

State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

### -M-E-M-O-R-A-N-D-U-M-

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**DATE:** March 23, 2006

**TO:** Director, Division of the Commission Clerk & Administrative Services (Bayó)

**FROM:** Office of the General Counsel (Cibula, Keating)  
Division of Economic Regulation (Matlock, Kummer, Hewitt)

**RE:** Docket No. 060121-EI – Proposed amendment of Rules 25-6.022, 25-6.052, 25-6.056, 25-6.058, 25-6.059, 25-6.060, and 25-6.103, Florida Administrative Code.

**AGENDA:** 04/04/06 – Regular Agenda – Rule Proposal – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Tew

**RULE STATUS:** Proposal May Be Deferred

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\GCL\WP\060121.RCM.DOC

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### Case Background

Pursuant to section 366.05, Florida Statutes, the Commission has jurisdiction to prescribe standards of quality and measurements for electric utilities and to adopt rules to implement and enforce the provisions of Chapter 366. Section 366.05 also specifically states that the Commission must provide for the examination and testing of all meters used for measuring any product or service of a public utility and establish reasonable fees to be paid for the testing of meters. Moreover, the Commission has the authority, pursuant to section 366.04(f), “to prescribe and require the filing of periodic reports and other data as may be reasonably available and as necessary.”

The Commission has adopted rules to implement its authority over electric meter testing. The following rules address the Commission’s standards on electric meter testing: 1) Rule 25-

6.022, Record of Metering Devices and Metering Device Tests; 2) Rule 25-6.052, Test Procedures and Accuracies of Consumption Metering Devices; 3) Rule 25-6.056, Metering Device Test Plans; 4) Rule 25-6.058, Determination of Average Meter Error; 5) Rule 25-6.059, Meter Test By Request; 6) 25-6.060, Meter Test – Referee; and 7) Rule 25-6.103, Adjustment of Bills for Meter Error.

In a customer complaint proceeding initiated by Southeastern Utilities Services, Inc. against Florida Power & Light Company, in Docket No. 030623-EI, the Commission discovered that Rules 25-6.052 and 25-6.103 were not completely clear with respect to the appropriate method for testing the accuracy of the demand portion of the meters. By Order PSC-05-0226-FOF-EI, in Docket No. 030623-EI, issued February 25, 2005, the Commission directed staff to pursue rulemaking to clarify the rules.<sup>1</sup> Staff also reviewed the other meter testing rules and determined that changes may be necessary to update and clarify the rules.

Staff held two rule development workshops to obtain input from interested persons on potential revisions to the rules. The first staff rule development workshop was held on June 9, 2005. Issues raised at the first workshop indicated to staff that it was necessary to conduct a second rule development workshop. The second staff rule development workshop was held on September 21, 2005. Interested persons submitted written comments after the second workshop.

Florida Power & Light Company and Gulf Power Company suggested in their post-workshop comments the idea of a third staff rule development workshop in connection with the issue of how to test mechanical and lagged demand meters. While these companies initially indicated confusion over staff's method for testing such meters, further conversations with the companies revealed that they were not so much confused as to how to make the calculations using the staff's test method, but that they disagreed with staff in regard to the best method to test these types of meters. The companies' disagreement with staff as to best method for testing mechanical and lagged demand meters had been discussed and noted at the second staff rule development workshop. As staff was already aware of the companies' position on the issue, staff concluded that a third workshop would not be an efficient use of resources. The companies' position on the best method for testing mechanical and lagged demand meters is discussed in the body of this recommendation.

This recommendation addresses whether the Commission should amend Rules 25-6.022, 25-6.052, 25-6.056, 25-6.058, 25-6.059, 25-6.060, and 25-6.103. The Commission has rulemaking authority pursuant to sections 366.04, 366.05, and 120.54, Florida Statutes.

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<sup>1</sup> Staff notes that Order No. PSC-05-0226-FOF-EI is currently on appeal before the Florida Supreme Court. The issues before the Court on appeal do not impact this rulemaking.

