

## 2020 ITP Market Powerflow Models (MPM) – Pass 2 Information

- **Action Required**

SPP has reposted pass 2 of the 2020 ITP MPMs to [GlobalScape](#) for stakeholder review due to a previous model issue related to auxiliary load modeling. This issue has been resolved and the models have been reposted for an additional request for reactive device setting adjustments.

As a reminder, the following models will be utilized in the 2020 ITP:

- 2022 Future 1 Market Powerflow On-Peak and Off-Peak models
- 2025 Future 1 and Future 2 Market Powerflow On-Peak and Off-Peak models
- 2030 Future 1 and Future 2 Market Powerflow On-Peak and Off-Peak models

The summer On-Peak Base Reliability (BR) models for each study year were utilized as the starting models for the development of the MPMs. The PROMOD dispatch, load, phase-shifter angle, and DC tie setpoints for each On-Peak and Off-Peak hour were applied to these models.

The Off-Peak MPMs were updated with device control profiles from corresponding BR light load seasons. These models should be reviewed for reactive setting adjustment submittals to SPP per ITP Manual, Section 2.3.2. Staff is requesting that stakeholders review and submit any changes to set points for:

- Capacitors
- Reactors
- Tap changers for transformers
- Remotely regulated buses
- Voltage schedules for generators and static VAR compensators (SVCs)
- DC tie and line parameters (other than MW SETVAL)
- Off-Peak (light load) power factors (QLOAD)

These adjustments will improve the response of the transmission system under system intact and contingency conditions, as well as provide confidence to SPP and stakeholders that potential violations are based on realistic system conditions prior to the reliability needs assessment. After all additional reactive device setting adjustments have been received, staff will apply the final adjustments to the appropriate models before final posting for TWG approval.

Docucheck and ACCC results will continue to be evaluated for potential model updates. It is recommended that a preliminary ACCC analysis be performed to identify potential voltage violations in order to help facilitate reactive setting adjustments.

- **Entities Required to Provide Feedback**

All interested stakeholders, TWG members

- **Due Date and Method of Submittal**

Please provide feedback by **Monday, January 27, 2020** via the [SPP Request Management System \(RMS\)](#), using Request Type “ITP Submittals” and Subtype 1 “Data Submission.” Staff will incorporate feedback and

repost for review on January 28, 2020. SPP will solicit a vote for approval at the [TWG February 4-5, 2020 meeting](#).

- **Changes from Last Pass**

In the cases where auxiliary loads were modeled offline when the associated generator resource was online, those auxiliary loads were modeled online.

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- **Material Disclaimer**

CONTAINS CONFIDENTIAL AND PROTECTED MATERIAL NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL – DO NOT RELEASE

- **File location on [GlobalScape](#)**

*For users who have signed an SPP non-competitive duty NDA:*

These files can be found on GlobalScape under: ITP → ITP → NCD (CEII, RSD) → NDA → 2020 ITP → 2020 ITP Market Powerflow Models → in the “[2020 ITP MPM – Pass 2](#)” folder.

File Name	Description
2020 ITP MPM-Pass 2 Raw V33.zip	Models in .RAW file format
2020 ITP MPM-Pass 2 Sav V33.zip	Models in .SAV file format
2020 ITP MPM-Pass 2 Docucheck.xlsx	SPP Docucheck

- **Helpful Links and Access**

If you do not already have access to these documents in [GlobalScape](#), see the instructions for [confidentiality agreements](#) and submit the appropriate form via [RMS](#) using the “GlobalScape Access Request” Quick Pick. Other helpful links can be found on [SPP.org](#).