

CITY OF AUSTIN ELECTRIC UTILITY DEPARTMENT

PURCHASE SPECIFICATION

FOR

METERING INSTRUMENT CURRENT TRANSFORMER

DATE	PREPARED BY	ISSUANCE/REVISION	APPROVAL PROCESS MANAGER/STD. SUPV.
7-25-1977		Issuance	_____
3-24-2003	Carl A. Nance	Revision	_____
7-13-2010	Carlos Tello	Revision	_____
04-27-2016	Ryan Maybin	Revision	_____
09-25-2017	Abdur Rahman, P.E.	Revision	 _____

REASON FOR REVISION	AFFECTED PARAGRAPHS
Updated date for purchasing	N/A
Updated possible current ratings	4.1.2
Added extended range accuracy	4.1.4
Added electronic certified test record requirement	4.2.4, Attachment 1
Specified barcode serialization	4.2.5, Attachment 2, Table 1, Table 2
Specified barcode serialization	4.2.5, Delete Attachments 1 and 2, Tables 1 and 2

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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° C at 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 \geq 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.