

Manual 01: Control Center and Data Exchange Requirements, Revision 51

Ryan Nice,

Sr. Manager EMS Support

Markets and Reliability Committee

April 22nd, 2026

Updates for Control Center and Data Exchange Requirement Clarity

- PJM Manual 01: Control Center and Data Exchange Requirements requires a grouping of changes in Revision 51
 - The necessary revisions are resulting from different drivers, but the overall theme is keeping the guidance and requirements consistent with current best practices and operational conditions
 - The revisions seek to add clarity, remove redundancy, and address potential causes for uncertainty
- PJM addressed these revisions utilizing the Quick Fix process at the Operating Committee

- 3.2.1.1 PJMnet Communications Systems
 - Language added to the description of PJMnet Communications System.
 - Normalize to latest CIP-012-2 requirement updates.
- 3.2.3 EMS Data Exchange
 - Removed redundant and possibly confusing "repeatability of data" metering accuracy requirement.
 - Topic already handled thoroughly and correctly in Section 5

Manual 01: Control Center and Data Exchange
Requirements, Revision 51

- 3.2.3 EMS Data Exchange
 - Language added to clarify that PJM cannot receive and forward data with no operational or other value to PJM.
- 3.2.3 EMS Data Exchange
 - Clarified that members with DNP links must also, like with ICCP links, provide data maps and definitions.

Manual 01: Control Center and Data Exchange
Requirements, Revision 51

- The revision seeks to lower unnecessary administrative burden and compliance risk for all three parties typically involved with a billing meter by removing requirements to submit accuracy tests to PJM.
 - PJM has no in-house expertise to interpret technical meter/CT/PT test results.
 - Meter discrepancy resolution process is universally defined elsewhere in the Manuals and pjm.com
 - ISA/GSA nominal language for periodic meter calibration or discrepancy resolution does *not* involve PJM as an arbiter

- PJM performs SE-based “reasonability checks” on all submitted settlements data, but otherwise does not have any physical or electronic access directly to the revenue meter other than what is submitted to Power Meter.
- In Power Meter, all relevant parties have access to their settlements data for validation.

- In original revision, **removed**:
 - requirement to notify PJM of all meter out-of-service or inaccuracy for auditing purposes
 - requirement to report to PJM all accuracy testing
- In current revision, **added**:
 - information and references to established settlement discrepancy and correction processes, and confirmation of PJM settlement data retention
 - confirmation that, as required by Manual or ISA/GIA, test shall be made available by request and periodic meter checks shall be followed

5.3.4 Maintenance

The accuracy of all billing meters, as required to transact energy services, shall be verified by tests conducted by the equipment owner once every two years. If such test identifies, or other indications show, a recording meter is out of service or inaccurate, the owner must take action to restore the meter to correct operation within 30 days or a date mutually agreed upon by all parties. In the interim, backup metering may be used as mutually agreed by the parties involved. If equipment installation or replacement is required to resolve the inaccuracy, all equipment must be correctly operating at a date mutually agreed upon by all parties.

Outside of PJM deadlines for settlement corrections, discrepancies can be resolved by the settling parties. Any post-deadline settlement value changes are evaluated on a case-by-case basis. PJM holds over five years of historical settlement data. Refer to Power Meter tool details at <https://www.pjm.com/markets-and-operations/etools/power-meter>. ~~PJM shall be notified of the inaccuracy, interim procedures, and resolution for auditing purposes.~~

Periodic accuracy compliance testing may be requested by PJM member groups as required. ~~Periodic meter check or calibration requirements as detailed in a relevant ISA or GIA shall be respected.~~ Authentication of current meter testing and validation of newly installed or repaired meter systems may also be required. ~~The results of all accuracy testing shall be reported to PJM. As a minimum, PJM will document provided test results for all PJM Member metering tests that show errors of greater than 1% for auditing purposes.~~

5.3.5 Accuracy Checks and Retention

All manual or additional meter reading or comparisons required to ensure consistent valid meter information (“true-up”), are performed prior to the billing cycle, as mutually agreed upon by the parties involved. Current billing cycles are monthly.

All meter records and associated documentation is retained for a period of seven years for independent auditing purposes. **Test results as required by this PJM Manual or an applicable ISA or GIA or similar governing agreement, shall be made available to PJM by request.**

Any disputes involving any aspect of the billing metering standards or their application are resolved as described in Manual 33: Administrative Services for the PJM Operating Agreement.

- Manual 01 R51
 - SOS Review, November 25th 2025
 - OC First Read, December 4th 2025
 - TTMS/RSCS Review, December 8th 2025
 - OC Endorsement, January 8th 2026
 - Further revisions of Section 5 edits, February, March
 - OC Endorsement, April 9th 2026
 - MRC First Read, April 22nd 2026
 - MRC Endorsement, May 20th 2026

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<ul style="list-style-type: none">Proposed revisions seek to add clarity, remove redundancy, and address potential causes for uncertainty.	<ul style="list-style-type: none">Revisions captured in the Executive Summary and corresponding Manual 01 redlines.	<ul style="list-style-type: none">Stakeholders should review revisions in preparation for the April 2026 OC & May 2026 MRC votes

