#### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

NOTIFICATION TO UTILITIES FURNISHING METERED ELECTRIC, GAS OR WATER SERVICE REGARDING METER TESTING REQUIREMENTS

CASE NO. 2018-00226

### <u>ORDER</u>

The Commission, on its own motion, opens this proceeding to provide guidance to gas, electric and water utilities regarding meter-testing requirements under 807 KAR Chapter 5.

The Commission has plenary authority under KRS 278.040 to regulate the rates and services of jurisdictional utilities and to enforce the provisions of KRS Chapter 278. KRS 278.030 requires every utility to furnish "adequate, efficient and reasonable" service. KRS 278.260 permits the Commission, upon its own motion, to investigate any act or practice of a utility that affects or is related to the service of a utility. KRS 278.280(1) further permits the Commission, after conducting such investigation and finding that a practice is unreasonable, unsafe, improper, or inadequate, to determine the reasonable, safe, proper, or adequate practice or methods to be observed and to fix same by Order.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. Pursuant to this authority, the Commission promulgated 807 KAR 5:006, Section 17, which sets forth minimum requirements for the testing and accuracy of meters used to measure gas, electric and water service. In

addition, the Commission promulgated 807 KAR 5:022, Section 8,<sup>1</sup> 807 KAR 5:041, Sections 13, 14, 15 and 16, and 807 KAR 5:066, Sections 14 and 15, which set forth meter-testing requirements specific to gas, electric and water utilities, respectively.

Pursuant to 807 KAR 5:006, Section 17(1), all electric, gas and water utilities furnishing metered service in Kentucky are required to provide facilities to test the accuracy of customer meters. The test of a meter is performed by comparing its accuracy with a measurement standard of known accuracy. Before a standard may be used to determine the accuracy of a utility's meters, the Commission must approve the standard's calibration.<sup>2</sup>

A utility may utilize a third party to perform its meter tests provided the third party

is approved by the Commission.<sup>3</sup> Whether a utility tests its own meters or utilizes a third

party, individuals who perform tests must be certified by the Commission.<sup>4</sup>

In May 2006, the Commission advised jurisdictional electric, water and gas utilities by letter of the following changes to its process for approval of meter-testing facilities and

basic measurement standards and for certification of meter testers:

**Approval of third-party meter-testing facilities** – The Commission will approve: (1) facilities previously approved by the Commission; (2) facilities of the original meter manufacturer; and (3) facilities certified by a nationally recognized registrar to a metrology laboratory standard, such as ISO 17025.

Approval of calibration of basic measurement standards – The Commission will approve the calibration of a standard certified by: (1) the original manufacturer

<sup>&</sup>lt;sup>1</sup> A proposed amendment to 807 KAR 5:022 will move the meter-testing requirements specific to natural gas utilities to section 3 of the regulation.

<sup>&</sup>lt;sup>2</sup> 807 KAR 5:006, Section 17(3).

<sup>&</sup>lt;sup>3</sup> 807 KAR 5:006, Section 17(2).

<sup>4 807</sup> KAR 5:006, Section 17(4).

of the standard; or (2) a laboratory certified by a nationally recognized registrar to a metrology laboratory standard, such as ISO 17025.

**Meter tester certification** – The Commission will certify meter testers that pass a written competency test administered by the Commission. Additionally, the Commission will consider self-certification of meter-testing personnel based on a documented training and testing program that ensures meter-testing personnel are knowledgeable of commission testing regulations as well as meter-testing procedures.

By letter dated May 31, 2017, the Commission reminded jurisdictional electric, water and gas utilities of the meter-testing procedures outlined in the May 2006 guidance letter. The Commission set a January 1, 2018 deadline for compliance with the procedures to afford utilities a transition period. By letter dated December 27, 2017, the Commission extended the transition period to July 1, 2018.