### **Discussion of Issues**

**Issue 1:** Should the Commission propose the amendment of Rule 25-6.022, Record of Metering Devices and Metering Device Tests; Rule 25-6.052, Test Procedures and Accuracies of Consumption Metering Devices; Rule 25-6.056, Metering Device Test Plans; Rule 25-6.058, Determination of Average Meter Error; Rule 25-6.059, Meter Test By Request; 25-6.060, Meter Test - Referee; and Rule 25-6.103, Adjustment of Bills for Meter Error?

**Recommendation:** Yes. Rules 25-6.022, 25-6.052, 25-6.056, 25-6.058, 25-6.059, 25-6.060, and 25-6.103 should be amended as set forth in Attachment A of this recommendation. (Cibula, Keating, Matlock, Hewitt)

**Staff Analysis:** Staff is recommending the amendment of Rules 25-6.022, 25-6.052, 25-6.056, 25-6.058, 25-6.059, 25-6.060, and 25-6.103. Staff is recommending both technical changes (i.e., word choice, grammar, punctuation, renumbering) and substantive changes (i.e., clarifications, additions, deletions, updates) to these rules. Attachment A contains all of staff's recommended changes to the rules. The following is a summary of the substantive changes that staff is recommending.

#### **Rule 25-6.022 Record of Metering Devices and Metering Device Tests**

Staff recommends, on page 11, beginning on line 4, that the rule be amended to require test records be retained until any dispute arising from a customer-requested standard meter test or a refereed meter test is resolved. Staff believes that a plain reading of the current rule may lead to the conclusion that a test record can be discarded after the meter is re-tested. Staff believes that it is important for the utility to retain all test records until the dispute is resolved.

#### **Rule 25-6.052 Test Procedures and Accuracies of Consumption Metering Devices**

Staff recommends, on page 14, line 1, that the title of this rule be changed. Staff believes that the change is necessary to more accurately reflect the contents of the rule.

Staff recommends that a section be added at the beginning of this rule, page 14, beginning on line 3, to define the terms "electronic meter," "mechanical meter," "lagged demand (or thermal demand) meter," "registration error," and "meter type." The industry suggested inclusion of the definitions to clarify the meaning of these terms in the rules.

On page 14, line 17, staff recommends that the language of the rule be changed to refer to the "registration error," which would be defined in the new subsection (1), page 14, line 11. Since the rule would refer to registration error, the rule language was changed to state that the registration error should not exceed plus or minus two percent, instead of the range of no more than 102 percent or not less than 98 percent, which refers to average percent registration. While the language has changed, the meaning of the rule remains the same.

On page 14, line 25, and page 15, line 3, staff recommends that references to Rule 25-6.058, which specifies the methodology for determining meter registration error, should added.

There appears to be no disagreement that such references need to be included. There is, however, disagreement as to the best method for determining the meter registration error. This disagreement is discussed below in the summary pertaining to Rule 25-6.058.

Furthermore, staff recommends, on page 15, line 11, that this rule be amended to reflect that watt-hour meters and associated devices must be tested for accuracy and adjusted in accordance with the most current version of the American National Standard for Electric Meters, Code for Electricity Metering, which is the 2001 edition. The rule currently refers to the 1995 edition of the code.

Staff recommends, on page 16, line 22, deletion of the last sentence of this subsection. Staff believes that the sentence does not give sufficient guidance, as it fails to state how the Commission will prescribe a procedure for the utility. Deleting the language does not bar the Commission from prescribing a test procedure for the utility by order, as the Commission has statutory authority to do so pursuant to section 366.05. Moreover, as currently written, the language of the rule could be construed to prevent the Commission from pursuing other options in the event that the utility fails to abide by the rule, such as initiating a show cause proceeding. Removal of the language will give the Commission the option to pursue alternative remedies available under Chapter 366 to force compliance with the rule.

#### Rule 25-6.056 Metering Device Test Plans

On page 19, line 1, staff recommends a section be added to the rule requiring all meters within a population being sampled have the same class amperage and class voltage. This requirement will ensure that meter populations are somewhat homogeneous, yielding more valid test results.

