BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Adoption of Rule 25-6.0455, F.A.C., Annual Quality of Service Report, and Amendment of Rules 25-6.044 and 25-6.046, F.A.C., Quality of Electric Service, and Repeal of Rule 25-6.045, F.A.C., Frequency Standards.

DOCKET NO. 920228-EI ORDER NO. PSC-92-0603-NOR-EI ISSUED: 07/06/92

NOTICE OF RULEMAKING

NOTICE is hereby given that the Commission, pursuant to section 120.54, Florida Statutes, has initiated rulemaking to adopt Adoption of Rule 25-6.0455, F.A.C., Annual Quality of Service Report, and Amendment of Rules 25-6.044 and 25-6.046, F.A.C., Quality of Electric Service, and Repeal of Rule 25-6.045, F.A.C., Frequency Standards.

The attached Notice of Rulemaking will appear in the July 10, 1992 edition of the Florida Administrative Weekly. If requested, a hearing will be held at the following time and place:

> 9:30 a.m., Thursday, August 6, 1992 Room 122, Fletcher Building 101 East Gaines Street Tallahassee, Florida

Written requests for hearing and written comments or suggestions on the rules must be received by the Director, Division of Records and Reporting, Florida Public Service Commission, 101 East Gaines Street, Tallahassee, FL 32399, no later than July 31, 1992.

By Direction of the Florida Public Service Commission, this 6th day of July, 1992.

STEVE TRIBBLE, Director Division of Records & Reporting

(SEAL)

by: Chief, Bureau of Records

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FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 920228-EI RULE TITLE: RULE NO.: Continuity of Service 25-6.044 Voltage Standards 25-6.046 Annual Quality of Service Report 25-6.0455 REPEAL OF:

Frequency Standards

25-6.045

PURPOSE AND EFFECT: At present, Commission rules do not require utilities to collect and provide data by which to objectively measure the quality of their electric service. The proposed new rule and amendments will allow a system-wide objective view of utility performance. Objective measurement of quality of service should allow the Commission to judge the performance of utilities as well as judge the design and maintenance of distribution systems.

SUMMARY: The recommended amendments to Rule 25.6.044 include new terms and definitions to help the Commission measure quality of service by objective standards, and would require utilities to keep a categorized record of the cause of service interruptions. New Rule 25-6.0455 would require utilities to file an annual quality of service report, which would include the standards defined in Rule 25-6.044 and would identify each utility's worstperforming feeders. Rule 25-6.045 is obsolete and should be

repealed, as should paragraph (4) of Rule 25-6.046. SUMMARY OF THE ESTIMATE OF ECONOMIC IMPACT OF THIS RULE: The proposed rule revisions should cause no additional direct costs to the Commission and should affect neither small businesses nor competition. No significant impact on employment is forecast, as the responding utilities indicated that the major portion of their estimated expense will be for programming changes.

The responding utilities provided estimates of both nonrecurring start-up costs and annual recurring costs, which varied widely among utilities. Tampa Electric Company estimated the lowest compliance expense (no start-up costs, and annual costs of only \$700) while Florida Public Utilities Company's estimated expenses were much higher (start-up costs of \$313,600 and annual costs of \$50,000).

RULEMAKING AUTHORITY: 366.05(1), 366.06(1), F.S.

LAW IMPLEMENTED: 366.05, 366.06(1), F.S.

WRITTEN COMMENTS OR SUGGESTIONS ON THE PROPOSED RULE MAY BE SUBMITTED TO THE FPSC, DIVISION OF RECORDS AND REPORTING, WITHIN 21 DAYS OF THE DATE OF THIS NOTICE FOR INCLUSION IN THE RECORD OF THE PROCEEDING. IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE DATE AND PLACE SHOWN BELOW: TIME AND DATE: 9:30 A.M., August 6, 1992

PLACE: Room 122, 101 East Gaines Street, Tallahassee, Florida.

THE PERSON TO BE CONTACTED REGARDING THIS RULE AND THE ECONOMIC IMPACT STATEMENT IS: Director of Appeals, Florida Public Service Commission, 101 East Gaines Street, Tallahassee, Florida 32399. THE FULL TEXT OF THE RULES ARE:

25-6.044 Continuity of Service.

(1) Definitions:

(a) "Service Interruption". An unplanned interruption of electric service due to a malfunction on the distribution system or a distribution-related outage caused by events on the utility's side of customer meters which is triggered by load management restoration. The term does not include interruptions due to momentary circuit breaker operations, hurricanes, tornados, ice on lines, planned load management, or electrical disturbances on the generation or transmission system.

(b) "Customer Interruption Duration". The time interval, in minutes, between the time when a utility first becomes aware of a Service Interruption and restoration of service to the last customer affected by that Service Interruption.

(c) "System Interruption Time". The total customer minutes of Service Interruption, calculated by multiplying the actual number of customers (or estimated number of customers, if the actual number is unavailable) who experienced a Service Interruption due to the same outage by the Customer Interruption Duration, and summed for all Service Interruptions occurring

during a given time period.

(d) "Customer Average Interruption Duration Index" (CAIDI). System Interruption Time divided by the number of Service Interruptions during a given time period.

(e) "System Average Interruption Frequency Index" (SAIFI). The average number of Service Interruptions experienced by customers during a given period, calculated by dividing the total number of customers experiencing Service Interruptions by the average number of customers served during the period.

(f) "System Average Interruption Duration Index" (SAIDI). The average interruption duration in minutes per customer served, calculated by multiplying the Customer Average Interruption Duration Index by the System Average Interruption Frequency Index.