The Commission is aware that utilities are continuing to have difficulty complying with meter-testing regulations. In light of this difficulty and of the Commission's current staffing level and the condition of the Commission's Meters Standards Laboratory, the Commission finds it appropriate to further refine its criteria for approval of testing facilities and measurement standards and for certification of meter testers. Therefore, in addition to the procedures outlined in the Commission's May 2006 guidance letter, the Commission finds that the following means of compliance should be authorized. The Commission further finds that each utility should be required to meet the criteria for Commission approval of meter-testing facilities, basic measurement standards, and meter testers, as revised by this Order, within sixty days of the date of this Order

## 807 KAR 5:006, Section 17(2) - Third-Party Testing

In the May 2006 guidance document, the Commission approved the use of thirdparty testing facilities either of the original meter manufacturer or those certified by a

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nationally recognized registrar to a metrology laboratory standard, such as ISO 17025. In addition to these third parties, the Commission finds that a third party should be approved to perform meter testing on behalf of a utility provided the third party uses a Commission-approved basic measurement standard<sup>5</sup> and follows written procedures that are consistent with industry recognized and generally accepted practices for meter testing and calibration. The Commission further finds that each utility should be required to maintain current documentation of the qualifications and the calibration methods and procedures of the facility testing its meters.

## 807 KAR 5:006, Section 17(3) – Approval of Standards

In addition to a basic measurement standard certified by the original standard manufacturer or by a laboratory certified by a nationally recognized registrar, the Commission finds that it should approve a basic measurement standard if the standard is certified by the National Institute of Standards and Technology (NIST) or is certified as traceable to a NIST-certified standard. NIST certifies and provides standard reference materials (SRM) that are used to perform instrument calibrations and verify the accuracy of specific measurements. NIST certification means that an item has been tested by comparison against a NIST SRM and meets a stated tolerance of accuracy for that item. Traceability refers to the process by which a standard's assigned value of measurement

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<sup>&</sup>lt;sup>5</sup> This includes a basic measurement standard that meets the criteria for approval discussed herein and that are set forth in ordering paragraph 3 of this Order.

is compared, directly or indirectly, through an unbroken chain of documented calibrations back to a NIST SRM.

The Commission finds that each utility should be required to maintain documentation that establishes a standard's NIST-traceability. The Commission further finds that each utility should be required to maintain documentation showing that each meter test, whether performed by the utility or a third-party tester, is performed using a NIST-certified standard or a NIST-traceable standard.

#### 807 KAR 5:006, Section 17(4) – Meter tester certification

In its May 2006 guidance letter, the Commission stated it would consider selfcertification of meter-testing personnel based on a documented training and testing program that ensures meter-testing personnel are knowledgeable of Commission testing regulations as well as meter-testing procedures. The Commission finds that a utility or third-party operator of a meter-testing facility may self-certify as a meter tester an employee who receives documented training regarding meter shop practices, proper meter-testing procedures, and Commission regulations applicable to meter testing. The Commission further finds that each utility and third party performing meter testing for a utility should be responsible for maintaining current documentation of training for each employee performing meter tests for a utility.

### IT IS THEREFORE ORDERED that:

1. Pursuant to 807 KAR 5:006, Section 17(2), the Commission approves the following third parties to test the accuracy of meters on behalf of a utility that furnishes metered electric, gas or water service:

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a. A third party previously approved by the Commission to perform meter testing on behalf of an electric, gas or water utility.

b. The original manufacturer of a meter.

c. A third party that is certified by a nationally recognized registrar to a metrology laboratory standard, such as ISO 17025.

d. A third party that uses a Commission-approved basic measurement standard and follows written procedures that are consistent with industry recognized and generally accepted practices for meter testing and calibration.

2. A utility that utilizes a third party to perform meter testing required by Commission regulations shall maintain current documentation of the qualifications and the calibration methods and procedures of the third party, including documentation of the basic measurement standards utilized by the third party.

3. Pursuant to 807 KAR 5:006, Section 17(3), the Commission approves the calibration of a basic measurement standard that is NIST-certified or traceable to a NIST-certified SRM. Each standard approved hereby must be accompanied by a signed certificate that shows an unbroken chain of comparisons to stated references. Each certificate shall also include an expiration date after which the standard must be tested and, if necessary, recalibrated.

4. Pursuant to 807 KAR 5:006, Section 17(4), an employee of a utility or of a third party performing meter tests for a utility shall be certified to test meters, provided the employee receives documented training regarding meter shop practices, proper meter-testing procedures, and Commission regulations applicable to meter testing.

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5. A utility shall maintain current documentation of the training each individual performing meter tests for a utility has received without regard to whether that individual is employed by the utility or a third party.

6. Each utility that furnishes electric, gas or water service shall meet the criteria for Commission approval of meter test facilities, basic measurement standards, and meter testers, as revised by this Order, within sixty days of the date of this Order.

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By the Commission



ATTEST:

wer R. Runson

Executive Director

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