Staff further recommends that original subsection (7)(a), on page 19, lines 12 through 14, be deleted from the rule. Staff believes that this subsection is only informational. Thus, it does not need to be included in a rule.

On page 21, line 7, staff recommends deletion of the last sentence of this subsection. Rule 25-6.052 contains almost identical language, and as discussed above, staff believes the sentence does not give sufficient guidance because it fails to state how the Commission will prescribe a test plan for the utility. Deleting the language does not bar the Commission from prescribing a plan for the utility by order pursuant to its statutory authority set forth in section 366.05. Moreover, as currently written, the language of the rule could be construed to prevent the Commission from pursuing other options in the event that the utility fails to abide by the rule, such as initiating a show cause proceeding. As stated above, removal of the language will give the Commission the option to pursue alternative remedies available pursuant to Chapter 366 to force compliance with the rule.

Rule 25-6.058 Determination of Average Meter Error

On page 22, line 1, staff recommends that the word "Registration" be added to the title. Staff believes this change is necessary to more accurately reflect the contents of the rule.

On page 22, staff recommends that lines 2 through 3 be deleted as the title of the rule already provides sufficient information as to the purpose of this rule. Staff believes this language is redundant and should be eliminated to prevent any potential confusion.

Staff recommends, on page 22, lines 10-11 and 21-22, that the rule be amended to require that the company select the method for determining the average registration error that best fits the customer's usage pattern. Staff believes the company should be responsible for choosing the best method because the company has access to the customer's usage information.

Staff also recommends, on page 23, beginning on line 6, the addition of a new subsection, delineated as subsection (2). Subsection (2) sets forth a precise method for determining the registration error for demand meters.

For mechanical and lagged demand meters, staff recommends that the rule be amended to require testing the meter at two points. The results of this test would be used to determine if the meter is registering properly throughout a range of 25% of full-scale to 100% of full-scale.

The formulas set forth on lines 12 and 13 of page 23 determine the meter registration error for mechanical and lagged demand meters. These formulas are based on the method of "straight-line interpolation." Using this method, the meter is tested at two different points on the scale, once at 40% of full-scale value and again at 80% of full-scale value. The results of the test determines a straight line from which the error at any point on the scale can be estimated. The error at 25% of full-scale value and 100% of full-scale value are determined in this way. If the error at both points is less than or equal to 4%, then the meter meets the accuracy requirement stated in Rule 25-6.052(3)(a). Otherwise, the meter does not meet the accuracy requirement.

Staff has included, as Attachment B, a diagram depicting staff's recommended methodology. The diagram shows an example of the application of staff's recommended methodology.

Florida Power & Light Company disagrees with the meter testing methodology recommended by staff. It instead suggests that questionable meters be tested at a single point that represents the customer's average demand. Gulf Power Company agrees with FPL.

Staff believes that testing at two points is preferable to testing at a single point for the following reasons: (1) testing a mechanical or lagged demand meter at a single point is not sufficient to determine the meter's accuracy throughout its range; (2) testing a lagged demand meter at the customer's average load is problematic in that it is somewhat difficult to know the precise level of amperage to feed into the test board to cause the meter to indicate its average load; and (3) by testing meters at a single point representing the customer's average load, the test boards can only test one meter at a time; however, with staff's proposed method, as many as 18

meters may be tested at one time, albeit tested twice, once at 40% of full-scale and once at 80% of full-scale. Moreover, customer confidence in the testing would be further enhanced. Thus, staff believes this is the best method for testing mechanical or lagged demand meters.

On page 24, line 3, staff recommends that a subsection should be added to address electronic demand meters. All workshop participants seemed to agree with this additional rule language.

#### Rule 25-6.059 Meter Test By Request

On page 25, line 8, staff recommends that the deposit for meter tests be increased from \$15 to \$100. Staff notes that the \$15 deposit has not changed since at least 1983 and inflation justifies the change. It is important to note that the deposit pertains only to those meter tests requested by customers more often than once a year. Gulf Power Corporation suggested the new deposit amount.

