



System Planning Modeling Update

Jonathan Thompson
System Planning Modeling & Support
March 8, 2018

- 2021 Summer
 - Initial analysis and benchmark to RPM case in progress

- 2023: Summer, Winter, Light Load
 - Pre-final cases delivered to Transmission Planning early February
 - Will reach out to TOs as needed
 - Finalization to begin window analysis soon

➤ **Late March 2018**

- 'Pre-final' 2023 case sent to TOs

- **Operational Assessment Task Force case**
 - Updated 2018 summer based on MMWG case: Complete

- **Extreme Event Contingencies**
 - To match 2023 RTEP case

- **2022 RTEP Final Case**
 - Update 2017 Series RTEP 2022 base cases (Summer, Winter, LL)
 - Completed by end of May

- **Network Modeling Alignment**
 - Comparing transformer impedance and ratings between Ops and Planning

- **2018 Schedule**
 - Schedule for 2018 Series MMWG and 2019 series RTEP to be shared soon

- **2018 Series MMWG**
 - Process kicks off again in April

- Purpose NERC MOD-032-1
 - To establish consistent modeling data requirements and reporting procedures for development of planning horizon cases necessary to support analysis of the reliability of the interconnected transmission system
- Collected data from Generation Owners and Transmission Owners in 2016 and 2017
 - PJM has developed and used Gen Model portal for Generation Owner submission
 - PJM has implemented and used Model On Demand to build gather and build load flow cases

- MOD-032 Schedule for TOs

Date	Action Item
February 7, 2018	Modeling Working Group Conference Call #1
March 16, 2018	Transmission Owners to submit project revisions in Model-on-Demand
March 19, 2018	PJM to post 1, 2, & 5 year summer cases for topology updates
March 30, 2018	Transmission Owners to submit topology updates to the 1, 2 & 5 year summer cases in Model-on-Demand
April 4, 2018	Modeling Working Group Conference Call #2
May 1, 2018	PJM to post all 12 MMWG case definitions and tie lines for review
May 25, 2018	Transmission Owners to submit updates to case definitions and tie lines
May 30, 2018	Pull 12 cases from Model-on-Demand and begin: <ul style="list-style-type: none"> o Set Load o Solve cases o Dispatch o Incorporate tie lines and interchange
June 29, 2018	Data Coordinators submit Power Flow Data to Powertech (N-1 completed)

- Gen Model is the tool used by GOs to get PJM gen data
- 2018 Activity
 - Open April 2 – June 15
 - Form will be preloaded with 2017 data making it quick to submit generators with unchanged data and easy to update any changed parameters
 - No noticeable changes from last year

- PJM staff has reviewed and updated “PJM MOD-032 Steady State, Dynamics, and Short Circuit Modeling Data Requirements and Reporting Procedures Document”
- Most updates were to clarify questions from 2017

- Section 1.5.2
 - Added procedure for queue generation projects coming online
 - They are to submit MOD-032 data to “Queue Point” tool in the form of as built data
- Section 1.5.3
 - Added that TOs serving external load on their system are to coordinate with external entity to submit data to PJM
 - Added language for how to handle non-incumbent TOs
- Section 3.1
 - Updated Short Circuit schedule to better reflect current RTEP schedule
- Section 6.2.2
 - Updated language to be clear TOs and MTX provider only have to submit data they themselves own