

2023 TPL Sensitivity Models – Pass 1 Information

- **Action Required**

SPP has posted [Pass 1](#) of the 2023 TPL Sensitivity Models to [GlobalScape](#) for stakeholder review.

The following models will be utilized in the 2023 TPL Powerflow Sensitivity Studies:

- 2024 On-Peak and Off-Peak models
- 2027 On-Peak model

The finalized 2023 ITP Base Reliability (BR) models for each study year were utilized as the starting models for the development of the TPL Sensitivity Models. A PROMOD dispatch for renewable units was utilized to stress the system with a high renewable dispatch. These sensitivity models are created to comply with requirement R2.1.3 of TPL-001-05.

These models should be reviewed to identify reactive device control setting adjustment submittals to SPP per ITP Manual, Section 2.3.2 as well as applicable DC Tie and Off Peak load power factor (PF) information. 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 control setting adjustments have been received, staff will apply the final adjustments to the appropriate models before posting for TWG approval.

SPP Staff will continue model reviews 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 device control setting adjustments.

- **Entities Required to Provide Feedback**

All interested stakeholders, TWG members

- **Due Date and Method of Submittal**

Please provide feedback by **Wednesday, April 12, 2023** via the [SPP Request Management System \(RMS\)](#), using the “Initiate a System Access Action” **Request Template**, “Submission” **Request Type**, and “Integrated Transmission Planning (ITP)” **Subtype 1**, and “Data Submission” **Subtype 2**.

Staff will incorporate feedback and repost updated models for review on April 12, 2023. SPP will solicit a vote for approval through email.

- Changes from Last Pass**

N/A

- 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 → TPL Sensitivity Models → in the “[TPL Sensitivity – Pass 1](#)” folder.

File Name	Description
2023 TPL SENS-Pass 1 Raw.zip	Models in .RAW file format
2023 TPL SENS-Pass 1 Sav.zip	Models in .SAV file format
2023 TPL SENS-Pass 1 Docucheck.xlsx	SPP Docucheck

- Schedule for TPL Sensitivity feedback**

Post initial TPL Sensitivity and Request reactive system adjustments from stakeholders for light load models	1 day	Fri 4/7/2023	Fri 4/7/2023
Stakeholders review and submit reactive system adjustments	3 days	Mon 4/10/2023	Wed 4/12/2023
Final Pass - Apply stakeholder updates	2 days	Thur 4/13/2023	Fri 4/14/2023
Post TPL Sensitivity with reactive system adjustments and other model updates	1 day	Fri 4/14/2023	Fri 4/14/2023
Stakeholders review for Final Approval	2 days	Mon 4/17/2023	Tues 4/18/2023
TPL Sensitivity Build - TWG Final Approval (Email vote)	3 days	Wed 4/19/2023	Fri 4/21/2023

- 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](#).