal and Economic Division, Southwestern Electric Power Company (SWEPCO), Entergy Gulf States and Entergy Louisiana, Inc., Cajun, South Louisiana Electric Cooperative Association (SLECA), Claiborne Electric Cooperative, Dixie Electric Membership Cooperative (DEMCO), Northeast Louisiana Power Cooperative, Inc., Washington-St. Tammany Electric, Point Coupee Electric Membership Corporation, Valley Electric Membership Corporation, Jefferson Davis Electric, Panola-Harrison, Teche Electric, and Concordia Electric.

On March 18, 1997, the Staff published its Proposed General Order along with a request for comments in the Commission's Official Bulletin. After receiving comments from the parties regarding the Staff's proposed General Order, Staff gathered additional data from the North American Reliability Council, the Southwest Power Pool, the Public Utility Commission of Texas, the Wisconsin Public Service Commission, the State of New York Public Service Commission, the California Public Utility Commission, and the United States Secretary of Energy Advisory Boards' Task Force on Electric System Reliability.

At its August 20, 1997 Business and Executive Session, the Commission voted to expand the scope consideration in this docket to include interruption frequency and duration criteria. Accordingly, all electric Public Utilities subject to the jurisdiction of the Commission were instructed to advise the Commission of the number of hours that the average customer on its system has been without service as well as the average interruption frequency.

On March 25, 1998 the Staff issued a notice to members of the service list along with a copy of the Proposed General Order requesting that the parties provide comments to the Proposed General Order. The additional comments were received and taken into consideration by the Staff. Thus, this General Order is the product of a collaborative process involving the Commission Staff and all interested industry representatives who chose to participate. Thus, after careful review of the issues presented in this docket, the Commission Staff recommended adopting of the attached General Order.

Accordingly, at the Commission's April 15, 1998 Open Session, on motion of Commissioner Field, seconded by Commissioner Dixon, the Commission voted unanimously to adopt the attached General Order.

IT IS THEREFORE ORDERED THAT:

1. The Regulations for ensuring reliable electric service as attached are hereby adopted.
2. All provisions of these Regulations are hereby ordered by the Commission.
3. All entities subject to the provisions of this Order shall forthwith take all actions required by the regulations found herein.
4. This Order shall be effective immediately.

**BY ORDER OF THE COMMISSION
BATON ROUGE, LOUISIANA
April 30, 1998**

/S/ DON OWEN
DON OWEN, CHAIRMAN
DISTRICT V

/S/ IRMA MUSE DIXON
IRMA MUSE DIXON, VICE-CHAIRMAN
DISTRICT III

/S/ C. DALE SITTIG
C. DALE SITTIG, COMMISSIONER
DISTRICT IV

/S/ JAMES M. FIELD
JAMES M. FIELD, COMMISSIONER
DISTRICT II

/S/ LAWRENCE C. ST. BLANC
SECRETARY

/S/ JACK "JAY" A. BLOSSMAN, JR.
JACK "JAY" A. BLOSSMAN, JR., COMMISSIONER
DISTRICT I

REGULATIONS

SECTION 1: GENERAL PROVISIONS

(a) Purpose of Order and Scope of Regulation

The standards set forth herein have been developed to provide consumers, the Louisiana Public Service Commission, and jurisdictional electric utilities with a uniform method of ensuring reliable electric service. The standards shall be applicable to the distribution systems of all electric utilities under the jurisdiction of the Louisiana Public Service Commission. The standards establish the reliability of service on an annual basis under all operating conditions except events that are beyond a utility's control. The terms "Major Events" and "Non-Distribution System Interruptions," as defined in Section 2, are beyond the utility's control. The provisions set forth in this order are recognized as interim steps and in no way are intended to preclude the Commission from proposing or enacting significantly different performance based regulation plans as a result of electric restructuring, which is presently being considered in Docket U-21453, or any other development.

(b) Responsibility of the Utility

It shall be the responsibility of the utility to provide and maintain the resources necessary to meet the service levels set forth herein. All jurisdictional utilities shall maintain complete records of all sustained interruptions. Such records shall include the type of interruption, the cause for the interruption, the date and time of the interruption, the restoration time for the interruption event, the number of interrupted customers, the substation identifier, the distribution circuit identifier, and any action taken to restore service and prevent recurrence. Upon a showing of good cause, the Commission may grant a utility-specific waiver from any specific reporting requirement that is demonstrated to be not applicable, inappropriate, or unlikely to produce the needed information, due to the facts and circumstances of the utility.

