ORIGINAL

NOTICE OF PROPOSED RULE DEVELOPMENT
FLORIDA PUBLIC SERVICE COMMISSION

UNDOCKETED

RULE TITLE:	RULE NO.:
Record of Metering Devices and Metering Device Tests	25-6.022
Test Procedures and Accuracies of Consumption Metering Devices	25-6.052
Metering Device Test Plans	25-6.056
Determination of Average Meter Error	25-6.058
Meter Test by Request	25-6.059
Meter Test – Referee	25-6.060

PURPOSE AND EFFECT: To clarify the calculation of meter error used in the determination of any potential refund or backbill.

SUBJECT AREA TO BE ADDRESSED: Electric meter testing

SPECIFIC AUTHORITY: 366.05(1), FS

LAW IMPLEMENTED: 366.04(2)(f), 366.05(1),(3),(4),(5), FS

A RULE DEVELOPMENT WORKSHOP WILL BE HELD AT THE TIME, DATE, AND PLACE SHOWN BELOW:

CMP
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CTR
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OTH

TIME AND DATE: 9:30 a.m., June 9, 2005

PLACE: Betty Easley Conference Center, Room 152, 4075 Esplanade Way, Tallahassee, Florida

Any person requiring some accommodation at this workshop because of a physical impairment should call the Division of the Commission Clerk and Administrative Services at (850) 413-6770 at least 48 hours prior to the hearing. Any person who is hearing or speech impaired should contact the Florida Public Service Commission by using the Florida Relay Service, which can be reached at: 1-800-955-8771 (TDD).

DOCUMENT NUMBER-DATE
04584 MAY 11 05
FPSC-COMMISSION CLERK

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE DEVELOPMENT IS: Roland Floyd, Florida Public Service Commission, 2540 Shumard Oak Blvd., Tallahassee, FL 32399-0862, (850) 413-6676.

THE PRELIMINARY TEXT OF THE PROPOSED RULE DEVELOPMENT IS:

25-6.022 Record of Metering Devices and Metering Device Tests.

(1) For all types of utility-performed tests, a test record shall be made whenever a unit of metering equipment is tested, but need not be retained after the equipment is again tested unless the test is made in accordance with Rule 25-6.059. For equipment tested under Rule 25-6.059, any record of a previous accuracy test must be retained by the utility until after any dispute is resolved. The record shall show information to identify the unit and its location; equipment with which the unit is associated; the date of the test; reason for the test; readings before and after the test; if the meter creeps, a statement as to the rate of creeping; a statement of the "as found" accuracy; indications showing that all required checks have been made; a statement of repairs made, if any; and identification of the person making the test. The completion of each test will signify the "as left" accuracy falls within the required limits specified in Rule 25-6.052, F.A.C., unless the meter is to be retired.

(2) No change.

(3) Records of Test for Incoming Purchases. Regardless whether the newly purchased metering equipment is tested under a Random Sampling Plan approved pursuant to Rule 25-6.056, each utility shall maintain and make available to the Commission for each purchase of new meters and associated devices made during the calendar or fiscal year, the following information:

(a) – (4)(i) No change.

Specific Authority 366.05(1) FS.

Law Implemented 366.05(1), (3), 366.04(2)(f) FS.

History–Amended 7-29-69, Formerly 25-6.22, Amended 5-19-97,_____

25-6.052 Test Procedures and Accuracies of Consumption Metering Devices.

(1) Accuracy Requirements for Watthour Meters. The performance of an in-service watthour meter shall be acceptable when the meter does not creep and the average percentage registration is not more than 102 percent nor less than 98 percent, calculated in accordance with Rule 25-6.058, F.A.C.

(2) Accuracy Requirements for Demand Meters and Registers.

(a) The performance of a mechanical or lagged demand meter or register shall be acceptable when the error of registration does not exceed four percent in terms of full-scale value throughout the range of~~, when tested at any point between~~ 25 percent and 100 percent of full-scale~~ value~~.

(b) The performance of an electronic demand meter or register shall be acceptable when the error of registration does not exceed two percent of reading throughout the range of~~, when tested at any point between~~ 10 percent and 100 percent of full-scale~~ value~~.

(c) No change.

(3) Meter Equipment Test Procedures.

(a) No change.

(b) Watthour meters and associated devices shall be tested for accuracy and adjusted in accordance with American National Standard for Electric Meters, Code for Electricity Metering (ANSI C12.1 – 2001~~1995~~), which is incorporated into this rule by reference.

(c) Totally solid-state meters that compute demand from watthour meter registration and programmed demand algorithms shall be tested and adjusted in accordance with ANSI C12.1 – 20011~~995~~. Demand registration need not be tested, provided the meter has been inspected to contain the correct demand algorithm whenever watthour registration is tested.

(4) – (b) 4. No change.

5. Description of the general steps involved.

(c) Any changes to a previously approved test procedure must be submitted to the Commission's Division of Economic Regulation for approval. Adding a meter type to a previously approved test procedure is a change that ~~which~~ requires approval.

