

2019 ITP Needs Assessment Posted

The 2019 Integrated Transmission Planning (ITP) Assessment Detailed Project Proposal (DPP) Transmission Planning Response Window (“DPP Window”) opens at 12:00 a.m. CDT (midnight) January 8, 2019, and will remain open until February 6, 2019 at 11:59 p.m. CDT.

2019 ITP DPP Window Information

All DPP and non-DPP stakeholder submittals (non-DPPs, such as operating guides, or Order 890 solutions, such as submittal for company-specific local planning criteria) need to be received by **11:59 p.m. CDT on Wednesday, February 6, 2019**, in order to meet assessment timelines. Any submittals received after that date are not guaranteed to be evaluated in the 2019 ITP Assessment.

The [updated DPP Submittal Form](#) is the preferred method for receiving **all** solution submittals, including non-DPP and Order 890 solutions. This form has been updated for 2019 with these updates:

- PROMOD files should use version 11.1.13
- Sequence data is required for all submittals

File Information

[Information for obtaining posted data can be found at the bottom of this document.](#)

The 2019 ITP needs assessment can be found on [GlobalScape](#) under “ITP → ITP → NCD (CEII, RSD) → NDA → 2019 ITP → Needs Assessment”.

File Name	Description
2019 ITP Needs Assessment.xlsx	Needs assessment document including all needs, violations, and supplemental information
2019 ITP SEKSSWMO Target Area Analysis.pdf	Document defining the background, scope of work, and draft schedule for evaluation of the SE KS/SW MO Target Area. For high-level information, see Target Area Needs Evaluation section below.
Solve Idevs.zip	ACCC Loadflow Parameters

The 2019 ITP models utilized for this needs assessment are posted on GlobalScape using the filepaths listed below:

- Base Reliability Powerflow Models
 - ITP → ITP → NCD (CEII, RSD) → NDA → 2019 ITP → 2019 ITP Powerflow Models → Pass 5e Final
- Market Powerflow Models (formerly SPP BA Powerflow)
 - ITP → ITP → NCD (CEII, RSD) → NDA → 2019 ITP → 2019 ITP BA Powerflow – Final
- Market Economic Models (formerly SPP BA Economic Models)
 - ITP → ITP → NCD (CEII, RSD) → License_NDA_JointSPPMISO → 2019 ITP → PROMOD Models **OR**

- ITP → ITP → NCD (CEII, RSD) → ABBNDA_NDA_JointSPPMISO → 2019 ITP **OR**
- ITP → ITP → NCD (CEII, RSD) → NDA → 2019 ITP → 2019 ITP Economic Models → 2019 ITP BA Powerflow – Final
- Short-Circuit Models
 - ITP → ITP → NCD (CEII, RSD) → NDA → 2019 ITP → 2019 ITP Short-Circuit Models → Final

The auxiliary files utilized for the 2019 ITP Assessment can be found on [GlobalScape](#) under “ITP → ITP → NCD (CEII, RSD) → NDA → 2019 ITP → 2019 ITP Aux Files”

SUB/MON/CON/INVALID CON Data:

File Name	Description
Sub2019.txt	Subsystem file
BCmon2019.txt	Basecase monitored elements file
mon2019.txt	Monitored elements file
2019 ITP Con Files.zip*	Contingency files (member-submitted contingencies)
Contingencies (Auto N-1).txt	Contingency file (auto N-1)
2019 ITP Con Files (P3 events).zip**	P3 events for POM
InvalidContingency_2019_ITP.csv	Invalid contingency file

***Note:** PSS/E 33 has a 12-character upper limit for contingency labels, and several of the contingencies in the contingency files have labels that exceed 12 characters.

****Note:** These P3 event files contain the individual elements that were paired together to make the complete P3 event. Completed P3 events that were associated with a need will be posted in the needs assessment.

Needs associated with contingencies listed in the invalid contingency file (InvalidContingency_2019_ITP.csv) are included in this posting to ensure any actual valid contingency listed as invalid was posted for consideration. If you observe contingencies that are incorrectly considered valid or invalid in the posted needs assessment, please submit an [RMS](#) ticket indicating the reason why the contingency should be reclassified as valid or invalid. Needs associated with invalid contingencies will be invalidated.

2019 ITP Needs Assessment

Informational Needs

Various needs have been included for informational purposes only. Please refer to the ‘Overview’ and ‘Legend’ tabs of the “2019 ITP Needs Assessment.xlsx” workbook for identification and additional description of these needs.

Short Circuit Needs

The 2019 ITP is the first ITP assessment evaluating the system and developing solutions to address short circuit violations. Short circuit needs are reliability needs identified when maximum available fault current exceeds the respective equipment fault-interrupting duty capability.

SPP Evaluation of Model Changes Not Included in the Approved Model Set

SPP staff will evaluate the impacts of model changes submitted during the 2019 ITP DPP window, as appropriate. As noted in the DPP form, please check the box if your submittal includes a model correction. This includes model corrections submitted after the models were approved by either the TWG or ESWG, known Notification to Construct (NTC) projects not included in the approved model set, and modeled NTCs that have been withdrawn or will be withdrawn during the development of transmission portfolios.

- No changes will be made to the current base models to capture the impacts of model changes, specifically:
 - Defined needs will be based on the current approved models
 - All solutions will be screened against the approved reliability models without consideration of model changes
 - The impacts of all model changes will be captured and considered in development of the transmission portfolio
 - No new needs will be identified due to the impact of any model changes; any new violations will be assessed in future studies
 - Model corrections will be evaluated to determine the impact on posted transmission needs and either utilized to invalidate system needs or as solutions in development of the transmission portfolio(s).
 - Current NTCs not already modeled will be evaluated and utilized as potential solutions to transmission needs. This is not to be considered a re-evaluation of those existing NTCs.