(2) Each utility shall keep a record of the cause of each Service Interruption, and shall categorize the cause as one or more of the following: lightning, tree or limb contacting line, animal, line downed by vehicle, dig-in, substation outage, line transformer failure, salt spray on insulator, corrosion, other, or unknown, and shall further identify whether the initiating event occurred on overhead or underground distribution lines.

(3)(1) Each utility shall make all reasonable efforts to prevent interruptions of service and when such interruptions occur shall <u>attempt</u> endeavor to <u>restore</u> re-establish service

within the shortest time practicable consistent with safety.

(4)(2) When the service is necessarily interrupted or curtailed for prolonged periods and for the purpose of working on the system, it shall be done at a time which, when at all practicable, will cause the least inconvenience to customers and all such scheduled interruptions shall be preceded by adequate notice whenever practicable to affected customers.

(5)(3) The provisions of this rule shall not apply to customers receiving service under interruptible rate classifications.

Specific Authority: 366.05(1), F.S.

Law Implemented: 366.05, F S.

History: New 7/29/69, amended _____, formerly 25-6.44.

25-6.045 Frequency Standards.

(1) The standard frequency for alternating current supply systems shall be sixty cycles per second. Under normal operating conditions the frequency on inter-connected systems shall not vary more than plus or minus 2% from the standard frequency. The frequency of an isolated system shall not vary more than plus or minus 5% from the standard frequency of that system.

(2) Each utility generating all or a substantial part of its requirements shall have at its main generating station or load dispatching office a master clock or will adhere to a procedure designed to indicate average frequency which shall, if

necessary, be adjusted to the correct indication once a day. Every reasonable effort shall be made to operate at the standard frequency.

(3) Variations of frequency in excess of those specified above caused by service interruptions, action of the elements, temporary separation of parts of the system or other causes beyond the control of the utility, shall not be considered a violation of these rules.

Specific Authority: 366.05(1), F.S.

Law Implemented: 366.05(1), F S.

History: Amended 7/29/69, formerly 25-6.45. Repealed _____

25-6.046 Voltage Standards.

(1) Each utility shall adopt standard nominal voltages conforming to modern usage, as may be required by the design of its distributing and transmission system for its entire service area or for each of the districts into which its system may be divided.

(a) For service rendered to customers whose principal consumption shall be for lighting and/or residential purposes, the voltage at the point of delivery shall not exceed 5% above or below the standard voltage adopted.

(b) For service rendered principally for industrial or power purposes, excluding residential purposes, the voltage at the point of delivery shall not exceed 7 1/2% above or below the

standard voltage adopted.

(c) Sudden changes in voltage that exceed 5% of the standard voltage and occur more frequently than two times per hour, or changes of 2 1/2% that occur more frequently than once per minute shall be limited to magnitudes and frequency of occurrence compatible with the customer's requirements.

(d) The limitations in (a), (b) and (c) may be modified for cases in which the customer specifically agrees to accept service not meeting the specified limits.

(2) Where the utility's facilities are reasonably adequate and of sufficient capacity to carry the actual loads normally imposed, the utility may require that the equipment on the customer's premises shall be such that the starting and operating characteristics will not cause an instantaneous voltage drop of more than 4% of the standard voltage, measured at the point of delivery, or cause objectionable flicker to other customers' service.

(3) Variations in voltage in excess of the limits specified above caused by service interruptions, action of the elements, temporary separation of parts of the system, infrequent and unavoidable fluctuations not exceeding five (5) minutes duration, operation of the customers' equipment at low power factor, unbalanced loading, or other causes beyond the control of the utility shall not be considered a violation of this rule.

(4) Each utility shall make such load and voltage surveys necessary to determine the character of service furnished its customers and make such information available to the Commission upon request.

Specific Authority: 366.06(1), F.S.

Law Implemented: 366.06(1), F.S.

History: Amended 7/29/69, _____, formerly 25-6.46.

25-6.0455 Annual Quality of Service Report.

Each utility shall file a written quality of service report with the Director of the Commission's Division of Electric and Gas February 1 of each year, covering the preceding calendar year. The quality of service report shall contain the following information:

(a) the utility's Customer Average Interruption Duration Index, System Average Interruption Frequency Index, System Average Interruption Duration Index and number of Service Interruptions, categorized by cause, as specified in Rule 25-6.044;

(b) identification of the three percent of the utility's feeders with the highest Customer Average Interruption Duration Index and the three percent of feeders with the highest System Average Interruption Frequency Index, as defined in Rule 25-6.044. Each such feeder shall be identified by feeder number, substation name and general location as well as the estimated

number of customers in each service class served by the feeder circuit.

Specific Authority: 366.05(1), F.S.

Law Implemented: 366.05, F.S.

History: New

NAME OF PERSON ORIGINATING PROPOSED RULES: Lee Colson, Division of Electric and Gas

NAME OF SUPERVISOR OR PERSON(S) WHO APPROVED THE PROPOSED RULES: Florida Public Service Commission.

DATE PROPOSED RULES APPROVED: June 16, 1992

If any person decides to appeal any decision of the Commission with respect to any matter considered at the rulemaking hearing, if held, a record of the hearing is necessary. The appellant must ensure that a verbatim record, including testimony and evidence forming the basis of the appeal is made. The Commission usually makes a verbatim record of rulemaking hearings. Any person requiring some accommodation at this hearing because of a physical impairment should call the Division of Records and Reporting at (904) 488-8371 at least five calendar days prior to the hearing. If you are hearing or speech impaired, please contact the Florida Public Service Commission using the Florida Relay Service, which can be reached at: 1-800-955-8771 (TDD).