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

DATE:

4/19/01

TO:

DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYÓ)

FROM:

DIVISION OF APPEALS (MOORE)

DIVISION OF ECONOMIC REGULATION (HEWITT)

DIVISION OF LEGAL SERVICES (ELIAS)

DIVISION OF SAFETY AND ELECTRIC RELIABILITY (MI

RE:

DOCKET NO. 010105-GU - PROPOSED AMENDMENT TO RULE 25-

7.063, F.A.C., METER ACCURACY AT INSTALLATION.

AGENDA: 5/1/01 - REGULAR AGENDA - RULE ADOPTION - PARTICIPATION

LIMITED TO COMMISSIONERS AND STAFF

RULE STATUS: ADOPTION MAY BE DEFERRED

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\APP\WP\010105#2.RCM

CASE BACKGROUND

On February 20, 2001, the Commission voted to amend existing Rule 25-7.063, Florida Administrative Code, titled Meter Accuracy at Installation, revising the requirements for meter accuracy at the time of installation, and revising the testing requirements for new meters. The proposed rule was published in the Florida Administrative Weekly on March 2, 2001. South Florida Natural Gas Company and its parent company, Southern Union Company, filed comments.

The recommended rule is on page 4. Changes to the rule as proposed by the Commission are shown in shaded text. Following the rule are the comments. (Attachment 1)

DOCUMENT NUMBER - DATE

04807 APR 185

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission adopt changes to proposed Rule 25-7.063, Florida Administrative Code, titled "Meter Accuracy at Installation"?

RECOMMENDATION: Yes, the Commission should adopt changes to proposed Rule 25-7.063, Florida Administrative Code, to clarify the intent and requirements for testing new gas meters.

STAFF ANALYSIS: Rule 25-7.063 as proposed by the Commission eliminated the requirement for investor-owned gas utilities to perform a random test of ten percent of all new meters. Instead, the proposed rule requires testing of a ten percent sample of the shipment of new meters only if damage to the meters from shipping is apparent. This is to assure that the damage has not detrimentally changed the meter accuracy of the shipment as a whole. The rule further requires that if any meter of the sample is found not to be within accuracy limits, the entire shipment must be tested.

In their comments, South Florida Natural Gas Company and Southern Union Company stated identical concerns that the ten percent sampling requirement is not a statistically valid procedure, and will result in testing an excessive number of meters in a large shipment. In addition, the companies suggested using a standard that would not require an entire shipment to be tested unless a certain percentage of the meters in the shipment were found not to be within the accuracy limits.

Staff contacted the companies to discuss their concerns. The primary objection is to the testing requirements for large shipments containing from 500 to 3,000 meters. The companies suggested using a statistically proven sampling plan such as Military Standard 105-D, "Sampling Procedures and Tables for Inspection by Attributes." By using General Inspection Level II and Acceptable Quality Level 0.65, a 90 percent level of reliability can be achieved. This procedure would require 125 meters of the 500 to 3,000 meters shipment to be tested to assure If no more than two meters were found to be accuracy levels. outside the prescribed accuracy limits, then the entire shipment would be considered acceptable and no further testing would be required under the companies' proposal. If three or more meters were found to be inaccurate, the sample test would fail and the entire shipment of meters would have to be tested.

The acceptable level of failures allowed by the companies' proposed sampling plan is contrary to the intent of the rule

DOCKET NO. 010105-GU APRIL 19, 2001

revision. The goal of the rule requirement is that all meters placed in service are within the established accuracy limits of plus or minus one percent. Staff does not believe that any meters that are outside the accuracy limits should be placed in service.

Staff recognizes that requiring ten percent of the meters in a shipment to be tested when meter shipments exceed 500 meters would require as many as three times the number of meters to be tested than statistically valid sampling practice would require. Staff agrees that this places an unnecessary burden on a utility without any resulting improvement in meter accuracy. To eliminate this unnecessary burden, staff recommends changing the rule language to require testing of ten percent of the meters in a damaged shipping unit, such as a pallet or container, rather than ten percent of the meters in a damaged shipment. A pallet is the most common form of handling and moving a group of meters in shipment and normally contains less than 100 meters. Thus, when damage is limited to a single pallet of a shipment, only the meters in that pallet or container must be tested, and not all of the meters in an entire shipment.