Lubbock Power & Light (LP&L) System Exit Analysis

Per the [2019 ITP Assessment Scope](#), impacts of the proposal by LP&L to move a portion of the LP&L system from the SPP transmission system to the Electric Reliability Council of Texas (ERCOT) transmission system have been evaluated during the 2019 ITP needs assessment. Reliability or economic needs that are mitigated or relieved by the removal of the LP&L system are identified in the needs assessment. Per SPP's Open Access Transmission Tariff (OATT), mitigations will be required for these identified needs until the LP&L exit is finalized. In situations where a reliability or economic need is caused by the removal of the LP&L system, that need will be posted in the needs assessment as informational only.

Process for Reclassification and Invalidation of Market Powerflow Model Needs

Per Section 4.2 of the ITP Manual, thermal violations in the Market Powerflow models may be reclassified as an economic need if the violation did not meet the constraint assessment criteria to be defined as a constraint or is related to a defined constraint in the economic model in order to properly evaluate system needs. Violations meeting this criteria have been preliminarily identified in the needs list and further review will continue, as necessary. These needs will be evaluated for economic potential during the Solution Evaluation milestone. Stakeholders will be notified via email or the SPP website if additional need reclassifications are identified.

Per Section 4.2.5 of the ITP Manual, certain thermal violations in the Market Powerflow models may be invalidated as a reliability need if it is found to be equivalent or related to an economic constraint.

The invalidation will ensure that a cost-beneficial solution is available. Violations meeting this criteria have been preliminarily identified in the needs list and further review will continue, as necessary.

Refer to the 'Legend' tab in the "2019 ITP Needs Assessment.xlsx" workbook to determine which needs may have met these criteria.

Event File Changes During Economic Portfolio Development

During the Economic Portfolio Development milestone, it may be necessary to add additional constraints to the event file to identify upstream and/or downstream congestion. Staff will make these determinations, however suggestions for these additional constraints may be included as part of a DPP submittal.

Target Area Needs Evaluation

The Southeast Kansas/Southwest Missouri (SE KS/SW MO) corridor is the SPP-working group approved Target Area for additional analysis in the 2019 ITP Assessment. The congested flowgates in the Target Area are related to each other as well as other areas of congestion in East-Central Oklahoma. Also included in the needs assessment are two flowgates on the Associated Electric Cooperative Incorporated (AECI) system that are related to the SE KS/SW MO Target Area¹. In order for SPP staff and stakeholders to properly evaluate and develop solutions to address needs in these Target Areas, the need relationships and correlation provided in the needs posting as well as other local SPP and non-SPP transmission constraints should be recognized.

SPP Staff has provided a high level scope of the additional analysis to be performed during the Project Screening milestone to aid in project submittals for the Southeast Kansas Southwest Missouri Target Area.

Correlation of Need Types for Solution Development

Reliability, Economic, and Operational Needs have been correlated in order to identify overlap and additional opportunities for synergy of projects. During the Project Screening milestone, all solutions will be evaluated to determine their ability to provide relief or mitigate each economic and reliability need, as applicable². This evaluation will provide information which can be leveraged in the Grouping and Optimization milestones to aid in determining whether a reliability or economic solution addressing similar needs should be selected. During this effort, the Avoided Reliability Benefit Metric (discussed in the [Benefits Metric Manual](#)) will be calculated and considered as a supplement to the adjusted production cost savings benefit metric of an economic project that can successfully and appropriately avoid or defer a base reliability project. This effort will attempt to introduce the Avoided Reliability Benefit Metric³ to the decision making process of project and portfolio recommendations and, while SPP staff is still investigating and vetting this approach with the appropriate stakeholder groups, it should be considered when developing solutions to the needs.

¹ Futures developed by SPP and applied to the AECI transmission and generation footprint.

² Solutions providing only reactive support cannot be evaluated in economic analysis because the economic tool does not consider reactive flows

³ Currently, the adjusted production cost is the only metric used in the decision making process with regards to project recommendations or consolidation.

Seams Consideration(s)

Seams evaluation in the ITP Assessment will be performed according to details in ITP Manual sections 5.3.1 and 5.3.2. Economic projects interconnecting SPP with a non-SPP TO or with an adjusted production cost benefit to a neighboring entity of at least 20% of total benefit will be evaluated as a seams project. Economic projects meeting this criteria will be evaluated with at least 20% of the cost applicable to the neighboring entity. As solution development moves forward, SPP staff will coordinate with the applicable neighboring entity to determine a more accurate level of cost sharing for any potential reliability and economic seams projects. Please consider this information in your solution development.

The 2019 ITP needs assessment has identified multiple constraints along SPP’s seams. Some of these constraints are equivalent or related to constraints on SPP’s neighboring transmissions systems. In an effort to accurately evaluate these constraints, SPP is coordinating with adjacent entities to develop potential seams solutions that may provide benefit to both SPP and the adjacent entity. These SPP constraints are included in the needs assessment and will be evaluated through the 2019 ITP, and the SPP-MISO Coordinated System Plan (CSP). Some of these seams issues are also directly related to the approved Target Area mentioned above.

The SPP-MISO CSP will evaluate needs identified in this SPP 2019 ITP and MISO’s 2019 MTEP. The SPP-MISO CSP issues list will be comprised of SPP and MISO regional needs with potential to benefit from an SPP-MISO Interregional Project. These issues will be presented at the next SPP-MISO IPSAC meeting which is tentatively scheduled for January 31, 2019.

Information for obtaining posted data:

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

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

Description	Deadline
DPP/non-DPP Transmission Planning Response Window	February 6, 2019, 11:59 PM CDT

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