

2018 ITP Near-Term (“ITPNT”) Updated Final Models Posting

The final scenario 0, 5, Base Reliability and updated final DC Tie sensitivity models, and supplemental data for the 2018 ITPNT have been posted to TrueShare. Stakeholders identified issues in the 2018 ITPNT models that SPP staff agreed should be corrected prior to moving forward with the needs assessment. The DC sensitivity models were found to have not correctly followed the requirements of the scope and have been updated with the necessary changes. No changes were made to the scenario 0, 5, and Base Reliability models. SPP staff also completed the re-evaluation¹ of the 345 kV line from Roundup to Kummer Ridge in the ITP model set and determined the line was no longer needed. The incorporation of the DC tie sensitivity model updates and the use of the model set without the Roundup to Kummer Ridge 345 kV line for the 2018 ITPNT assessment were approved by the TWG at their August 15-16 meeting. Stakeholders also previously identified additional issues in the SPP BA models that are still under investigation. These models are not included in this posting.

Change summary:

- Modification to the 2019 and 2022 Scenario 5 Winter Peak DC Tie Sensitivity Cases to reflect the details outlined in the 2018 ITPNT Scope
- Removal of the model set with the Roundup to Kummer Ridge 345 kV line in-service from consideration in the 2018 ITPNT assessment

As a reminder, the following models are required for analysis per the 2018 ITPNT scope:

| Description | Scenario 0 | Scenario 5 | DC Tie Sensitivity (Scenario 5) | Base Reliability Scenario | SPP BA |
|---------------|--|--|---------------------------------|---------------------------|--|
| Year 2 (2019) | Summer Peak Winter Peak | Summer Peak Winter Peak | Winter Peak ² | Summer Peak | Summer Peak Winter Peak |
| Year 5 (2022) | Summer Peak Winter Peak Light Load | Summer Peak Winter Peak Light Load | Winter Peak | Summer Peak | Summer Peak Winter Peak Light Load |

Information for obtaining the 2018 ITPNT models

In order to obtain access to these documents in TrueShare, stakeholders must provide SPP with a signed [confidentiality agreement](#). Instructions can be obtained by clicking on the link. Please submit these forms via **RMS** through the “Request TrueShare Access” Quick Pick. After the executed confidentiality agreement is received, an account will be created for the requester on TrueShare. An email with instructions for logging on will be sent to requester. For those that already have a TrueShare account, no additional action is necessary.

As a reminder, instructions for accessing the model information can be found on the SPP website [here](#).

¹ The re-evaluation through Transmission Service and Generator Interconnection processes is ongoing.

² This model will only be used for the staging of potential transmission projects selected to mitigate 2022 violations.

These files can be found on TrueShare under “Integrated Transmission Planning – Confidential and Protected Material and or Critical Energy Infrastructure Information-Do Not Release → 2018 ITPNT” in the “[2018 ITPNT Powerflow Models Final](#)” folder.

FILE Information

ITPNT Final files

| File Name | Description |
|------------------------------------|--|
| 2018 ITPNT Final Sav Cases V33.zip | Models in .SAV file format |
| 2018 ITPNT Final Raw Cases V33.zip | Models in .RAW file format |
| 2018 ITPNT Final Xactions.zip | Transactions included in models |
| 2018 ITPNT Final Docucheck.xlsx | SPP DocuCode |
| 2018 ITPNT Final NTC Check.xlsx | Spreadsheet comparing TAGIT NTC ratings vs model ratings |

Brief Description of Scenario Models:

Scenario 0 is modeled to be as similar as possible to the Model Development Working Group (MDWG) models, but with unconfirmed transactions removed and generation without service agreements removed. The topology of the models is built from Models on Demand (MOD) according to the approved MOD Project matrix. SPP areas and several embedded Load Serving Entities (LSE) were dispatched using generation included in the Designated Network Resource (DNR) file along with member feedback.

Scenario 5 has the same topology as scenario 0, but with all wind reservations set to maximum capacity. All confirmed transmission service between two separate areas or LSEs are set to maximum capacity of the reservation, as well. In seasons where there is not enough load to max out all transactions, the transactions are decreased on a prorated basis.

The Base Reliability scenario models assume expected long-term firm transmission service usage levels. Renewable resources are dispatched at each facility's latest 5-year average for the SPP coincident summer peak³, not to exceed each facility's firm service amount. In the event that 5 years of historical renewable resource output data is unavailable, SPP will follow the TWG-approved data replacement methodology. The Base Reliability has the same topology as the Summer Peak models of the respected year.

Brief Description of SPP BA Models:

SPP BA models have the same topology as scenario 0, 5, and Base Reliability models. The SPP BA models were built by performing a Security Constrained Economic Dispatch (SCED) on the Pass 3 ITPNT Scenario 0 models while treating SPP as a single balancing authority. The overall SPP interchange, DC ties, and generation outside of SPP was unchanged.

³SPP coincident summer peak equals the highest demand including transmission losses for energy measured over a one clock hour period.

Helpful Links

- [Transmission Owner Selection Process \(formerly Order 1000\) home page](#)
 - [Order 1000 Documents](#)
 - [Detailed Project Proposal \(DPP\) page](#)
- [SPP Transmission Planning Page](#)
 - All notice postings previously on the SPP.org home page are now on this page
 - ITP Postings (formerly in Order 1000 Documents folder) [here](#)
- SPP Request Management System ([SPP RMS](#)) is the preferred method for inquiries and data submissions. Click on this link and then “Register Now” if you are not already registered.
 - Quick Picks to use in RMS:
 - **“ITP – Project Inquiry”** Quick Pick for questions/comments regarding projects
 - **“ITP – Modeling Inquiry”** Quick Pick for input regarding modeling questions and changes
 - **“ITP – DPP Submittal”** Quick Pick for DPP submissions
 - **“ITP – Data Submission”** Quick Pick for responses to ITP data requests and surveys from SPP
 - **“Request TrueShare Access”** Quick Pick for access to TrueShare for models
- [SPP RMS](#) is the preferred method for receiving all inquiries and solution submittals.