Summary of M-03A Rev 11 Changes

Ron DeLoach
Manager, Model Management Department
RSCS
November 2016

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Overview of M-03A Changes

Overview of Changes:

- Updated URL for Tariff Facilities List throughout document
- Miscellaneous administrative and formatting updates
- Section 1.2: Submission timelines and detail added for modeling updates specific to Generators.
- Section 1.2.1: New section outlining Electrical Model Responsibilities for Behind the Meter Generation (BtMG)
- Section 3.2: Submit-on-time functionality and process outlined; (old) Exhibit 3 deleted (redundant/confusing); Exhibit 3 (General Schedule for Submitting Modeling Data) enhanced distinguish between Required and Preferred In Service Date for Project; Exhibit 4 (Network Model Data Submission and Model Validation Timeline) enhanced to display corrected timelines, and new timelines added for 'Preferred In Model Build' and 'PJM Tests New Model'
- Section 3.2.1: New section added for EHV Modeling.
- Section 3.4: Paragraph added to outline non-automated process for submitting fixed tap changes to PJM.

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Overview of M-03A Changes (cont'd)

Overview of Changes:

- Section 4.1: Paragraph 5 updated to reflect current practices.
- Section 4.8.1: Sharing of data and one-lines across DMS Members outlined.
- Section 4.9: Reference added for PJM Sub-Transmission Modeling White Paper.
- Section 4.9.3: Instructions added for BES notification of BES exceptions
  - Exhibit 12 and preceding paragraph moved to Section 2.4 (now Exhibit 2).
- Appendix C: New paragraph added to outline BESNet process with supporting web links.
- Appendix D: New appendix added for new Behind the Meter Generation (BtMG) Submission Form outlining procedure for form submission.
  - New Exhibit D1 (blank BtMG submission form)
  - New Exhibit D2 (sample BtMG Submission Form for Distribution)
  - New Exhibit D3 (sample BtMG Submission Form for Transmission).
- Appendix E: Acronyms & Descriptions moved from Appendix D to Appendix E to accommodate new Appendix D for BtMG.

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Appendix

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Section 1.2:

- Outlines GSU details needed specifically for units 20MW+ connected to BES consistent with Manuals 1, 3, 14B, 14D
- Added information on where to view build schedule and exhibit on submission timelines

Section 1.2.1:

- New section detailing model update requirements to link telemetry as required in Manual 14D Appendix A Item 9 for BtMG 10MW+
  - Telemetry specific requirements outlined in Manual 14D Sections 4.1.7 & 4.2.3
  - Reference in Manual 14D Appendix A Item 9 to this new section of Manual 3A

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BtMG Process Flow & Submission Form

PJM Behind the Meter Generation Submission Form

BtMG Form Description

This form is to gather information on Behind the Meter Generators. PJM will use this information to update the EMS model. Refer to PJM Manual 3A section 1.2.1 for more details regarding this form.

General Information

In Service Date:		Transmission Owner:	
Utility Company Name:		Generator Name:	
Utility Company Address:		Generator Address:	
Utility Company Phone:		BtM Generator Contact:	
Utility Company Email:		Generator Email:	
System Operating to (check one): Distribution (<100 kV) ☐ Transmission (>100 kV) ☐		Generator Code:	
GIS Data (latitude, longitude):			

Modeling Information

Generator Model Update (required section):