(d) Review of Proposed Test Procedures. Except where a utility has requested a formal ruling by the Commission, the Division of Economic Regulation shall within 90 days after submission review each utility's proposed test procedures to determine whether they satisfy the criteria set forth in paragraphs (4)(a) and (b) above and shall notify the utility in writing of its decision accepting or rejecting the proposed procedures. If a proposed procedure is rejected, the written notice of rejection shall state clearly the reasons for rejecting the proposed procedure. If a utility's proposed procedure is rejected, the utility shall submit a revised procedure to the Commission within 60 days after receiving the notice of rejection. Where a utility has requested staff review of its procedures and a procedure has been rejected, the utility may petition the Commission for approval of the procedure. ~~If a utility has not submitted a satisfactory procedure within six months following the submission of the initially proposed procedure, the Commission may prescribe by order a procedure for the utility.~~

Specific Authority 366.05(1) FS.

Law Implemented 366.05(3) FS.

History–Amended 7-29-69, Formerly 25-6.52, Amended 5-19-97,_____

25-6.056 Metering Device Test Plans.

(1) No change.

(2) All metering device tests shall be retained in accordance with ~~by the utility and made available to the Commission pursuant to~~ Rule 25-6.022, F.A.C.

(3) No change.

(4) All metering equipment listed in Rule ~~paragraph~~ 25-6.052(4)(a), F.A.C., shall be tested:

(a) Before initial and each successive installation, either by the utility or the manufacturer, with the exception of units of metering equipment which are statistically sample tested by the utility under an approved Random Sampling Plan, as set forth in subsection (8); and

(b) – (5)(c) No change.

(6) Within each population specified in an approved sampling plan or periodic test plan of mechanical or lagged demand meters, or other metering devices for which acceptability is stated in terms of full-scale value, each device shall have the same full-scale value.

(7)~~(6)~~ In-Service Testing.

(a) – (b) No change.

(c) The utility shall supplement its in-service tests of metering equipment by operating a program to analyze customer billing records and any other information regarding customers' consumption, for the purpose of detecting and investigating abnormally high or low electric bills. The utility's procedures for doing this shall be set forth in its meter testing plan on file with the Commission.

(8)~~(7)~~ Random Sampling Plans Submitted for Approval.

(a) – 3. No change.

(d) "Variables" sampling plans shall ~~may~~ use either of the "known variability" or the "unknown variability" acceptance criteria. The acceptance criteria shall be appropriately modeled. Variables sampling plans shall use the population standard deviation to measure variability unless the proposed plan is accompanied by adequate justification for using another parameter.

(9)~~(8)~~ No change.

(10)~~(9)~~ Approval of Sampling Plans and In-Service Testing Schedules. All utilities subject to this rule shall submit to the Commission's Division of Economic Regulation a proposed Random Sampling Plan for each population of metering devices for which it intends to use a random sampling plan for acceptance testing or for in-service testing, and a proposed periodic testing schedule for each population of metering devices for which it does not submit a proposed in-service random sampling plan. Sampling plans and in-service testing schedules must be reviewed and approved pursuant to subsection (11) prior to their use.

(11)~~(10)~~ Review of Proposed Test Plan. As used in this subsection, the word "plan" includes periodic testing schedules as well as Random Sampling Plans. Except where a utility has requested a formal ruling by the Commission, the Division of Economic Regulation shall within 90 days after submission review each utility's plan to determine whether it satisfies the criteria set forth in subsections (8)~~(7)~~ and (9)~~(8)~~ above and shall notify the utility in writing of its decision accepting or rejecting the proposed plan. If a proposed plan is rejected, the written notice of rejection shall state clearly the reasons for rejecting the proposed plan. If a utility's proposed plan is rejected, the utility shall submit a revised plan to the Commission within 60 days after receiving the notice of rejection. Where a utility has requested staff review of its plan

and the plan has been rejected, the utility may petition the Commission for approval of the initially proposed plan. ~~If a utility has not submitted a satisfactory plan within six months following the submission of the initially proposed plan, the Commission may prescribe by a plan for the utility.~~

Specific Authority 366.05(1) FS.

Law Implemented 366.05(3) FS.

History–New 7-29-69, Amended 4-13-80, Formerly 25-6.56, Amended 5-19-97, _____.

25-6.058 Determination of Average Meter Error.

The average meter error shall be determined as follows: ~~Whenever a metering installation is tested and found to exceed the accuracy limits, the average error shall be determined in one of the following ways:~~

(1) Average Meter Error for Watthour Meters

(a)~~(1)~~ No change.

(b)~~(2)~~ If a single-phase metering installation is used on a varying load, the average error shall be determined by ~~in~~ one of the following methods ~~ways:~~ The utility shall select the method that best fits the customer's usage pattern.

1.~~(a)~~ (a) – (b) renumbered as 1. – 2. No change.

3.~~(c)~~ A single point, when calculating the error of a totally solid-state ~~solid-state~~ meter, and the single point is an accurate representation of the error over the load range of the meter.