SECTION 2: DEFINITIONS

- C **Interruption:** The loss of service to one or more customers.
- C **Forced Interruption:** An interruption that results from conditions (lightning, ice, vegetation, animals, unknowns, etc.) directly associated with a component requiring that it be taken out of service immediately, either automatically or manually, or an interruption caused by improper operation of equipment or human error.
- C **Scheduled Interruption:** An interruption that results when a component is deliberately taken out of service at a selected time for purposes of construction, preventive maintenance, or repair. If it is possible to defer an interruption, the interruption is considered a scheduled interruption.
- C **Non-Distribution System Interruption:** An interruption that is caused by non-distribution system functions, such as generation and transmission, when such functions are performed by non-affiliates of the "Utility" as defined herein.
- C **Major Event:** A catastrophic event that exceeds the design limits of the electric power system, such as an extreme storm. These events shall include situations where there is a loss of service to 10% or more of the customers in a region, and where full restoration of all affected customers requires more than 24 hours from the beginning of the event.
- C **Momentary Interruption:** A single operation of an interrupting device which results in a voltage zero and an interruption duration of 5 minutes or less. Two operations are two interruptions if they occur during separate events.
- C **Sustained Interruptions:** All interruptions not classified as momentary.
- C **Number of Customers Served:** The average number of customers served during the reporting year.
- C **Region:** The utility's existing service regions or operating divisions.
- C **Reporting Year:** The reporting year shall begin January 1st and end December 31st.
- C **Utility:** For the purposes of this order, an electric service distributor subject to the jurisdiction of the Louisiana Public Service Commission.
- C **Customer Interruption:** One sustained interruption to one customer. Customer interruptions shall be totaled by summing each and every customer interruption for each and every customer during a reporting year.
- C **Customer Interruption Duration:** The period of time that begins when the utility becomes aware of an interruption to a customer and ends when service has been restored to that customer. Customer interruption durations shall be totaled by summing each and every customer interruption duration for each and every customer interruption during a reporting year.
- C **System Average Interruption Duration Index (SAIDI):** The average amount of time a customer's

service is interrupted during the reporting year.

SAIDI = Sum of all Customer Interruption Durations) Total Number of Customers

- C **System Average Interruption Frequency Index (SAIFI):** The average number of times that a customer's service is interrupted during the reporting year.

SAIFI = Total Number of Customer Interruptions) Total Number of Customers

SECTION 3: RELIABILITY PROGRAM OBJECTIVES

(a) Program Goal

Each utility shall design and maintain a program to improve reliability where it can be improved cost-effectively, and to sustain that reliability over time. The goal of such a program shall be to limit the frequency and duration of electric service interruptions in an attempt to meet 100% of the utility's customer demand.

(b) Program Design

The program shall include but should not be limited to:

- C An efficient Customer Call Center to facilitate the reporting of outages by the customer to the utility. The Customer Call Center shall, at a minimum, give the customer the option to report an outage electronically or the option to speak to a customer service representative. To improve the timeliness of outage reporting, the Division of Economics and Rates Analysis strongly urges the implementation of an automated reporting system in addition to the above requirements, whereby the utility is able to generate a complete customer outage report when a customer enters a phone number or other input via a touch-tone telephone.
- C Inspection maintenance, repair and replacement standards that ensure timely and efficient service restoration as well as preventive and emergency maintenance. In establishing such standards it is imperative that the utility locate sufficient personnel, equipment, repair materials, and supplies strategically throughout its service territory in order to fully and adequately meet the reliability standards established herein.

The program should give special emphasis to the improvement of the worst-performing circuits in each region of the utility's service territory.

SECTION 4: PERFORMANCE LEVELS

(a) Utility's Responsibility and Indices Used

It shall be the utility's responsibility to maintain and compile the data necessary to compute the System Average Interruption Duration Index and the System Average Interruption Frequency Index as defined in Section 2. These indices shall be computed by the utility for each reporting year. The data maintained and compiled for the computation of the indices shall conform strictly to their respective definitions in Section 2. The indices shall be computed for the utility's entire service territory, for each region, and for each distribution circuit. Computation of the indices shall not include interruptions that have resulted from operating conditions that are beyond the utility's control as described in Section 1(a). Each utility shall maintain the raw interruption and duration data as well as the computation of the indices for each reporting year, for a period of not less than three (3) years after the February 15 annual report filing deadline. The Commission may impose a \$25,000 fine for failure to maintain the data as requested in this section.