These proposed changes are comparable to statistical sampling methods and will assure the accuracy of meters that have been mishandled and incurred damage during shipment without placing an undue burden and cost on the utility for testing excessive numbers of meters. The companies agreed that if the sample group is limited to the single shipping unit in which the damage has occurred, it will alleviate their concerns about the proposed rule.

ISSUE 2: Should the rules be filed for adoption with the Secretary of State and the docket be closed?

RECOMMENDATION: Yes. The rules with the changes recommended by staff should be filed for adoption with the Secretary of State and the docket should be closed.

STAFF ANALYSIS: If the Commission approves the changes to Rule 25-7.063, a notice of change must be published. After the notice is published or if the rule is adopted without changes, the rule may be filed for adoption with the Secretary of State and the docket may then be closed.

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25-7.063 Meter Accuracy at Installation.

than one percent of accuracy to be (1%) fast and not more than two percent (2%) slow when installed for customer use. Manufacturers' test data may be used if there is no indication of damage to the meters resulting from the shipping process. If damage is apparent, in order for the manufacturers' test data to be used, a random representative sample of not less than a minimum of ten 10 percent (10%) of the new meters in the damaged shipment shipping unit, such as a pallet or container, shall be have been tested and found to be insure they are within accuracy limits. If any meter of the sample is found not to be within accuracy limits, the entire shipping unit must be tested, and where necessary, the meters adjusted to within the plus or minus 1 percent accuracy limits.

- (2) Every meter removed from service when opened for repairs shall be adjusted to be not more than one 1 percent (1%) fast and not more than two or 1 percent (2%) slow before being reset. ; and if If not opened for repairs, the meter may be reset without adjustment if found to be not more than 1 two percent (2%) in error fast or not more than 1 percent slow provided the meter is otherwise in good condition.
- (3) (2) No meter <u>may shall</u> be installed unless it has been tested <u>within the previous 12 months</u> and found to be within the accuracy—limits prescribed in (1) of <u>established by</u> this rule.

CODING: Words <u>underlined</u> are additions; words in struck through type are deletions from existing law.

DOCKET NO. 010105-GU APRIL 19, 2001

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within a period no longer than twelve (12) months previous to the
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    date of installation.
    Specific Authority: 366.05(1), F.S.
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    Law Implemented: 366.05(1), F.S.
 5
    History: Repromulgated 1/8/75, 5/4/75, Amended 2/13/84, formerly
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    25-7.63, Amended .
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SOUTH FLORIDA NATURAL GAS

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ORIGINAL

March 13, 2001

Director, Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0862

010105.GW

RE: Proposed amendment to Rule 25-7.063 F.A.C., Meter Accuracy at Installation.

South Florida Natural Gas, a division of Southern Union Company submits the following comments for consideration by the commission:

The company generally agrees with the changes reflected in the proposed rulemaking. The massive amount of testing formerly required was not cost effective, and gained little in the way of benefit for either the company or the customer. One area of concern, however, is the sampling method proposed for apparently damaged lots. It does not appear to be a statistically valid procedure. The proposed method sets a fixed sampling rate (10%) and a fixed rejection number (1).

In typical sampling practice, both the sampling rate and the rejection number are determined by the lot size. This is done to keep the risks of either accepting a bad lot or rejecting a good lot fairly constant. If the sampling rate and rejection number are fixed, then the risks mentioned above vary.

Generally, a fixed sampling rate of 10% is not adequate for small lots, and it is excessively stringent for very large lots. That is, five (5) meters from a lot of fifty does not give enough information to make a good decision. Under a well-designed sampling plan, eight (8) meters would be more appropriate. Similarly, 400 meters from a lot of 4,000 is excessive. A sample of 200 would provide sufficient information.

The company respectfully suggests that the Commission consider the use of a statistically proven sampling plan such as Mil-Std. 105D as the decision-making tool in these cases. Many public utility commissions accept this sampling plan for sampling purposes.

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Respectfully,

Al Kara Regional Vice President

DOCUMENT NUMBER - DATE

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FOSE FF LADS -FERSING



SOUTHERN UNION COMPANY

3420 Broadway Kansas City, MO 64111

JACK COX, P.E. VICE PRESIDENT-ENGINEERING

March 13, 2001

Director, Division of Records and Reporting Florida Public Service Commission 2540 Shmard Oak Blvd. Tallahassee, FL 32399-0862

010105-64

In re: Proposed amendment to Rule 25-7.063 F.A.C., Meter Accuracy at Installation.

APP

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For the Division,

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