RULES FOR ELECTRIC METER & SERVICE INSTALLATIONS



RULE 18

- (a) PPL EU Specifies Equipment Location
- (b) Outdoor Pole Mounted Installation
- (c) Underground Service to Switchgear
- (d) Specifications for Switchgear
- (e) Specifications for Switchgear Accessible Compartment for Current Transformers and Voltage Transformers
- (f) Meter Panel Mounting
- (g) Conduit for Metering Cable

RULE 18 — METERS AND METERING EQUIPMENT — HIGH VOLTAGE SERVICE EXCEEDING 600 VOLTS THROUGH 15KV

a. PPL EU Specifies Equipment Location:

PPL EU specifies the location and/or arrangement of metering equipment.

b. Outdoor Pole Mounted Installation:

Instrument transformers and meter panel for outdoor metering are installed on a separate meter pole located not less than 15 feet from the service pole

However, when space is limited, the Supervisor-Metering Services may approve installing instrument transformers on the customer's service pole or structure for overhead service to overhead distribution only; see **Sketch #32** and **Sketch #35**.

c. Underground Service to Switchgear:

When the customer is served by underground high voltage service laterals the metering may be installed in the customer's switchgear, see **CRS 6-09-199** and **Sketch #39**.

d. Specifications for Switchgear:

When instrument transformers are installed in switchgear, the supplier furnishes detail drawings of the instrument transformer arrangement to PPL EU for acceptance and approval before constructing the switchgear.

For a list of switchgear with acceptable termination and metering compartments see Table 3 of the Switchgear Metering and Termination Compartment section of the Metering Tables. It is recommended that manufacturers submit drawings to PPL EU for review.

Switchgear for 15 kV or less shall conform to the general specifications in paragraphs (e) and (f) below.

e. <u>Specifications for Switchgear - Accessible Compartment For Current</u> <u>Transformers and Voltage Transformers:</u>

A separate isolated, sealable and accessible compartment shall be provided within the switchgear for standard current and voltage transformers.

This compartment shall be large enough to contain three (3) current transformers and three (3) voltage transformers and so designed that, after proper electrical isolation, the transformers can be readily installed or changed after the switchgear is installed.

f. Meter Panel Mounting:

PPL EU furnishes its standard meter panel which the customer installs at the location designated by PPL EU.

The meter panel shall not be installed in or on metal-clad switchgear.

g. <u>Conduit for Metering Cable:</u>

PPL EU furnishes and specifies location of meter panel. Customer installs meter panels at the location specified by PPL EU. See **Sketch #8c and Sketch #8D**.

For metering conduit runs 50 feet or less, the customer furnishes and installs a 1-1/4 inch minimum galvanized rigid or intermediate steel or gray Schedule 40 PVC conduit between the instrument transformers and the meter panel.

For metering conduit runs over 50 feet and all substation metering conduit runs, approval by Metering Support is required.

- 1-1/2 inch minimum threaded galvanized or intermediate rigid steel or gray Schedule 40 PVC conduit is required
- Elbows and LBs in conduit runs shall be galvanized rigid or intermediate steel conduit
- LR condulets are not permitted
- All bends shall have at least a 24 inch radius
- No more than three 90 degree bends shall be installed

PPL EU furnishes, installs and connects the metering cable from the instrument transformers to the meter panel.

See Sketch#16, Sketch #16A and Sketch #16B.

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