

SECTION 262713 - ELECTRICITY METERING

PART 1 - GENERAL

1.1 SUBMITTAL REQUIREMENTS

A. Product Data

1. For each type include detailed product information, electrical characteristics, outputs, connection protocols, accessory components, enclosures, wiring diagrams, warranty, etc.

B. Training

1. Cover installation, maintenance, troubleshooting, programming, repair and operation of the system.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Provide lugs, lug kits and related accessory work as required to accommodate the conductor sizes and quantities needed for each application. Coordinate with single-line diagram, field conditions, etc. Provide barriers required for separating sections compliant with NFPA 70. Provide nameplates that identify loads/tenants that are compliant with prevailing codes, Owner's standards and utility company requirements.

2.2 EQUIPMENT FOR ELECTRICITY METERING BY UTILITY COMPANY

A. General

1. Furnish and install all work in strict compliance with all requirements set forth by the utility company providing electrical service for the project. Procure all needed details and information directly from the utility company as required for complete operational installations. Furnish and install all electrical work accordingly. Such work includes, but is not limited to: CT cabinets (bussed if necessary), meter bases/sockets, supports, conduit, wiring, connections, maintaining clearances, testing and inspections. Coordinate installation and connection of utilities and services, including provision for electricity-metering components. Locate and position meters in locations approved by the utility company, Design Professionals and Owner. Steady-state and short-circuit current ratings shall meet indicated circuit ratings.
2. Provide lugs, lug kits and related accessory work as required to accommodate the conductor sizes and quantities needed for each application. Coordinate with single-line diagram, field conditions, etc. Meter will be furnished and installed by utility company. Provide metering-related work in strict accordance with utility company requirements.

3. Current-Transformer Cabinets: Provide current-transformer cabinets. Comply with requirements of electrical-power utility company, including providing bussed cabinets for large services if required.
4. Provide two 1-inch empty PVC electrical conduits (one active, one spare) from each meter enclosure to building telephone service entrance equipment board for solid-state/pulse utility company metering. Provide (1) 4-pair plenum-rated Cat. 5e #22 AWG solid copper communication cable from each utility meter RJ-31X phone jack to the building telephone service entrance equipment board in one of these respective 1-inch conduits. Install RJ-31X phone jacks at the utility meter, which will be furnished by the utility company, and terminated/connected by the utility company. Verify requirements and termination locations in advance with the utility company.

B. Metering at Building or Structure

1. Where applicable for projects requiring metering current transformer cabinets ("CT cabinets"), provide in strict compliance with utility company requirements. Provide bussed CT cabinets, constructed per utility company requirements, wherever more than three sets of paralleled service entrance conductors exist, or will exist based on provisions indicated for future growth. If resulting cabinets exceed the width available, or if indicated on drawings, install them vertically in lieu of horizontally after coordinating with utility company. Provide (1) 2" empty conduit with 200-lb pull string from CT Cabinet to the meter enclosure. Provide supports for CT cabinet and meter base. Do not exceed 25 feet in length for the conduit between the CT cabinet and the meter base.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Provide Series Combination Warning Labels, if applicable: Self-adhesive type, with text as required by NFPA 70.
- B. Install meters furnished by utility company. Install raceways and equipment according to utility company's written requirements. Provide empty conduits for metering leads and extend grounding connections as required by utility company.

END OF SECTION 262713