SME/Presenter:
Ryan Nice, RyanNice@pjm.com



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

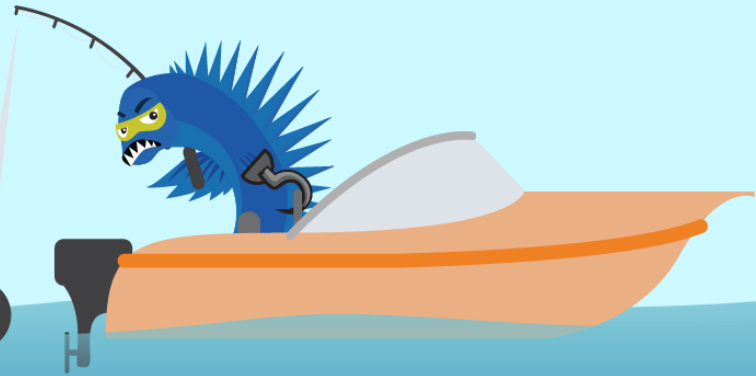
Manual 01: Revision 51

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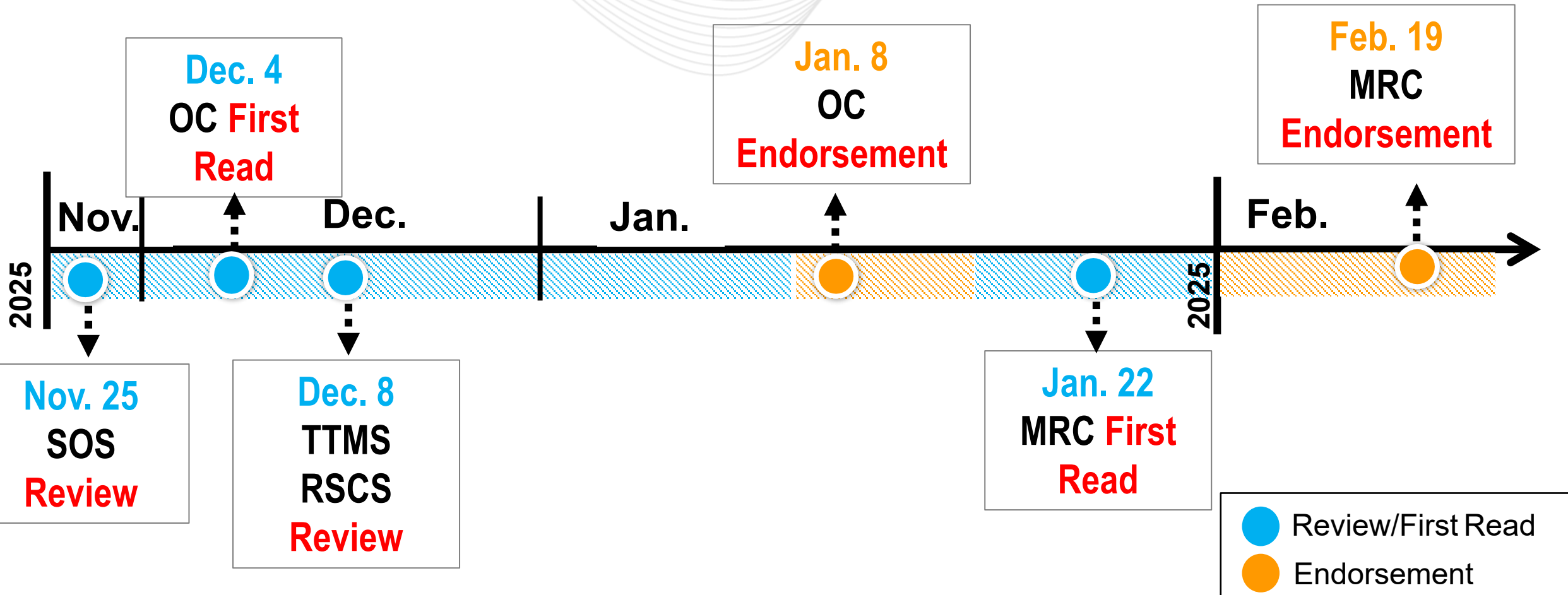


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8.3 Testing of Metering Equipment:

The Interconnected Entity that, pursuant to section 8.1 of this Appendix 2, owns the Metering Equipment shall operate, maintain, inspect, and test all Metering Equipment upon installation and at least once every two years thereafter. Upon reasonable request by the other Interconnected Entity, the owner of the Metering Equipment shall inspect or test the Metering Equipment more frequently than every two years, but in no event more frequently than three times in any 24-month period. The owner of the Metering Equipment shall give reasonable notice to the Interconnection Parties of the time when any inspection or test of the owner's Metering Equipment shall take place, and the other parties may have representatives present at the test or inspection. If Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced in order to provide accurate metering. Where the Transmission Owner owns the Metering Equipment, the expense of such adjustment, repair or replacement shall be borne by the Project Developer, except that the Project Developer shall not be responsible for such expenses where the inaccuracy or defect is caused by the Transmission Owner. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than 1 percent from the measurement made by the standard meter used in the test, the owner of the Metering Equipment shall inform Transmission Provider, and the Transmission Provider shall inform the other Interconnected Entity, of the need to correct all measurements made by the inaccurate meter for the period during which the inaccurate measurements were made, if the period can be determined. If the period of inaccurate measurement cannot be determined, the correction shall be for the period immediately preceding the test of the Metering Equipment that is equal to one-half of the time from the date of the last previous test of the Metering Equipment, provided that the period subject to correction shall not exceed nine months.

Original Review/Endorsement Timeline



PJM Incoming versus Outgoing Data