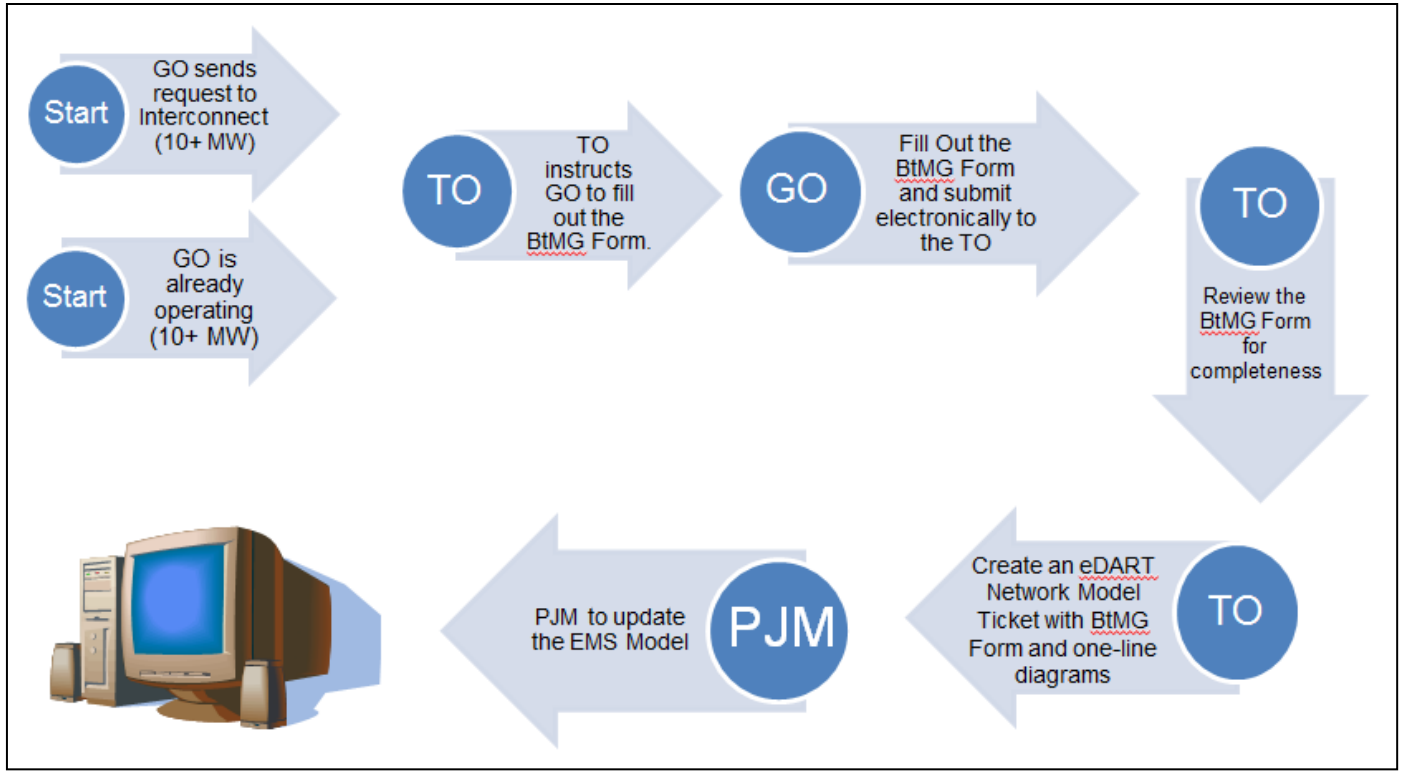
- Commercial name:
- Attach Generator single-line diagram
- Generator Information:
  - Unit Type (see below):
  - Fuel Type:
  - Maximum Output PMax (total): MW
  - Number of Units:
  - Operating Voltage: (kV)

Transmission Model Details (can be supplied by TO in Network Model Request):

- Nearest Transmission Substation name:
- Attach Transmission Substation single-line diagram

Telemetry (see Manual 14D, Appendix A (9) to determine applicability):

- From TO via ICCP
  - Provide status of circuit breakers and switches
  - Provide MW and MVAr measurements
  - Provide Voltage



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Section 3.2:

- Removed Exhibit 3: Timeline for PJM Actions in Coordinating Model Update - Sample Summer Process since info already covered in Exhibit 4: Network Model Data Submission & Model Validation Timeline
  - Repointed all references to removed exhibit to Network Model Data Submission & Model Validation Timeline exhibit
- Added task for model update testing period to Network Model Data Submission & Model Validation Timeline exhibit
- Adjusted effective model update area with colors to better explain period being modeled and time period to date of model build forward

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Timeline for Model Update – Sample

