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| NPRR Number | [1263](https://www.ercot.com/mktrules/issues/NPRR1263) | NPRR Title | Clarify Testing Requirements for CCVTs |
| Date of Decision | | September 17, 2025 | |
| Action | | Recommended Approval | |
| Timeline | | Normal | |
| Proposed Effective Date | | To be determined | |
| Priority and Rank Assigned | | To be determined | |
| Nodal Protocol Sections Requiring Revision | | 10.6.1.2, TSP and DSP Testing Requirements for EPS Metering Facilities | |
| Related Documents Requiring Revision/Related Revision Requests | | None | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR) clarifies the accuracy testing requirements for Coupling Capacitor Voltage Transformers (CCVTs). | |
| Reason for Revision | | [Strategic Plan](https://www.ercot.com/files/docs/2023/08/25/ERCOT-Strategic-Plan-2024-2028.pdf) Objective 1 – Be an industry leader for grid reliability and resilience  [Strategic Plan](https://www.ercot.com/files/docs/2023/08/25/ERCOT-Strategic-Plan-2024-2028.pdf) Objective 2 - Enhance the ERCOT region’s economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers  [Strategic Plan](https://www.ercot.com/files/docs/2023/08/25/ERCOT-Strategic-Plan-2024-2028.pdf) Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission  General system and/or process improvement(s)  Regulatory requirements  ERCOT Board/PUCT Directive  *(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)* | |
| Justification of Reason for Revision and Market Impacts | | CCVTs are stable and reliable. These devices have been in service for more than 20 years without any recorded inaccuracies. In 151 Magneto Optic Current Transformers (MOCTs) and CCVTs reported to the Meter Working Group (MWG) from 2006 to 2010, none were found to be out of tolerance.  In discussions with the CCVT manufacturer, it has been noted that any potential drift in accuracy is minimal and typically occurs at the ZZ (400Va) burden rating; typical connected burden measurements do not exceed 150Va.  Given the above, WETT believes that the current accuracy testing requirement is an unnecessary burden on the market, primarily due to the costs and logistical challenges involved in shipping CCVTs back to the manufacturer for testing. This process is further complicated by the fact that accuracy testing cannot be performed in the field, and there have been instances where CCVTs were damaged during shipment while attempting to meet these testing requirements.  Moreover, five of six Independent System Operator (ISO) do not require additional accuracy testing for CCVTs. NY ISO is the exception; it does not allow CCVTs to be used in revenue metering.  This Protocol change allows a voltage monitoring program to be used on CCVTs that remain in service after the initial five years. | |
| PRS Decision | | On 1/15/25, PRS voted unanimously to table NPRR1263 and refer the issue to WMS. All Market Segments participated in the vote.  On 9/17/25, PRS voted unanimously to recommend approval of NPRR1263 as amended by the 9/9/25 Meter Working Group (MWG) comments. All Market Segments participated in the vote. | |
| Summary of PRS Discussion | | On 1/15/25, participants requested PRS table NPRR1263 for further review by the MWG. Some participants questioned whether manufacturers are able to provide the data to resolve the issue.  On 9/17/25, participants reviewed the 9/9/25 MWG comments. | |

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| **Opinion** | |
| Credit Review | To be determined |
| Independent Market Monitor Opinion | To be determined |
| ERCOT Opinion | To be determined |
| ERCOT Market Impact Statement | To be determined |

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| Market Segment | Investor Owned Utility (IOU) |

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| **Comments Received** | |
| **Comment Author** | **Comment Summary** |
| WMS 020625 | Requested PRS continue to table NPRR1263 for further review by the MWG |
| MWG 090925 | Proposed language to add a voltage monitoring method as optional testing of installed CCVTs |
| WMS 091025 | Endorsed NPRR1263 as amended by the 9/9/25 MWG comments |
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| **Market Rules Notes** | |

None

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| Proposed Protocol Language Revision |

10.6.1.2 TSP and DSP Testing Requirements for EPS Metering Facilities

(1) At a minimum, the TSP and DSP EPS Meter Inspector shall conduct testing of EPS Meters on an annual basis, within the same month of each year as the previous year’s test. Metering Facilities used in the ERCOT system for settlement must be tested pursuant to the TSP or DSP tariffs, the Settlement Metering Operating Guide and these Protocols.

(2) Instrument transformers used in settlement metering circuits must be tested per the American National Standards Institute (ANSI) C12.1, Code for Electricity Metering, and the following guidelines:.

(a) Magnetic Instrument Transformers do not require periodic testing;

(b) Coupling Capacitor Voltage Transformers (CCVTs) shall be tested for accuracy:

(i) By the end of the year in which the fifth anniversary of the previous test occurs; or

(ii) By the end of the year in which the sixth anniversary of the previous test occurs, if the previous test occurred during the fourth quarter of the year.

(c) At the end of the year of the fifth anniversary of the original CCVT testing a TSP or DSP may request in writing to be exempt from paragraph (2)(b) above for a period of 15 years by agreeing to perform monitoring of the phase voltages along with the following requirements:

(i) The TSP or DSP shall perform monitoring of the phase voltages ensuring that the voltages do not fall outside 1.6% of the other two phases; or

(ii) The TSP or DSP shall perform monitoring of the voltages of two CCVTs that are physically located on the same phase of the same electrical buss ensuring that the voltages do not fall outside 0.6% of each other.

(iii) The TSP or DSP will review this monitoring monthly to ensure that the voltages do not exceed the parameters defined in paragraph (2)(c)(i) above or paragraph (2)(c)(ii) above on a continuous basis for a period of one month. This review may be an automated or manual process.

(iv) The TSP or DSP shall add comments to the annual meter test report that voltage monitoring is being performed as per paragraph (2)(c)(i) above or paragraph (2)(c)(ii) above and there has been no consistent failure lasting a month or longer.

(v) If there is a failure of the voltage monitoring per paragraph (2)(c)(iii) above the TSP or DSP shall remove the CCVT from service with the option to send it back to the manufacturer for testing and calibration.

(vi) The TSP or DSP shall remove the CCVT from service by the end of the year of the 20th anniversary of the original CCVT testing with the option to send it back to the manufacturer for testing and calibration.

(3) ERCOT may determine that periodic testing of CCVTs and/or voltage monitoring is not required once these devices have been proven to be stable. If the devices have shown themselves to be unstable, ERCOT may discontinue the use of these devices for settlement purposes.