

Combined 2016 ITP Near-Term (“ITPNT”) Final Models Posting 2016 ITPNT S0/S5 – Final and 2016 ITPNT Consolidated Balancing Authority (CBA) – Final

The 2016 ITPNT S0/S5 *Final* power flow models and supplemental data, as well as the *Final* CBA power flow models for the 2016 ITPNT analysis have been posted to TrueShare. The posting on TrueShare includes information describing the CBA model build and the list of constraints included in addition to the Book of Flowgates that were used to constrain the dispatch.

TWG members will vote to finalize all 2016 ITPNT models from June 22-26, 2015.

For the 2016 ITPNT, SPP will consider power flow models with individual load balancing areas, as well as CBA models. SPP will analyze 2017 and 2020 models in the 2016 ITPNT for the following seasons: 2017 summer peak, 2017 winter peak, 2020 light load, 2020 summer peak, and 2020 winter peak. A total of 15 model scenarios will be analyzed as part of the 2016 ITPNT Assessment. The modeling set is summarized in the table below:

Description	Scenario 0	Scenario 5	CBA
Year 2 peak	ITPNT 2017SP ITPNT 2017WP	ITPNT 2017SP ITPNT 2017WP	ITPNT 2017SP ITPNT 2017WP
Year 5 peak	ITPNT 2020SP ITPNT 2020WP	ITPNT 2020SP ITPNT 2020WP	ITPNT 2020SP ITPNT 2020WP
Year 5 off-peak	ITPNT 2020L	ITPNT 2020L	ITPNT 2020L

Information for obtaining the 2016 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 by email to questions@spp.org. 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.

These files can be found on TrueShare under “Integrated Transmission Planning – Confidential and Protected Material and or Critical Energy Infrastructure Information-Do Not Release → 2016 ITPNT” in the “[2016 ITPNT Powerflow Models Final](#)” and “[2016 ITPNT CBA Models Final](#)” folders.

FILE Information

Final Block Order Dispatch files:

File Name	Description
16ITPNT Final Block Sav.zip	Models in PSS®E .SAV file format
16ITPNT Final Block Raw.zip	Models in PSS®E .RAW file format
16ITPNT Final Block Trans.xlsx	Transactions included in models
16ITPNT Final Block Docu.xlsx	SPP DocuCode

Final ECDI Dispatch files:

File Name	Description
16ITPNT Final ECDI Sav.zip	Models in PSS®E .SAV file format
16ITPNT Final ECDI Raw.zip	Models in PSS®E .RAW file format

File Name	Description
16ITPNT Final ECDI Trans.xlsx	Transactions included in models
16ITPNT Final ECDI Docu.xlsx	SPP DocuCode

Final CBA Dispatch files:

File Name	Description
16ITPNT_Final-CBA-Model Development.docx	Information regarding the CBA build
2016ITP_FINAL_CBA_Models_RAW.zip	Models in PSS®E.RAW file format
2016ITP_FINAL_CBA_Models_SAV.zip	Models in PSS®E.SAV file format
16ITPNT_Final-CBA_BID_17S.csv	2017 Summer TARA BID file used to SCED Dispatch
16ITPNT_Final-CBA_BID_17W.csv	2017 Winter TARA BID file used to SCED Dispatch
16ITPNT_Final-CBA_BID_20L.csv	2020 Light TARA BID file used to SCED Dispatch
16ITPNT_Final-CBA_BID_20S.csv	2020 Summer TARA BID file used to SCED Dispatch
16ITPNT_Final-CBA_BID_20W.csv	2020 Winter TARA BID file used to SCED Dispatch
16ITPNT_Final-CBA_PNOD_INPUT_FILE.csv	TARA PNOD file maps each generator to a bid
CBA_Flowgates_Final.mon	TARA Monitor Element File used to constrain SCED dispatch
16ITPNT_Final-CBA_SUB_17S.sub	TARA Subsystem file
16ITPNT_Final-CBA_SUB_17W.sub	TARA Subsystem file
16ITPNT_Final-CBA_SUB_20L.sub	TARA Subsystem file
16ITPNT_Final-CBA_SUB_20S.sub	TARA Subsystem file
16ITPNT_Final-CBA_SUB_20W.sub	TARA Subsystem file
16ITPNT_CBA_Final_DocuCode.xlsx	SPP DocuCode
DocuCode_Compare_S0_S5_CBA_Final.xlsx	SPP DocuCode Comparing Final S0, S5 and CBA
16ITPNT_CBA_Final-Addtl Constraints.xlsx	Final constraints used to constrain the CBA dispatch

As a reminder, instructions for accessing the model information can be found on the SPP website on the Order 1000 page: <http://www.spp.org/publications/Map%20and%20Model%20Request%20Instructions%203-21-2014.pdf>

Brief Description of Scenario Models:

The topology of the ITPNT models is built from Models on Demand (“MOD”) according to the approved MOD Project matrix found here: http://www.spp.org/publications/MOD%20Project%20Type-Status%20Matrix_20121023-DRAFT.xls. Scenario 0 uses transactions submitted by members in the Model Development Working Group (“MDWG”) model build with changes made by SPP Staff. SPP Staff shall remove any Transmission Service Requests (“TSRs”) that lack long-term confirmed transmission service. SPP Staff may edit transaction amounts to match the load that it serves and add firm TSRs that are missing. SPP Staff will dispatch the generation in the SPP footprint once the new interchange is calculated. The dispatched generation levels are based on member feedback and the Designated Network Resources (“DNRs”) found here: <http://sppoasis.spp.org/documents/SWPP/FERC890Items/List%20of%20Designated%20Resources.xls>.

Scenario 5 has the same topology as scenario 0, but scenario 5 attempts to prioritize maxing the capacity of every transmission service request with confirmed long-term service. Only certain TSRs are maxed. Any

transmission service involving wind generation should be set to the maximum service capacity. Any purchases between companies that are not load following should also be set to maximum service capacity. In seasons where there is not enough load to maximize the capacity of all firm service, the transactions are decreased on a prorata basis. Like scenario 0, SPP staff will dispatch the SPP generation in scenario 5.

For more information on the ITP process see the ITP Manual:
<http://www.spp.org/publications/2015%20ITP%20Manual.pdf>

Brief Description of CBA Models:

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

Helpful Links

- [Transmission Owner Selection Process \(formerly Order 1000\) Home Page](#)
 - [Order 1000 Documents \(includes previous postings\)](#)
- [SPP Transmission Planning Page](#)
- All model comments submitted through [SPP RMS](#). Click on this link and then “Register Now” if you are not already registered. Use the “**ITP - Modeling**” Quick Pick.
- [SPP RMS](#) is also the preferred method for receiving all solution submittals.