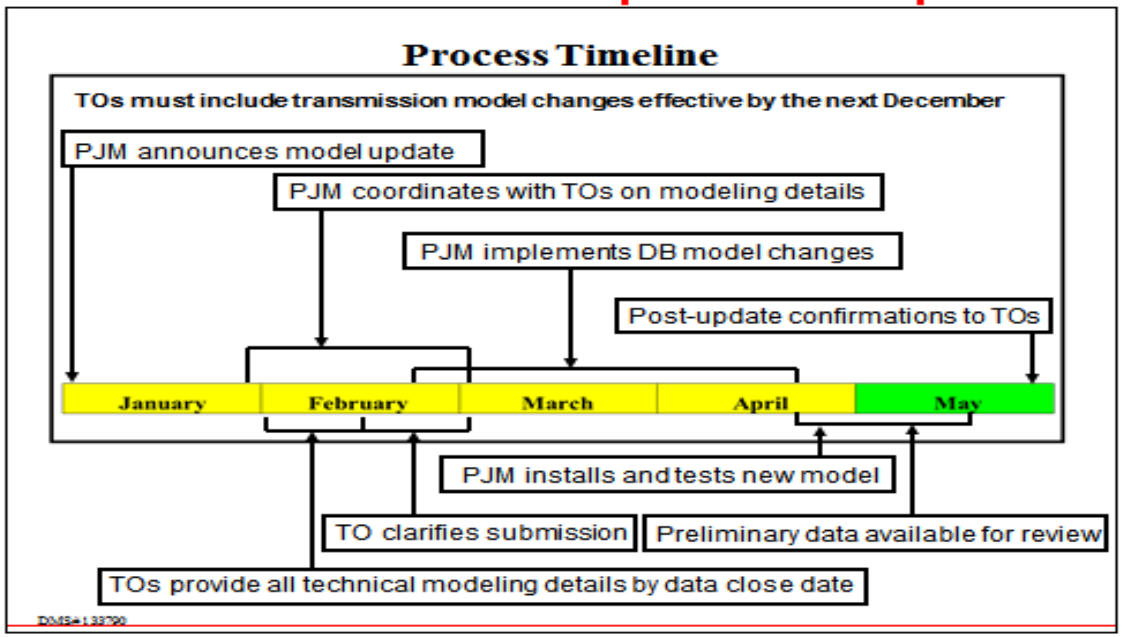

Exhibit 3: Timeline for PJM Actions in Coordinating Model Update—Sample Summer Process