Staff further recommends, on page 25, line 20, that the rule be amended to reflect that watt-hour meters and associated devices must be tested for accuracy and adjusted in accordance with the most current version of the American National Standard for Electric Meters, Code for Electricity Metering, which is the 2001 edition. The rule currently refers to the 1982 edition of the code.

Staff also recommends in subsection (4), page 25, lines 15 through page 26, line 5, that additional language be added to the rule to clarify which entity (i.e., utility or customer) is responsible for costs associated with independent (third party) meter testing and which entity is responsible for making estimates of third party testing costs. The changes to this section also clarify the costs that are to be refunded, if any.

On page 26, line 10, staff recommends an amendment to the rule to include a requirement that the utility retain any accuracy test results that are on record at the time the meter test is requested in accordance with Rule 25-6.022. This added language reinforces the requirement to retain accuracy test results, as set forth in Rule 25-6.022. As discussed in reference to Rule 25-6.022, staff believes that all test records are important to keep when a customer is questioning the accuracy of the meter.

#### Rule 25-6.060 Meter Test – Referee

On page 27, line 10, staff recommends the addition of a requirement that the utility retain any accuracy test results on record at the time the meter test is requested in accordance with Rule 25-6.022. As discussed in reference to Rule 25-6.022, staff believes that all test records are important to keep when a customer is questioning the accuracy of the meter.

Rule 25-6.103 Adjustment of Bills for Meter Error

On page 28, line 2 through page 29, line 1, staff recommends that the rule be amended to include a methodology for determining the error of the customer's meter at the customer's average billing demand. Under the rule amendment, the error for mechanical and lagged demand meters would be based on testing the meter at two test points. For purposes of refund, the test-point error at the customer's average load would be used. The error for electronic meters is defined by the rule amendment to be the same error determined in Rule 25-6.058(1) for wathour registration error.

The formula set forth on page 28, line 8 determines the kilowatt error of the meter at the customer's average billing demand for purposes of calculating a refund or backbill. The formula is based on "straightline interpolation," as described in Rule 25-6.058(2). The error at the customer's average billing demand is obtained by simply plugging the average billing demand,  $M_{avg}$ , into the formula on page 28, line 8.

On page 28, line 17, through page 29, line 1, staff is recommending that a "correction factor" be added to the rule. Staff believes that this will further clarify the rule by providing more detail for calculating the customer's corrected billing demand. The correction factor would be applied to the original monthly billing demands in the refund/backbill period to obtain the corrected monthly billing demands. The correction factor is based on the percentage error determined by the tests specified in Rule 25-6.058(1) for wathour meters and in Rule 25-6.058(2) for demand meters.

Staff has included, as Attachment C, a diagram depicting staff's recommended methodology. The diagram shows an example of the application of staff's recommended methodology.

As with the method for determining average meter registration error, Florida Power & Light Company disagrees with this method for determining error for purposes of making refunds. FPL prefers to only test the meter at a single point -- the customer's average load. In addition, FPL prefers that the percent error used for refund purposes be the full-scale percentage error rather than the test-point error. Gulf Power Company seems to agree with FPL on this issue. Staff believes that it is necessary to use test-point error to make the both the utility (when the meter is under-registering) and the customer (when the meter is over-registering) whole.

On page 29, beginning on line 2, staff recommends the addition of rule language addressing the methodology for the backbilling/refunding of wathour and electronic demand meters. This subsection states that "the percentage error to be used for refunds and backbills shall be the same percentage calculated when tested for wathour registration as set forth in Rules 25-6.058(1) and 25-6.058(2)(b), respectively." Staff also recommends, on page 29, lines 4 through 12, the inclusion of the formula for determining the correction factor to provide further clarification to this rule, as discussed above.

On page 29, line 15, staff recommends that the reference to Rule 25-6.058 be deleted and references to subsections (1) and (2) of Rule 25-6.103 be added. This change is required as staff

is recommending the inclusion of the methodology for determining backbills/refunds in subsections (1) and (2) of this rule.

