

CITY OF AUSTIN ELECTRIC UTILITY DEPARTMENT
PURCHASE SPECIFICATION
FOR
CURRENT TRANSFORMER, METERING, INSTRUMENT, 600V

DATE	PREPARED BY	CHANGE SUMMARY	APPROVAL
7/25/1977		ISSUANCE	
9/25/17	Abdur Rahman	Revision	Abdur Rahman, P.E.
8/6/18	Michael Pittman	Formatting Only	Michael Pittman, P.E.

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1.0 SCOPE AND CLASSIFICATION

1.1 SCOPE

The City of Austin-Electric Utility Department is hereinafter referred to as Austin Energy (AE). This specification establishes the minimum requirements for operating characteristics and safety features of an instrument current transformer.

1.2 CLASSIFICATION

- 1.2.1 No deviation from this specification on the part of the bidder will be allowed. Any items supplied under this specification not in compliance with this specification shall be unacceptable.
- 1.2.2 The metering instrument transformer will be installed outdoor below an altitude of 1,000 meters and subjected to an annual ambient temperature variance of -25° to +55° Cat 100% humidity.
- 1.2.3 Austin Energy bases CT sizing using the 55 deg C temperature rating.

2. APPLICABLE SPECIFICATIONS/STANDARDS

All metering instrument current transformers conform to the latest standard including AEIC-EEI-NEMA Standard for instrument transformer (MSJ-11) and ANSI Standards (C57.13 .6. and C12.11) unless stated otherwise.

3. FUNCTIONAL REQUIREMENTS

Current transformer is required to be mounted in an enclosure or installed at the bushings of a pad mount transformer. The metering instrument current transformer will be used for indoor and outdoor applications.

4. PERFORMANCE REQUIREMENTS

4.1 ELECTRICAL

- 4.1.1 Voltage: 600 volt class
- 4.1.2 Possible current ratios: 600/5 with rating factor 2.0 (min) at 55 deg C, 2000/5 with rating factor 1.5 (min) at 55 deg C, and 4000/5 with rating factor 1.0 (min) at 55 deg C.
- 4.1.3 High accuracy with extended range: class 0.15 accuracy at B 0.1, 0.2, 0.5, and up to 1.8 burdens at 60 cycles for all ratings.
- 4.1.4 High accuracy, extended range class 0.15 means that 1% of nominal current through the rating factor, accuracy is guaranteed to be $\pm 0.15\%$.

4.2 PHYSICAL

All transformers furnished under this specification shall meet mechanical requirements as followed:

- 4.2.1 All transformers shall have a retaining shorting device with terminal cover.

- 4.2.2 All transformers shall be clearly marked with CT size; 200/5, 400/5, etc., 1-1/2 inch number size minimum.
- 4.2.3 All transformers shall be specified as Window or Bushing Type.
- 4.2.4 All transformers purchased shall include an electronic and paper certified test record.
- 4.2.5 All transformers shall have a nameplate installed by mounting screws that provides the catalog number, ratio, and all ANSI required info.