## PP&L Competitive Metering Specifications Rider

# **Requirements for Advanced Metering**

An Advanced Meter Service Provider supplying metering systems for electric distribution customers of the PP&L Local Distribution Company (LDC) will comply with the latest version of all applicable standards and codes for providing metering, metering devices, and metering services, including but not limited to the following:

- Applicable parts of the Pennsylvania Code Title 52, Chapter 56 and Chapter 57
- Any other applicable PA PUC guidelines
- All applicable ANSI standards, including specifically:
  - o ANSI C12 standards
  - o ANSI C57 standards
  - ANSI C2 standards

### (National Electrical Safety Code)

- National Electric Code standards
- NEMA standards
- PPL "Rules for Electric Meter and Service Installations"
- PPL Requirements for Commercial Electric Service
- OSHA requirements

The performance, accuracy, testing, calibration, and installation of the above mentioned metering systems, including revenue meter, instrument transformers, and any other ancillary devices (e.g., recorders, test switches, relays, etc.), shall comply with all requirements in the Pennsylvania Code, Title 52, Chapter 57, and the latest version of all applicable ANSI C12 standards.

The Advanced Meter Service Provider shall assure that the following specific requirements are met.

#### For All Meters:

- All meters must be permanently tagged/labeled on the nameplate with the name of the EGS;
   PP&L or subcontractor providing meters for the EGS or PP&L.
- All meters are to have a nameplate with values for "CTR", "VTR", "PkH", kh, form and "Multiply by" as applicable.
- Certain invalidated, non-billing data, as mutually agreed upon, will be made available to the non-metering party.
- All meters must be equipped with a visual or optical watt-hour indicator for meter testing. This indicator is to be calibrated to the meter watt-hour constant (Kh).
- For each meter installed by the Advanced Meter Provider, the following shall be provided: accuracy test information, vendor serial number, all metering and billing constants, and any other meter records information as required by the PUC. This data shall be provided by the method agreed upon in the Data Exchange Working Group.
- All meters must comply with ANSI C12.1, ANSI C12.13, ANSI C12.18, and ANSI C12.19, as applicable.
- The Advanced Meter Provider will have their representative present at the customer site to meet a PP&L representative if PP&L exercises its right to test the meter, in lieu of providing meter application programs and passwords.

All meters shall be tested and maintained as per PUC requirements and ANSI standards.

#### For Electromechanical Watt-hour Meters:

- The accuracy and form designation of electromechanical watt-hour meters must comply with ANSI C12.1 and ANSI C12.10.
- Electromechanical watt-hour meters may only be used for customers with peak demands of less than 75 kW.

#### For Solid-state Electricity Meters:

- The accuracy and form designation of solid-state electricity meters must comply with ANSI C12.16 and ANSI C12.20.
- Solid-state electricity meters may be used for any customer, but must be used for customers with peak demands of 75 kW or greater.
- Solid-state electricity meters used for customers with peak demands of 75 kW or greater, must be 0.2 accuracy class.
- Solid-state electricity meters used for customers with peak demands of less than 75kW, must be 0.2 or 0.5 accuracy class.
- Solid-state electricity meters used with an internal *Transformer Loss Compensation* feature need only to meet ANSI 12.1 accuracy requirements if the same meter meets the above specified accuracy class without the feature.

#### For Metering Installations:

- Metering Installations shall conform to the metering installation requirements in the PP&L Rules
  for Electric Meter and Service Installations manual, however these requirements will not limit the
  use of the latest technology and will be updated as necessary so as not to preclude the use of
  such new technology.
- Metering Installations for Self-Contained Meters must have an approved meter socket as defined in PP&L's listing of Approved Meter Base Tables. Meter socket locations will be specified by PP&L.
- All self-contained meters must be either socket based or K-based in configuration. The maximum nominal voltage cannot exceed 240 volts phase to phase.
- Metering Installations for Transformer-Rated Meters will be jointly coordinated by the EGS Meter supplier and PP&L. PP&L will supply and install the instrument transformers, meter panel, and wiring.
- Metering Installations must comply with ANSI C12.6, ANSI C12.7, ANSI C12.8, ANSI C12.9 and all applicable NEC codes.