Staff also recommends that the rule be amended, on page 29, lines 22 through 24, to delete the restriction that any backbilling must start at the date that the utility notifies the customer that his or her meter is under-registering. Staff believes that the utility should be able to backbill for up to twelve months regardless of the date that the utility notifies the customer that his or her meter is under-registering because there may be legitimate reasons for a delay in meter testing. For example, if there is a large number of meters to test, the time it takes to test the meters and notify the customer of the under-registration reduces the time period for which the customer may be backbilled. Also, coordinating the schedules of the utility, the customer, and the referee to actually conduct the test can sometimes cause substantial delays which reduces the time period in which backbilling would be allowed if the meter is found to be under-registering.

One interested person expressed concerns with this proposed change because the amount to be backbilled could be increased. Staff was not persuaded by this argument because, if the meter is found to be under-registering, staff believes that the utility should be made whole for the under-registration. Staff also notes that the rule allows collection of backbillings over the same amount of time as the backbilling period. Thus, any consumer concerns in regard to having to immediately repay a potentially large sum of money in one lump sum payment is somewhat alleviated.

On page 30, line 7, staff is recommending that subsection (4)(b) be added to the rule. This is the same language that was deleted from the paragraph above, on page 30, lines 4 through 6. Staff believes that placing this language in its own subsection adds clarity to the rule.

On page 30, line 13, staff recommends that the rule be amended to refer to subsection (1) and (2) of the rule instead of referring back to Rule 25-6.058, as the methodology for determining the amount of the refund or backbill was added to this rule on page 28, line 2 through page 29, line 1. Furthermore, as this methodology was added to this rule, the language on page 30, lines 13 through 17, is no longer necessary.

Staff also recommends, on page 30, lines 21 through 22, that the term “partially registering meter” be deleted from the rule and the language “a meter for which the test results are inconclusive” be added to the rule. Staff believes that the term “partially registering meter” could be confused with an “under-registering meter” which is referenced in new subsection (4) of this rule on page 29, line 21. The methodology recommended by staff in new subsection (1), page 28, beginning on line 1, applies to the adjustment of bills for under-registering meters. New subsection (5), on page 30, line 21, however, applies to those meters that are either not registering at all or are damaged in such a way that it is impossible to tell exactly how much the meters are under-registering.

On page 30, line 25 through page 31, line 3, staff recommends that original subsection (3) be deleted from the rule. This subsection is no longer necessary because staff is recommending, on page 28, line 2 through page 29, line 1, the inclusion of a methodology for determining the



amount of refund or backbill for over-registering or under-registering mechanical and lagged demand meters. Staff notes that the language in original subsection (3) created confusion at the hearing in Docket No. 030623-EI, which led the Commission to direct staff to proceed to rulemaking.

### **STATEMENT OF ESTIMATED REGULATORY COSTS**

The Florida Administrative Procedure Act encourages an agency to prepare a Statement of Estimated Regulatory Costs (SERC). The SERC prepared by staff, included as Attachment D, states that the utilities that replied to the data request done in conjunction with the SERC indicated that there would be no significant cost impacts from the proposed amendments. As in their post-workshop comments, FPL indicated that it was unable to determine the exact calculations for testing mechanical and lagged demand meters under the amended rules.

The SERC states that the utilities and the Commission should benefit by the rule amendments because there will be a clearer understanding as to what is required for meter testing. Likewise, small businesses, cities, and counties may also get some benefit from the clarification of the calculation of meter error.

Based on the foregoing, staff recommends that the Commission propose the amendment of Rules 25-6.022, 25-6.052, 25-6.056, 25-6.058, 25-6.059, 25-6.060, and 25-6.103 as set forth in Attachment A of this recommendation.

Docket No. 060121-EI

Date: March 23, 2006

**Issue 2:** Should this docket be closed?

**Recommendation:** Yes, if no requests for hearing or comments are filed, the rule amendments as proposed should be filed for adoption with the Secretary of State, and the docket should be closed. (Cibula)

**Staff Analysis:** Unless comments or requests for hearing are filed, the rules as proposed may be filed with the Secretary of State without further Commission action. The docket may then be closed.