

Combined 2018 ITP Near-Term (“ITPNT”) Preliminary Model Posting 2018 ITPNT Pass 2 and 2018 ITPNT SPP Balancing Authority (SPP BA) – Pass 1

The updated preliminary models and supplemental data for the 2018 ITPNT analysis have been posted to TrueShare. Please provide feedback by **Friday, July 7** through the [SPP Request Management System \(RMS\)](#).

As a reminder, the following models will be used for the 2018 ITPNT study:

- 2019 Winter Peak models (Scenarios 0 and 5)
- 2019 Summer Peak model (Scenario 0)
- 2022 Light Load models (Scenarios 0 and 5)
- 2022 Summer Peak model (Scenario 0)
- 2022 Winter Peak models (Scenarios 0 and 5)
- 2019 Base Reliability Summer model
- 2022 Base Reliability Summer model
- DC Tie Sensitivity Models

For the Base Reliability models, a formula used to calculate the renewable dispatch was corrected, and with this correction, some of the wind resource dispatch amounts have changed. Also, Corrections have been made to adjust the Scenario 0 Renewable resources. In Scenario 0, renewable resources were slightly higher than standard and has been corrected in 2018 ITPNT Pass 2.

Modeling Contacts are requested to review the following:

- 1) Please verify transactions are modeled correctly
- 2) Please verify dispatch is modeled correctly
 - a. For dispatch updates, please request to view dispatch inputs
 - b. Please provide SPP with any known generator retirements
- 3) Please verify topology is modeled appropriately
 - a. Please submit topology updates as PSS®E version 33 idev files through RMS
 - b. Please review Notification to Construction (NTC) Check spreadsheet and tell SPP if NTC is modeled properly, or if TAGIT needs updating
- 4) Please review the ACCC results
 - a. If any non-converged issues can be resolved with modeling updates, please submit
- 5) Please review the spreadsheets comparing the Pass 2 models to last year’s final ITPNT models
 - a. Review MVA rating changes for possible errors
 - b. Review load changes for possible errors

Modeling Contacts are requested to review the following for Pass 1 of the SPP BA ITPNT:

- 1) Please review dispatch
 - a. Please request to view dispatch inputs
- 2) Please review proposed constraints
 - a. Please verify constraints are valid
- 3) Please review the ACCC results
 - a. If any non-converged issues can be resolved with modeling updates, please submit

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](#).

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 Pass 2](#)” folder.

The 2018 ITPNT SPP BA Models Pass 1 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 SPP BA Models Pass 1](#)” folder.

FILE Information

ITPNT Pass2 files

File Name	Description
2018 ITPNT Pass 2 Sav Cases V33.zip	Models in .SAV file format
2018 ITPNT Pass 2 Raw V33.zip	Models in .RAW file format
2018 ITPNT Pass 2 Xactions.zip	Transactions included in models
2018 ITPNT Pass 2 Docucheck.zip	SPP DocuCode
2018 ITPNT Pass 2 ACCC.xlsx	ACCC Results
2018 ITPNT Pass 2 NTC Check.xlsx	Spreadsheet comparing TAGIT NTC ratings vs model ratings
Model Comparison 2018 P1 vs 2018 P2.zip	Spreadsheets comparing 2018 ITPNT Pass1 to 2018 ITPNT Pass 2

Pass1 SPP BA Dispatch files:

File Name	Description
2018 ITPNT Pass 1 SPP BA Sav V33.zip	Models in .SAV file PSSE 33 format
2018 ITPNT Pass 1 SPP BA Raw V33.zip	Models in .RAW file PSSE 33 format
2018 ITPNT Pass 1 SPP BA DocuCode.xlsx	SPP DocuCode
2018 ITPNT Pass 1 SPP BA ACCC.xlsx	ACCC Results
2018ITPNT_BA_Flowgates_Pass1_Summer.mon 2018ITPNT_BA_Flowgates_Pass1_Summer_19S.mon 2018ITPNT_BA_Flowgates_Pass1_Winter_Light.mon	Monitored Element Files used to constrain the Security Constrained Economic Dispatch of each SPP BA model (Final 2017 ITPNT SPP BA Constraints)
2018ITPNT_SPPBA_P1_Proposed_Add_Con.xlsx	Proposed Constraints in addition to the Final 2017 ITPNT SPP BA Constraints

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 peak¹, 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 2 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.

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-DPP Submittal**” Quick Pick for DPP submissions
 - “**Request TrueShare Access**” Quick Pick for access to TrueShare for models
 - “**ITP – Modeling**” Quick Pick for input regarding modeling
 - “**ITP – Project Inquiry**” Quick Pick for questions/comments regarding projects
- [SPP RMS](#) is the preferred method for receiving all inquiries and solution submittals.

¹SPP coincident summer peak equals the highest demand including transmission losses for energy measured over a one clock hour period.