Manual 3A, Revision 18
2nd Read
2019 Cover-to-cover Periodic Review

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Section 1.2.1

Before:

1.2.1 Electrical Model Responsibilities for Behind the Meter Generation (BtMG)
Consistent with Manual 14D, Appendix A (9) regarding BtMG that is 10 MW or greater or have been identified as requiring metering for operational security reasons; the PJM TO operating entity (or Local Control Center – LCC – Transmission Operator) should undertake best efforts to work with the BtMG owner to provide the following information for the BtMG by submitting a completed BtMG Modeling Information Form as an eDART Network Model Request as outlined in Appendix D: BtMG Modeling Information Form:

After:

1.2.1 Electrical Model Responsibilities for Behind the Meter Generation (BtMG)
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### Section 1.6

**Before:**

- Real-Time Telemetry Data Requirements for System Reliability
  - PJM Manual M-01, the PJM Manual for Control Center Requirements, shall be used as the source for Control Center requirements. This includes, but is not necessarily limited to, metering placement requirements, data acquisition frequency, and accuracy requirements. Technical requirements apply to both PJM TOP facilities and facilities outside the PJM TOP area.
  - In general, Analog Data measurements are required for:
    - Voltages for buses at 69 kV and above
    - MW and MVAR values for all generating units greater than 1 MW. See M14D for specific generation requirements. Usually, individual unit generation barring special, approved circumstances.
    - MW and MVAR values (both ends) for designated transmission facilities (lines, transformers, phase angle regulators/shunters, series devices) at 69 kV and above (if single-phase metering is employed, the A-phase is preferred).

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Updates / Revisions:

- Exhibits: 1, 6, 10 updated
- Section 1.6: Note (telemetry, data dump submission guidelines)
- Section 2: Modeling Philosophy
- Section 3.4: Revised procedures when changing transformers & shunts
- Section 4.8: DMS updated
- Section 4.9: Removed (content realigned)
- Section 5: Content rearranged; 5.5 removed
- Appendix G: New - Examples of EMS Sub-transmission Modeling