

Combined 2016 ITP Near-Term (“ITPNT”) Preliminary Model Posting 2016 ITPNT – Pass 2 and 2016 ITPNT Consolidated Balancing Authority (CBA) – Pass 1

The Pass 2 S0/S5 power flow models and supplemental data, as well as Pass 1 of the CBA power flow models for the 2016 ITPNT analysis have been posted to TrueShare for stakeholder review. Information describing the CBA model build is also provided, as well as a list of proposed constraints in addition to the Book of Flowgates. Stakeholders may request a proposed constraint to be included when dispatching the CBA Pass 2 models. Additional proposed constraints will be posted with the CBA Pass 2 models for stakeholder review and members will vote to finalize the constraints used to build CBA Pass 3 models.

Information describing the CBA model build is [posted](#).

Please provide all feedback by Friday, May 8th through the [SPP Request Management System \(“RMS”\)](#) using the “ITP – Modeling” Quick Pick.

For the 2016 ITPNT, SPP will consider powerflow 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 Pass 2](#)” and “[2016 ITPNT CBA Models Pass 1](#)” folders.

FILE Information

Pass2 Block Order Dispatch files:

File Name	Description
16ITPNT P2 Block Sav.zip	Models in .SAV file format
16ITPNT P2 Block Raw.zip	Models in .RAW file format

File Name	Description
16ITPNT P2 Xactions.xlsx	Transactions included in models
16ITPNT P2 Block Docu.xlsx	SPP DocuCode
16ITPNT P2 Block ACCC.xlsx	ACCC Results

Pass2 ECDI Dispatch files:

File Name	Description
16ITPNT P2 Ecdi Sav.zip	Models in .SAV file format
16ITPNT P2 Ecdi Raw.zip	Models in .RAW file format
16ITPNT P2 Xactions.xlsx	Transactions included in models
16ITPNT P2 Ecdi Docu.xlsx	SPP DocuCode
16ITPNT P2 Ecdi ACCC.xlsx	ACCC Results

Pass1 CBA Dispatch files:

File Name	Description
2016 ITPNT CBA Model Development.docx	Information regarding the CBA build
2016ITPP1-CBA Models RAW.zip	Models in .RAW file format
2016ITPP1-CBA Models SAV.zip	Models in .SAV file format
2016ITPNT_CBA_BID_17S.csv	2017 Summer TARA BID file used to SCED Dispatch
2016ITPNT_CBA_BID_17W.csv	2017 Winter TARA BID file used to SCED Dispatch
2016ITPNT_CBA_BID_20L.csv	2020 Light TARA BID file used to SCED Dispatch
2016ITPNT_CBA_BID_20S.csv	2020 Summer TARA BID file used to SCED Dispatch
2016ITPNT_CBA_BID_20W.csv	2020 Winter TARA BID file used to SCED Dispatch
ITPNT_CBA_PNOD_INPUT_FILE.csv	TARA PNOD file maps each generator to a bid
SPP-Flowgates.mon	TARA Monitor Element File used to constrain SCED dispatch
CBA_SUB_FILE_17S.sub	TARA Subsystem file
CBA_SUB_FILE_17W.sub	TARA Subsystem file
CBA_SUB_FILE_20L.sub	TARA Subsystem file
CBA_SUB_FILE_20S.sub	TARA Subsystem file
CBA_SUB_FILE_20W.sub	TARA Subsystem file
DocuCode_CBA.xlsx	SPP DocuCode
DocuCode_Compare_S0_S5_CBA.xlsx	SPP DocuCode Comparing Pass 1 S0, S5 and CBA
TARA_DCACver_S0_S5_CBA3.xlsx	TARA Contingency Scan results
Proposed Additional Constraints.xlsx	Proposed Constraints to include in Pass 2 CBA model build
PSSE_ACCC_S0_S5_CBA.xlsx	PSSE ACCC Results

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>

Highlighted Changes from ITPNT Pass 1 to Pass2:

Area 540 (GMO) and Area 541 (KCPL) have merged into a single area 541 (KCPL). Area 652 (WAPA) on the western side of the DC Ties has been renumbered to area 997 (WAPAWEST).

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.

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 Pass1 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

- [Order 1000 Home Page](#)
 - [Order 1000 Documents](#)
- [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.