(c)~~(3)~~ If a polyphase metering installation is used on a varying load, the average error shall be determined by ~~in~~ one of the following methods ~~ways:~~ The utility shall select the method that best fits the customer's usage pattern.

1.~~(a)~~ No change.

2.~~(b)~~ A single point, when calculating the error of a totally solid-state ~~solid-state~~ meter, and the single point is an accurate representation of the error over the load range of the meter.

(2) Average Meter Error for Demand Meters

(a) For tests performed to determine whether a meter meets the performance requirement of Rule 25-6.052(2)(a) or Rule 25-6.052(2)(b), for acceptance tests, in-service tests, or tests requested by customers, meter error shall be determined by testing the meter at both 40 percent and 80 percent of reference meter full-scale value, or as near to these two points as is practicable. The kilowatt readings on the meter being tested shall be denoted by M40 and M80, respectively, and the corresponding kilowatt errors shall be denoted by E40 and E80, respectively. These two pairs of results define a straight line relationship between the kilowatt readings on the meter being tested and the corresponding kilowatt errors.

1. For mechanical or lagged demand meters, the straight line determined by subsection (2)(a) above shall be used to estimate the kilowatt error of the meter at 25 percent of full scale and at 100 percent of full scale, both with respect to the meter being tested. The kilowatt errors shall be denoted by E25 and E100, respectively. The greater of the kilowatt errors E25 and E100 shall be expressed as a percentage of the full-scale value of the meter being tested to determine if the meter meets the accuracy requirement of Rule 25-6.052(2)(a).

2. For electronic demand meters, the straight line determined by subsection (2)(a) above shall be used to estimate the kilowatt error of the meter at 10 percent of full scale and at 100 percent of full scale, both with respect to the meter being tested. The kilowatt errors shall be denoted by E10 and E100, respectively. The two kilowatt errors E10 and E100 shall be expressed as a percentage of the corresponding reference meter kilowatt reading. The greater of

these two percentages shall be used to determine if the meter meets the accuracy requirement of Rule 25-6.052(2)(b).

(b) For tests performed to calculate amounts to refund customers, or amounts by which to backbill customers whose meters are found to be in error according to Rule 25-6.052 (2)(a) or Rule 25-6.052(2)(b), meter error shall be determined as follows. Using the same linear relationship determined in Rule 25-6.058(2)(a) above, determine the kilowatt error at the point on the scale that represents the average billing demand over the refund period. The kilowatt error so determined shall be expressed as a percentage of the reference meter reading corresponding to the average billing demand and shall be used to determine the corrected billing demand for each month in the refund period.

Specific Authority 366.05(1) FS.

Law Implemented 366.05(3) FS.

History–New 7-29-69, Formerly 25-6.58, Amended 5-19-97,_____

25-6.059 Meter Test by Request.

(1) No change.

(2) Should any customer request a meter test more frequently than provided for in subsection (1) of this rule, the utility may require a deposit to defray costs of testing, such deposit not to exceed fifteen dollars ($15.00) for each test. If the meter is found to be running fast in excess of the allowable limit the deposit shall be refunded, but if the meter is below the allowable limit, the deposit may be retained by the utility as a service charge for conducting the test.

(3) No change.

(4) At the request of the customer, the utility shall make arrangements for a meter test to be conducted by an independent meter testing facility of the customer's choosing. The customer shall be responsible for negotiating and paying to the independent meter testing facility any fee charged for such a test. Such independent meter testing facilities shall, at a minimum, conform to the requirements of the American National Standard for Electric Metering, Code for Electricity Metering~~, Seventh Edition~~ (ANSI C12.1 2001~~1982~~). Where appropriate, the meter may be field tested. The customer shall be responsible for all the costs to the utility associated with a meter test by an independent meter testing facility. The utility shall provide a detailed estimate of such costs and may require payment of such costs prior to the actual meter test. If the meter is found to be running fast in excess of the limits established by these rules, such costs shall be refunded, but if within the allowable limits, the utility may retain the costs.

(5) No change.

(6) For equipment tested under this rule, any previous accuracy test result on record at the time the meter test is requested must be retained in accordance with Rule 25-6.022.

Specific Authority 366.05(1) FS.

Law Implemented 366.05(4), (5), 366.05(3) FS.

History–New 7-29-69, Amended 10-11-83, Formerly 25-6.59,_____

25-6.060 Meter Test - Referee.

(1) – (3) No change.

(4) For equipment tested under this rule, any previous accuracy test result on record at the time the meter test is requested must be retained in accordance with Rule 25-6.022.

Specific Authority 366.05(1) FS.

Law Implemented 366.05(3) FS.

History–New 7-29-69, Formerly 25-6.60,_____

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Step 5: Acknowledgement of Submittal

The Administrative Code and Weekly Unit has received your notice for publication in the FAW.

A confirmation number has been provided below which may be used to reference this submittal in any communications with the Unit. Use the your browser *'Print'* button or the *'Print this Acknowledgement'* button at the bottom of this page to generate a receipt for your records. A record of this transmittal will be maintained for approximately 30 days and may be accessed from the 'Submittal Listing' item in the FAW Online menu on the left of this page.

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