2020 ITP Short-Circuit Model Information - Pass 2

The Pass 2 short-circuit models and supplemental data for the 2020 ITP have been posted to GlobalScape. The models are being built using PSS®E version 33.11. Please provide feedback by Friday, February 15, 2019. Model data should be submitted through Models on Demand (MOD) and questions through SPP Request Management System (RMS) using the “Integrated Transmission Planning-Data Submission” Quick Pick.

As a reminder, year 2 summer peak models will be used for the 2020 ITP short-circuit assessment in consideration of NERC Standard TPL-001-4. ITP needs will be identified from these Short-Circuit models.

The 2019 series MDWG and 2020 ITP models are being built in parallel; however, the models will be posted separately. Please refer to the model build schedule located on the SPP corporate website under the MDWG page (2020 ITP and 2019 Series MDWG Powerflow and Short-Circuit Model Build) for deadlines and milestones.

**Material Disclaimer**
CONTAINS CONFIDENTIAL AND PROTECTED MATERIAL NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL – DO NOT RELEASE

**Information for obtaining the 2020 ITP models**
In order to obtain access to these documents in GlobalScape, 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 “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 a GlobalScape, 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 GlobalScape in the “ITP → ITP → NCD (CEII, RSD) → NDA → 2020 ITP → 2020 ITP Short-Circuit Models → Pass 2” folder.

**FILE Information**

<table>
<thead>
<tr>
<th>File Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 ITP SC Pass 2 Sav.zip</td>
<td>Short-circuit models in PSSE version 33</td>
</tr>
<tr>
<td>2020 ITP SC Pass 2 Raw &amp; Seq.zip</td>
<td>Short-circuit models in raw and seq format</td>
</tr>
<tr>
<td>21S+_Max_Fault_Offline_Facilities{idv}</td>
<td>Facilities that should not be online for the max fault scenario that need updating</td>
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<tr>
<td>2020 ITP SC Pass 2 DocuCode.xlsx</td>
<td>List of possible errors that need reviewing</td>
</tr>
<tr>
<td>2019MDWGPX_Exception_Template_File_for_PF_SC.xlsx</td>
<td>Exceptions list for Powerflow and Short Circuit</td>
</tr>
<tr>
<td>Preliminary Bus Fault Current.xlsx</td>
<td>Preliminary bus-fault and line-outs results</td>
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2/08/2019
Brief Description of Short-Circuit Models:

The short-circuit models have the same topology as the powerflow models for SPP with included zero sequence data and connection codes for transformers. For external topology, the models were merged with the latest 2019S SERC models obtained on 12/15/2018 and the latest MEC short circuit models obtained on 12/3/2018.

SPP will simulate three-phase faults and single line-to-ground faults and provide the following results to the TOs as requested:

- Full bus-fault current and line-out results using an automatic sequencing fault calculation
- Full bus-fault current and line-out results using an American National Standards Institute fault calculation

The TOs will be required to evaluate the results and respond to SPP if any fault-interrupting equipment will have its duty ratings exceeded by the maximum available fault current (potential violation). For equipment that is seen to have its duty rating exceeded, the TO will provide SPP with the applicable duty rating of the equipment.

The short-circuit models labeled with “Classical” have flat start conditions enabled. The models labeled with “Max Fault” have all topology and generations placed in service.

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.