

2024 ITP Final Extreme Weather Powerflow Model Information

- **Action Required**

SPP staff is requesting stakeholder feedback on the 2024 ITP Extreme Weather Powerflow models and supplemental data posted today, as follows:

- Please verify devices (inductors, reactors, capacitors, etc.) and other reactive settings are modeled appropriately.

As a reminder, SPP staff built these models based upon 2024 ITP BR winter models using capacity reductions and load distribution reflected during Winter Storm Uri and approved by the TWG and ESWG. Guidance for “Extreme Winter Weather Scenario” model build is laid out in the “2024 ITP Assessment Scope”. Key capacity reductions focused on Coal, Natural Gas, and Wind observed using operations data collected during the 2021 winter storm event. Other considered conditions:

- Effect of Low Temperatures
- Fuel Availability
- Imports/Exports

SCRD (Security-Constrained Redispatch) is an add-on through TARA that enables TARA to use a high-performance algorithm to reduce thermal constraints, while minimizing dispatch changes from the base case. This functionality has been utilized on these models. Significant voltage violations appear in these cases. SPP posted two versions of these models; one set with load shed and a second without load shed.

- **Entities Required to Provide Feedback:**

All interested stakeholders, primarily TWG and MDAG stakeholders

- **Due Date and Method of Submittal**

Please provide feedback by **Friday, November 17, 2023** through **MOD**. For any questions or feedback, please submit those by **Friday, November 17, 2023** through the SPP Request Management System (**RMS**) using the “Submit an Inquiry” Request Template, “Integrated Transmission Planning (ITP)” Subtype 1, and “Data Submission” Subtype 2.

- **Changes from Last Pass**

Various reactive devices and generator updates from RMS 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:

This file can be found on GlobalScape under: ITP → ITP → NCD (CEII, RSD) → NDA → 2024 ITP → Powerflow Models → “[Extreme Winter Weather Final](#)” folder.

File Name	Description
2024ITP-IF-25W_11_SCRD_Gen_Load_Solved.raw	25W case with SCRD and with load shed in PSSE v35 raw format
2024ITP-IF-28W_11_SCRD_Gen_Load_Solved.raw	28W case with SCRD and with load shed in PSSE v35 raw format
2024ITP-IF-33W_11_SCRD_Gen_Load_Solved.raw	33W case with SCRD and with load shed in PSSE v35 raw format
2024ITP-IF-25W_11_SCRD_Gen_Load_Solved.sav	25W case with SCRD and with load shed in PSSE v35 sav format
2024ITP-IF-28W_11_SCRD_Gen_Load_Solved.sav	28W case with SCRD and with load shed in PSSE v35 sav format
2024ITP-IF-33W_11_SCRD_Gen_Load_Solved.sav	33W case with SCRD and with load shed in PSSE v35 sav format
2024ITP-IF-25W_10_SCRD_Gen_Solved.raw	25W case with SCRD and with no load shed in PSSE v35 raw format
2024ITP-IF-28W_10_SCRD_Gen_Solved.raw	28W case with SCRD and with no load shed in PSSE v35 raw format
2024ITP-IF-33W_10_SCRD_Gen_Solved.raw	33W case with SCRD and with no load shed in PSSE v35 raw format
2024ITP-IF-25W_10_SCRD_Gen_Solved.sav	25W case with SCRD and with no load shed in PSSE v35 sav format
2024ITP-IF-28W_10_SCRD_Gen_Solved.sav	28W case with SCRD and with no load shed in PSSE v35 sav format
2024ITP-IF-33W_10_SCRD_Gen_Solved.sav	33W case with SCRD and with no load shed in PSSE v35 sav format
DocuCheck_ExtremeWeather.xlsx	DocuCheck for all cases shown above.

- 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 “Initiate a System Access Action” **Request Template**, “Globalscape File Sharing” **Subtype 1**, “Add User” **Subtype 2** and “SPPDocushare / Engineering / TCR Models”. [GlobalScape](#) frequently asked questions can be found in [Knowledgebase Article 686](#). Other helpful links can be found on [SPP.org](#).