## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Proposed amendment of Rule 25-6.058, F.A.C., Determination of Average Meter Registration Error.

DOCKET NO. 140131-EU ORDER NO. PSC-14-0531-FOF-EU ISSUED: October 7, 2014

The following Commissioners participated in the disposition of this matter:

ART GRAHAM, Chairman LISA POLAK EDGAR RONALD A. BRISÉ EDUARDO E. BALBIS JULIE I. BROWN

## NOTICE OF ADOPTION OF RULE

## BY THE COMMISSION:

NOTICE is hereby given that the Florida Public Service Commission, pursuant to Section 120.54, Florida Statutes, has adopted without changes Rule 25-6.058, Florida Administrative Code, Determination of Average Meter Registration Error.

The rule was filed with the Department of State on October 7, 2014 and will be effective on October 27, 2014. A copy of the rule as filed with the Department is attached to this Notice.

This docket is closed upon issuance of this Notice.

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By ORDER of the Florida Public Service Commission this 7th day of October, 2014.

CARLOTTA S. STAUFFER

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Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

## 25-6.058 Determination of Average Meter Registration Error.

- (1) Average Meter Registration Error for Watthour Registers.
- (a) If the metering installation is used to measure a load which has practically constant characteristics, such as a street-lighting load, the meter shall be tested under similar conditions of load and the registration error of the meter "as found" shall be considered as the average meter error.
- (b) If a single-phase metering installation is used on a varying load, the average registration error shall be determined by one of the following methods. The utility shall select the method that best fits the customer's usage pattern.
- 1. The weighted algebraic average of the error at approximately 10 percent and at 100 percent of the rated test amperes for the meter, the latter being given a weight of four times the former;
- 2. The simple average of the error at approximately 10 percent and at approximately 100 percent of the rated test amperes of the meter, each being given an equal weight; or
- 3. A single point, when calculating the error of an electronic meter, and the single point is an accurate representation of the error over the load range of the meter.
- (c) If a polyphase metering installation is used on a varying load, the average registration error shall be determined by one of the following methods. The utility shall select the method that best fits the customer's usage pattern.
- 1. The weighted algebraic average of its error at light load (approximately 10 percent rated test amperes) given a weight of two one, its error at heavy load (approximately 100 percent rated test amperes) and 100 percent power factor given a weight of four, and at heavy load (approximately 100 percent rated test amperes) and 50 percent lagging power factor given a weight of one two; or
- 2. A single point, when calculating the error of an electronic meter, and the single point is an accurate representation of the error over the load range of the meter.
- (2) Average Meter Registration Error for Demand Registers.
- (a) For mechanical or lagged demand meters, registration error shall be determined by testing the meter at both 40 percent and 80 percent of its full-scale value, as read on the reference or standard meter, or as near to these two points as practicable. The following two formulas shall be used to estimate the kilowatt error of the meter at 25 percent of full scale and at 100 percent of full scale:

$$E_{25} = [E_{80} - E_{40}]/[R_{80} - R_{40}] * [R_{25} - R_{40}] + E_{40} \label{eq:eq:e25}$$

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$$E_{100} = [E_{80} - E_{40}]/[R_{80} - R_{40}] * [R_{100} - R_{40}] + E_{40} \label{eq:energy}$$

where:

 $R_{25}$  and  $R_{100}$  denote the kilowatt readings on the reference meter at 25 percent and 100 percent of the full scale value of the meter being tested, respectively;

 $R_{40}$  and  $R_{80}$  denote the kilowatt readings on the reference meter at 40 percent and 80 percent of the full scale value of the meter being tested, respectively;

 $E_{40}$  is the difference in kilowatts between the reference reading ( $R_{40}$ ) and the reading on the meter being tested;

 $E_{80}$  is the difference in kilowatts between the reference reading ( $R_{80}$ ) and the reading on the meter being tested;

 $E_{25}$  is the estimated kilowatt error corresponding to  $R_{25}$ ; and

 $E_{100}$  is the estimated kilowatt error corresponding to  $R_{100}$ .

The greater of these two estimated kilowatt errors,  $E_{25}$  or  $E_{100}$ , 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 paragraph 25-6.052(3)(a), F.A.C.

(b) For electronic demand meters, demand registration need not be separately tested provided the meter has been inspected to contain the correct demand algorithm whenever watthour registration is tested.

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, 7-3-06, \_\_\_\_\_\_.