**Section 501.160 Testing Facilities and Equipment**

a) A utility shall provide laboratories, testing shops and other equipment, facilities and personnel as may be necessary to conduct the tests required by this Subpart or other orders of the Commission. A utility's laboratories, meter testing shops, and other equipment and facilities so provided shall be at all times available for inspection by authorized representatives of the Commission.

b) If a utility selects an agent to perform meter sample testing, meter accuracy tests when a meter is removed from service, and other requirements of this Subpart, or if a utility changes its agent, or if the agent changes the location where it will conduct meter tests, the utility shall notify the Director of the Safety and Reliability Division of the Commission in writing within 60 days after the selection or change. If an agent is selected or changed, the utility shall provide the following information about the new agent:

1) Name of agent;

2) Name of contact for agent;

3) Address and phone number of agent contact;

4) Address of location where agent will conduct meter tests;

5) Summary of meter types and sizes that agent will test;

6) Summary of services the agent will perform for the utility; and

7) Identification of what changes, if any, caused the need for the notification.

c) A utility shall provide meter testing equipment, including a bell prover of not less than two-cubic-foot capacity. A utility shall maintain each of its active provers of all types in proper adjustment in order to determine the average accuracy of meters to within one-half of one percent. A utility shall provide suitable thermometers, pressure gauges, and temperature recorders and shall adequately control the temperature of the meter testing room, meter soaking room, and air supply used in testing meters to achieve the meter testing accuracy stated in this subsection. The temperature of the meter testing and soaking room, when in use, shall not vary by more than 4°F during regular operating hours and shall not vary by more than 6°F throughout the year.

d) In the event a meter shop experiences temperature variances that exceed those provided in subsection (c), a utility shall immediately stop testing meters in the meter shop until the utility corrects the problem and the temperature returns to the normal levels for at least four continuous hours or the utility can demonstrate that the temperature variance between the meters and testing equipment is less than or equal to 1°F.

e) A utility that uses a transfer prover to test the accuracy of meters in the field shall verify the transfer prover's accuracy by testing a reference meter on the transfer prover at least every three months. If this testing shows a deviation of more than 0.5% in the reference meter accuracy, the utility must take all necessary repairs or actions to bring the transfer prover's testing of the reference meter to within 0.5% of the prior readings.

f) An authorized representative of the Commission may check or establish the accuracy of all testing equipment used or intended for use in determining the accuracy of custody transfer meters, as well as the methods of operating that equipment. If a utility uses an agent to test the accuracy of its meters, the utility shall include provisions within its agreement with its agent for the authorized representatives of the Commission to conduct on-site audits of the agent's facility. An authorized representative of the Commission shall perform an audit of the utility's testing equipment and methods at least every three years. The utility shall reimburse the Commission for all expenses related to audits of meter shops used or maintained by the utility or its agents located outside of this State.

g) A utility shall certify the accuracy of its testing equipment with measurement results that are traceable to the international system of units through at least one of the following national measurement institutes: the National Institute of Standards and Technology for the United States, the National Physical Laboratory for the United Kingdom, the National Research Council for Canada, National Measurement Institute, American Association of Laboratory Accreditation, and the Physikalisch-Technische Bundesanstalt for Germany. Unless specified in this subsection (g), the maximum certification interval is 36 months.

1) A utility shall certify sonic nozzle automatic provers at least every 12 months. A utility shall also conduct the following maintenance at least every 12 months on sonic nozzle automatic provers:

A) Inspect and clean nozzles and solenoids;

B) Strap and recertify a master bell during the bell interface recertification process;

C) Recalibrate prover sensors and instrumentation in accordance with manufacturer's specifications;

D) Test the function of the optical sensor; and

E) Perform a complete bell interface certification followed by a reference meter target proof analysis.

2) Utility verification checks on portable or reference equipment shall meet the following requirements:

A) A utility shall verify the accuracy of a portable standard against a reference standard at least every 12 months. If the portable standard exhibits an error greater than 0.5%, the utility shall adjust the portable standard to read within 0.5% or replace the portable standard, or shall apply the proper correction factor.

B) If a utility does not operate a reference standard, the utility shall certify or replace its portable standards at least every 12 months.

C) A utility shall certify a reference standard at least every 36 months.

D) A calibration certificate, verification certificate, or card signed or initialed by the person responsible for the calibration shall accompany a portable standard and a reference standard at all times. A utility, in lieu of maintaining the certificate or card with the device, may maintain the certificate or card in a central location or database that is available to Commission Staff upon request. A certificate or card shall provide the date and results of the last calibration or verification of the instrument. A utility, after each successive issuance of certificates or cards, shall keep any superseded certificates or cards on file for at least three years.

h) A utility that tests meters with a rated capacity of 800 cubic feet per hour or less shall use one or more reference meters to conduct equipment checks every week. A utility shall designate and label reference meters for meter shop use only, and shall not adjust reference meters in any manner once in service unless they are in need of repair. A utility shall fully document all alterations to a repaired reference meter, including before and after accuracies. A reference meter shall carry a rating of 800 cubic feet per hour or less and shall have a similar size to the meters the utility tests. Every week during periods when a utility expects to test meters, a utility shall test a reference meter on each prover that the utility uses to test meters of the reference meter's size. A utility shall record reference meter test results, including temperature, when testing on a sonic nozzle automatic prover, and shall record the test results, temperature test flow times and bell pressure when testing on a bell prover. If the reference meter tests indicate an accuracy problem with any equipment, the utility shall cease using that equipment until the utility repairs the equipment.

i) A utility shall allow meters tested within a meter testing facility to acclimate in the room containing the testing equipment or meter soaking room for at least 12 hours prior to testing. This acclimation time is not required if the utility can show that it has taken sufficient actions to bring the meter temperature and the testing equipment to within 1.0°F of each other.

(Source: Amended at 41 Ill. Reg. 351, effective December 29, 2016)