



DISTRIBUTION CONSTRUCTION STANDARD
 EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

METERING REQUIREMENTS FOR SERVICES LARGER THAN 200 AMPS UP TO AND INCLUDING 800 AMPS

Approved July 24, 2018

EC5-7.5500

REV 1

1.0 METERING REQUIREMENTS

- 1.1 All services larger than 200 amps up to and including 800 amps shall be installed in a current transformer (CT) cabinet sized as shown. **EXCEPTION** – For single phase 120/240 volt services with a continuous load of no more than 320 amps, a self-contained meter is acceptable.
- 1.2 The service CT cabinet shall be provided with the following:
 - 1.2.a NEMA 250 Type 3R rating
 - 1.2.b Provisions for mounting EWEB provided bus bar type CT's
 - 1.2.c Blank door with two handles or hinged door. If the door is larger than 36" in either dimension, door shall be hinged. Neither the meter base nor test switches shall be mounted on the door. EWEB requires meter bases to be mounted remote from the CT cabinet, preferably on an accessible exterior wall. When the service CT cabinet and meter base are mounted on the same wall, the preferred arrangement is to mount them side-by-side as shown. Obtain EWEB approval to mount meter base above the service CT cabinet.
 - 1.2.d Means to install EWEB seal to prevent removal of front panel or opening hinged door without cutting the seal
 - 1.2.e Nameplate to read "EWEB CT CABINET" with 2" lettering.
 - 1.2.f Lug to accommodate 1#12 metering conductor on each phase bus and neutral lug
 - 1.2.g Ground lug to accommodate 2#10 metering conductors on the bottom of the enclosure
 - 1.2.h Nameplate to read "EWEB CT CABINET" with 2" lettering
 - 1.2.i For a 240/120V three phase delta service terminate the "high leg" on the C phase bus.
- 1.3 Prior to ordering the CT cabinet, the customer shall submit a paper or electronic PDF file format copy of the CT cabinet drawings and building plan view showing locations of CT cabinet and meter to EWEB's Electric Distribution department for meter shop approval.
- 1.4 Once drawings are approved, EWEB shall supply CT's to customer for customer installation in CT cabinet. CT's shall be installed with line or marked side pointing toward the line side. EWEB shall own and maintain CT's.
- 1.5 Provide meter base with provisions for mounting a test switch block and with meter clip configuration as directed by EWEB.
- 1.6 Provide metallic conduit of the size shown from the service CT cabinet to the meter base. The conduit shall:
 - 1.6.a Not be longer than 40 feet
 - 1.6.b Contain elbows with a total of no more than 360 degrees of bends

- 1.6.c Not contain any LB's, junction or pull boxes of any kind
- 1.6.d Be provided with conduit hubs with O ring gasket for a watertight termination at the CT cabinet and meter base to maintain the NEMA rating of each enclosure
- 1.6.e Be schedule 40 PVC conduit for any portion of conduit is installed underground or installed in concrete wall or floor
- 1.6.f Be provided with a pull string
- 1.7 EWEB shall provide, install, own, and maintain the following:
 - 1.7.a Meter
 - 1.7.b Meter sealing ring
 - 1.7.c Test switches for meter wiring in meter base enclosure
 - 1.7.d Wiring from CT's and service bus to meter test switches and meter
- 1.8 Provide working space clear of obstructions in front of the meter and CT cabinet from the floor or finished grade to a height of 6.5 feet, a depth of 3 feet, and the width of the equipment or 30 inches wide, whichever is greater.
- 1.9 The point of delivery is designated by EWEB, and is at the line side terminals of the service CT bus bar.

2.0 REFERENCE STANDARDS

- A Refer to EC5-7.0900 for Metering single phase three wire 320 amp self-contained 120/240V
- B Refer to EC5-7.2400 for Metering single phase three wire, with 2 CTS
- C Refer to EC5-7.2600 for Metering three phase four wire wye, with 3 CTS
- D Refer to EC5-7.6000 for Metering requirements for services 801 amps and larger