

## 2021 ITP Base Reliability Powerflow Model Information – Pass 2

- **Action Required**

SPP staff is requesting stakeholder feedback on the 2021 ITP Base Reliability Powerflow models – Pass 2, and supplemental data posted today, as follows:

- Please verify topology is modeled appropriately
  - Please submit topology updates as PSS®E version 34 projects through the [Model on Demand \(MOD\)](#); any questions or feedback should be submitted through the [SPP Request Management System \(RMS\)](#).
    - When submitting projects and profiles to MOD or post processing idevs, please use the following naming convention:
      - Prefix the project/profile name with your owner/area number underscore company name underscore XXXX OR company name underscore XXXX if you do not have an area/owner number. For example:
        - **Project name:** 525\_WFEC\_Midwest-Franklin\_Rebuild.prj or Nextera\_Add\_GenX.prj
        - **Profile name:** 659\_BEPC\_2017MDWGP4-18S or Nextera\_2017MDWGP4-18S
      - The file name should be separated by underscores instead of spaces (e.g., 525\_Patent\_Gate.prj)
      - For NTC projects, include the UID or PID number at the end. For example, 659\_Patent\_Gate\_UID300.prj or 659\_Patent\_Gate\_UID300.idv

As a reminder, the following Base Reliability models will be used for the 2021 ITP:

- 2023 Base Reliability Light Load, Summer, and Winter models
- 2026 Base Reliability Light Load, Summer, and Winter models
- 2031 Base Reliability Light Load, Summer, and Winter models

The 2020 series MDWG and 2021 ITP models are being built in parallel; however, the models will be posted separately. Please refer to the model build schedule located on the SPP corporate website under the MDWG page ([2020 Series MDWG Powerflow and Short Circuit Model Build](#)) for the different deadlines and milestones.

Note: PSS®E version 34 models are posted on GlobalScape at the link below; PSS®E version 33 models are available upon request.

- **Modeling Notes:**

The 2021 ITP 2031 Winter BR model is dispatched and is solving. The inclusion of the Bakken load in this model has caused some slack machines to be offline or out of tolerance, which is uncommon. This modeling issue will be addressed in Pass 3 of the 2021 ITP BR model build.

In the 2021 ITP 2031 Winter BR model, a Static VAR Compensator (SVC) was added to the Basin and SPS areas to mitigate voltage instability in order to solve the model.

As a reminder, capability amounts (P<sub>MAX</sub>, P<sub>MIN</sub>, Q<sub>MAX</sub>, Q<sub>MIN</sub>) for retired generation resources should be modeled per the MDWG Procedure Manual. If these amounts are zeroed out, please correct in the final pass of the 2021 ITP BR model build.

- **Entities Required to Provide Feedback:**

All interested stakeholders, primarily TWG and MDWG stakeholders

- **Due Date and Method of Submittal**

Please provide topology updates by **Friday, February 7, 2020** through **MOD**. For any questions or feedback, please submit those by **Friday, February 7, 2020** through **RMS** under the “ITP-Data Submissions” Quick Pick.

- **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:*

This file can be found on GlobalScape under: ITP → ITP → NCD (CEII, RSD) → NDA → 2021 ITP → Powerflow Models in the “Pass 2” folder.

File Name	Description
2021 ITP P1T2-P2 Compare.zip	Comparison of Pass 1 – Trial 2 to Pass 2
2021_ITP_Pass2_Raw_V34.zip	Models in .RAW file format
2021_ITP_Pass2_Sav_V34.zip	Models in .SAV file format
2021_ITP_Pass2_Docucheck.xlsx	SPP DocuCode
2021 ITP Pass 2 Dispatch Results.xlsx	Transactions, shortfall, and potential dispatch errors
2021 ITP Pass 2 NTC Check.xlsx	Workbook comparing TAGIT NTC ratings vs model ratings

- **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](#).