(b) Minimum Performance Level

Upon receipt of the utility's annual report as defined in Section 6, the Division of Economics and Rates Analysis will compare the indices computed for the utility's service territory to the minimum performance level. The minimum performance level shall represent the lower threshold of adequate service below which further review, analysis, and corrective action may be required. The minimum performance level shall be reached when the SAIDI and SAIFI values of each electric utility's service territory are equal to or better than the minimum performance level set forth herein. The minimum performance level for the first reporting year (January 1, 1999 to December 31, 1999) shall be as follows: SAIDI 3.58 hours per customer and SAIFI 2.84 interruptions per customer. The minimum performance level for a utility with 100,000 customers or greater shall be equal to the annual minimum performance level as illustrated in Section 4(d). The minimum performance level for a utility with less than 100,000 customers shall be adjusted to account for variances in the rural nature of their distribution system. The adjusted minimum performance level for a utility with less than 100,000 customers shall be determined by multiplying the annual minimum performance level by the

ratio of miles of line per customer plus 1(annual level H [miles of line) customers + 1]) for the reporting year. It will be the responsibility of the utility to determine the adjusted minimum performance level using this formula for each reporting year. The utility's average number of customers for the prior reporting year shall determine the standards to be applied to the current reporting year.

(c) Objective Performance Level

The objective performance level shall represent a fully adequate level of electric service that each utility should strive to achieve and maintain. It shall be reached when the SAIDI and SAIFI values of each utility's service territory are equal to or better than the SAIDI and SAIFI values that result from a 25% improvement over the minimum performance level for the first year as set forth in Section 4(b).

(d) Phase-In Plan

The minimum performance level shall improve 25% over time to the optimum level by decreasing the minimum performance level 5% every year for five years. The phase-in plan shall begin with the third reporting year. The values are as follows:

	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year
Improvement	0%	0%	5%	10%	15%	20%	25%
SAIDI	3.58	3.58	3.41	3.26	3.11	2.99	2.87
SAIFI	2.84	2.84	2.71	2.59	2.47	2.37	2.28

Utilities with less than 100,000 customers will use these annual minimum performance values to compute the adjusted minimum performance level as described in section 4(b) for each reporting year.

(e) Failure To Meet The Minimum Performance Level

Performance shall be considered unacceptable when the SAIDI or SAIFI value of a utility's service territory is not better than or equal to the minimum performance level. When a utility's calculations show that its service territory has failed to meet the minimum performance level defined in Section 4(b) for the reporting year, the utility shall prepare a report to be submitted to the Division of Economics and Rates Analysis which analyzes the interruption patterns and trends, as well as the operating and maintenance history of the major affected region or regions, describes the problems causing the unacceptable performance, and the actions the utility is taking to resolve them. The report shall contain target dates for completion of the corrective action. The utility may determine that actions on its part are unwarranted. In those cases, its report shall provide adequate justification for such a conclusion. This analysis should be included in the annual report described in Section 6. A utility may be fined up to \$500,000 for failure to meet the minimum performance level for the entire service territory for the reporting year.

(f) Flexibility For Future Adjustments

Penalties for failure to meet the minimum performance level shall not be enforced for the first reporting year to allow the Division of Economics and Rates Analysis the opportunity to evaluate whether or not the minimum performance values and formulas are reasonable and prudent. The Division of Economics and Rates Analysis reserves the right to make necessary adjustments applicable to the second and subsequent reporting years, subject to Commission approval. The Division of Economics and Rates Analysis further reserves the right to develop and propose a positive incentive plan to reward reliability improvement, subject to Commission approval.

SECTION 5: INDIVIDUAL CIRCUIT RELIABILITY

Each utility shall develop and maintain a program for identifying and analyzing its worst-performing circuits during the course of each reporting year. The program shall include but should not be limited to an analysis of the top 5% worst performing circuits in each region, and the actions taken to improve their performance. The worst performing circuits shall be identified and ranked using the SAIDI and SAIFI values computed for each circuit. The details and results of the program shall be submitted as part of the annual report described in Section 6.

SECTION 6: ANNUAL REPORT

(a) Filing Deadline

Each utility shall file a report with the Division of Economics and Rates Analysis by February 15th of every year. The report should be created and maintained using spreadsheet and/or word processing software and filed electronically via computer diskette or as an electronic mail attachment.

(b) Data to be Filed

The annual report shall include the following:

- C SAIDI and SAIFI values computed for the entire service territory and displayed in tabular form.
- C SAIDI and SAIFI values computed for each region and displayed in tabular form.
- C A detailed report for each qualifying major event not included in the calculation of the reliability indices. The major event report shall include the interruption cause or causes, date, regional location, percentage of customers without service in that region as a result of the event, the time or time frame in which service was lost to 10% of that region, the time the last customer's service was restored in that region, and any other details that the utility believes will further justify the exclusion of the event from the calculations.
- C A description of the program the utility has in place for analyzing worst-performing circuits and a summary of the results of the program for the reporting year.
- C A description and map identifying the utility's service regions or operating divisions, documentation and illustration of any changes in region boundaries as defined by the utility, and justification for such changes.
- C For each utility with less than 100,000 customers, show the data used to calculate and the calculation of the rural adjusted minimum performance level as described in Section 4(b).

The Louisiana Public Service Commission reserves the right to request additional data if necessary.