



Summary of M-03A Rev 13 Changes



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Operating Committee Meeting
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Overview of Changes (General Body Excluding Section 3.2 & Appendixes):

- Cover to Cover Periodic Review
- Non-substantive changes to format and references
- References: eDART Training Presentations link updated
- Section 1.3: Link added for online training presentations on model update related processes & procedures
- Section 2.2: Note added to address process to change to Flow CB
- Section 3.3: Added Flow CB as type of equipment can be submitted for ratings updates in TERM
- Section 3.5: Clarification added to generator unit naming requirements
- Section 4.4:
 - Elaboration added on Tie Line process; reference added to M01, Attachment D: Tie Line Meter Placement and Telemetry
 - New Exhibit 8: Tie Line Update Timeline added
 - Exhibit numbers updated per insertion of new Exhibit 8
- Section 4.8: Updated DMS parent committee & meeting occurrences

Overview of Changes (Section 3.2):

- Section 3.2:
 - Content reordering and reformatting for improved readability and flow
 - Reference note added to Appendix E: Checklist for New Equipment Energization Process
 - Referenced Manual 14B and online training for Supplemental Upgrades submission to PJM Planning
 - Updated list of required items needed for Network Model update submissions
 - Note added for Exhibit C1 outlining which facilities require ratings
 - Details added about process to link Network Model Requests to associated Cut-in Transmission Outage Tickets
 - Details outlined for areas needing TO quarterly in line with the model update process
 - Removed EHV Modeling as separate section (formerly 3.2.1) and made as Note in Section 3.2
 - Exhibit 5 moved from Section 3.2.1 to Section 3.2
 - New Section 3.2.1 - External Modeling
 - Moved external modeling specific verbiage from Section 3.2 to new Section 3.2.1
 - New Section 3.2.1.1 - Pseudo Tie Modeling used to identify PJM model update need for approved pseudo-ties
 - Points to Manual 12 for Pseudo-Tie consideration requirements

Overview of Changes (Appendixes):

- Appendix A: Title changed to 'TERM Equipment Ratings Update Process'
- Appendix C: Reference to NERC BES process and PJM white paper changed to a Note
- Appendix F: Acronyms & Descriptions updated

Appendix



Training

How system operations work in PJM

[Find Upcoming Training](#)

[Operator Seminar](#)

[Generation Operator Fundamentals](#)

[Fundamentals of Transmission Operations](#)

[How PJM Operates & Dispatches](#)

[Power System Fundamentals](#)

[Conservative Operations](#)

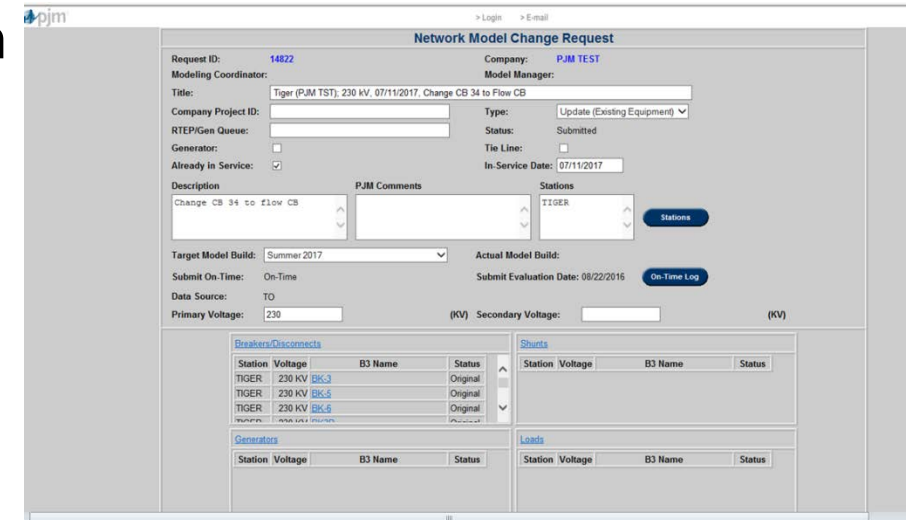
[Generation Basics](#)

[Load Forecasting & Weather](#)

Transmission Planning, Modeling & Energization

- [Introduction](#)
- [RTEP Process: Overview | Construction](#)
- [Network Model Application:](#)
 - [The Basics](#)
 - [Creating A New Change Request: Part 1 | Part 2](#)
 - [View/Revise Change Requests](#)
 - [Additional Functions: Part 1 | Part 2](#)
- [Telemetry & TERM](#)
- [Tie Line Energization](#)
- [New Equipment Energization Procedure](#)

- Section 1.3 - Reference made to online training provided on model update processes and procedures from planning through energization
 - Presentations around 10 minutes each
 - Markets & Operations – Systems Operations
- Section 2.2 - Note that conversion of CB to Flow CB accomplished through the Network Model Request process