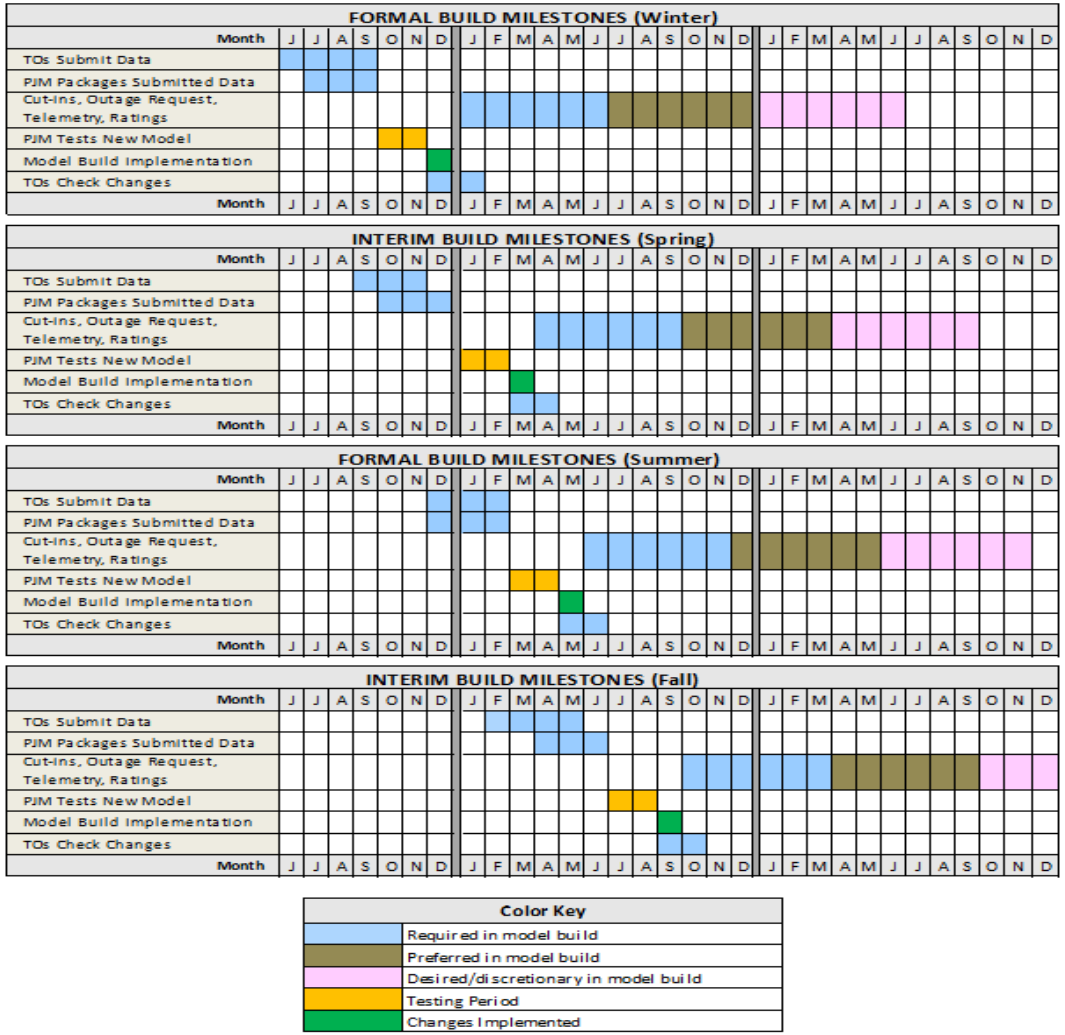

Exhibit 43: Network Model Data Submission & Model Validation Timeline

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Section 3.2:

- Updated renumbered Exhibit 3: General Schedule for Submitting Modeling Data by replacing Target In-Service Date for Project with Required & Preferred In-Service Date for Project columns to better align with updated Exhibit 4: Network Model Data Submission & Model Validation Timeline

Quarterly Build Name	Build Type	Information Submission Close Date Timeframe	EMS Model Update Date	Required In-Service Date for Project	Preferred In-Service Date for Project
Spring	Interim[4]	Late November	March	April - Sept.	October + 11 months
Summer	Formal	Early February	May	June - Nov.	December + 11 months
Fall	Interim	Early June	September	Oct. - March	April + 11 months. -
Winter	Formal	Early September	December	Jan. - June	July + 11 months

- Two new paragraphs added that detail Submit-on-time functionality now available through Network Model application.

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Section 3.2.1:

- New section added to state that EHV equipment update info should be communicated to PJM a year in advance of energization

Section 3.4:

- Specific direction added on how to submit updates on load tap parameters and nominal voltage information for transformers

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Section 4.1:

- Additional clarifying text on using the data posted on the secure DMS SharePoint site to review model updates

Section 4.8.1:

- Added example of types of files stored on the DMS SharePoint site

Section 4.9:

- Added reference to Sub-Transmission whitepaper

Section 4.9.3:

- Added reference to PJM Compliance Bulletin 14 and utilization of NERC BESnet tool to request changes to transmission facility BES status
- Transmission Facilities page on PJM.com exhibit moved to section 2.4

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Appendixes

Appendix C:

- PJM Compliance Bulletin 14 referenced
- Required use of BESNet tool identified

Appendix D:

- *Note: Detailed review of processes and procedures referenced in this appendix provided as part of a separate DMS agenda item*
- Detailed explanation of field requirements in the new PJM Behind the Meter Generation Submission Form
- Example of form submission where unit tied to transmission facilities
- Example of form submission where unit tied to distribution facilities

Appendix E:

- Acronyms & Descriptions moved from Appendix D to Appendix E to accommodate new Appendix D for BtMG

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