

## 2023 ITP Market Powerflow Models (MPM) – Pass 2 Information

- **Action Required**

SPP has posted [Pass 2](#) of the 2023 ITP MPMs to [GlobalScape](#) for stakeholder review.

As a reminder, the following models will be utilized in the 2023 ITP:

- 2024 Future 1 Market Powerflow On-Peak and Off-Peak models
- 2027 Future 1 and Future 2 Market Powerflow On-Peak and Off-Peak models
- 2032 Future 1 and Future 2 Market Powerflow On-Peak and Off-Peak models

The summer On-Peak ITP 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. 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.

SPP Staff will continue model review and will potentially make updates during the review period.

Docucheck and additional internal QA results will continue to be evaluated for potential model updates including activities to help facilitate appropriate reactive setting adjustments.

- **Entities Required to Provide Feedback**

All interested stakeholders, TWG members

- **Due Date and Method of Submittal**

Please provide feedback by **Tuesday, July 18th, 2023** via the [SPP Request Management System \(RMS\)](#), using the “Submit Information” Request Template with Subtype 1 as “Integrated Transmission Planning

(ITP)” and Subtype 2 as “Data Submission”. Staff will incorporate feedback and repost Final Models for review on July 21<sup>st</sup>,2023. SPP will solicit a vote for approval through email.

- **Changes from Last Pass**

- Corrected reactive loads in Light Load models
- Corrected Resource Plan capabilities
- Incorporation of member feedback

- **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 → 2023 ITP → Market Powerflow Models → “Pass 2” folder.

File Name	Description
2023 ITP MPM-Pass 2 Raw V34.zip	Models in .RAW file format
2023 ITP MPM-Pass 2 Sav V34.zip	Models in .SAV file format
2023 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 “Initiate a System Access Action” **Request Template**, “Access” **Request Type** “Globalscape File Sharing” **Subtype 1**, “Add User” **Subtype 2** and “SPPDocushare / Engineering / TCR Models” **Subtype 3**. [GlobalScape](#) frequently asked questions can be found in [Knowledgebase Article 686](#). Other helpful links can be found on [SPP.org](#).