The screenshot shows the 'Network Model Change Request' web application interface. The page includes a header with the PJM logo and navigation links for 'Login' and 'E-mail'. The main content area contains a form for creating or editing a change request. Key fields include: Request ID (14822), Company (PJM TEST), Modeling Coordinator, Model Manager, Title (Tiger (PJM TST), 230 KV, 07/11/2017, Change CB 34 to Flow CB), Company Project ID, Type (Update (Existing Equipment)), RTEP/Gen Queue, Generator, Status (Submitted), Tie Line, In-Service Date (07/11/2017), Description (Change CB 34 to Flow CB), PJM Comments, and Stations (TIGER). There are also dropdown menus for Target Model Build (Summer 2017) and Actual Model Build, and buttons for 'Stations', 'On-Time Log', and 'Submit On-Time'. At the bottom, there are tables for 'Breakers/Disconnects', 'Generators', 'Shunts', and 'Loads', each with columns for Station, Voltage, B3 Name, and Status.

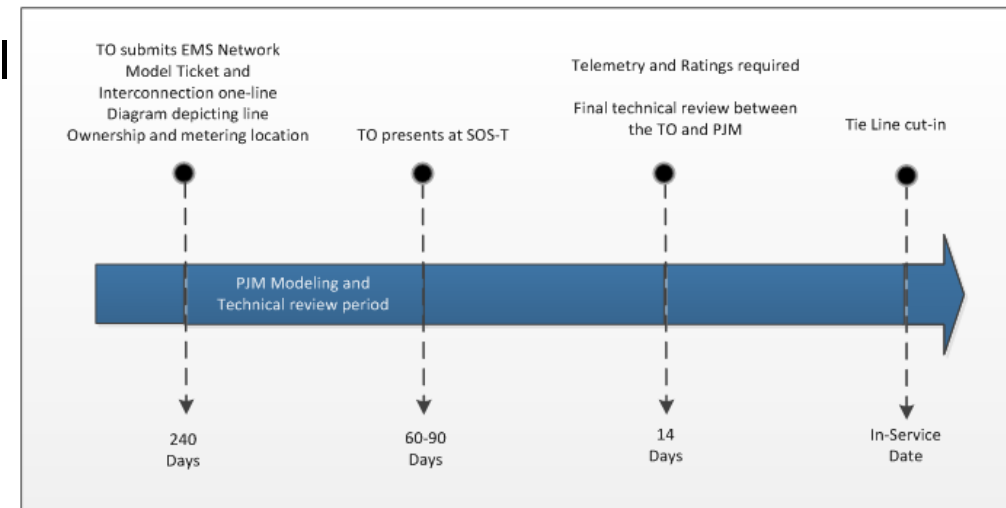
- Content reordering and reformatting for improved readability and flow
- Reference note added to Appendix E: Checklist for New Equipment Energization Process
- Identified need for Supplemental Upgrades to be submitted just like RTEP projects to PJM Transmission Planning staff
- Update of information needed for Model Request submission
- Note added for Appendix C, Exhibit C1: List of Monitored Priorities outlining equipment rating requirements based on Monitoring Priorities
- Reminder to link Network Model Requests to associated Cut-in Transmission Outage Tickets with pointing out available online training on how to do it

- To ensure the PJM Model is appropriately in sync with TO models TO should review the following summary information as it becomes available:
 - Updated one-lines available via the DMS SharePoint site and Network Model applications
 - Reports listing Network Model request that are in your zone via the Network Model application and the DMS SharePoint
 - Preliminary and final difference reports emailed to SOS-T and DMS-Confidential groups
 - Postings of other model related information on DMS SharePoint site
- Identified updates will be processed as new submissions according to model update schedule

- Changed EHV model update request section (formerly 3.2.1) to a Note as part of Section 3.2
 - Moved Exhibit 5 from Section 3.2.1 to Section 3.2
- Separated out External Modeling information from Section 3.2 to a new section (new version of 3.2.1) called External Modeling
 - New Section 3.2.1.1 - Pseudo Tie Modeling
 - References Manual 12, Attachment F: Dynamic Transfers for pseudo-tie consideration requirements
 - Explains criteria for determining what transmission facilities need to be modeled in the PJM EMS if an external unit is pseudo-tied into PJM

- **Section 3.3**
 - Added Flow CB as type of equipment available in TERM and removed text stating this to be available in the future
- **Section 3.5**
 - Generator naming requirements explained
 - Added new types: Fuel Cell & Behind the Meter Generation

- Section 4.4
 - Made reference to Manual 1, Attachment D: Tie Line Meter Placement and Telemetry
 - New Exhibit 8: Tie Line Update Timeline showing tie line timeline requirements for communication and parameter data
 - Reference made to online Tie Line Form & Manual 14C, Section 6.1.6 for further details
- Section 4.8
 - Adjusted reporting committee from SOS-T to OC
 - Updated DMS meeting months and frequency
 - Added reference to DMS Workplace



- Appendix A – Title changed to ‘TERM Equipment Ratings Update Process’, better representing section
- Appendix C – Reference to NERC BES process and PJM white paper changed to a Note and moved to earlier in section to make it stand out
- Appendix F – Acronym definitions added for BA, DFAX, TOP & TPL