2019 ITP Short-Circuit Model Information - Pass 1

The Pass 1 short-circuit models and supplemental data for the 2019 ITP have been posted to TrueShare and GlobalScape. The models are being built using PSS®E version 33.10. Please provide feedback by Friday, December 29 through the Models on Demand (MOD) and the 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 2019 ITP short-circuit assessment in consideration of NERC Standard TPL-001. A subset of these needs will be considered ITP needs.

The 2018 series MDWG and 2019 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 (2019 ITP and 2018 Series MDWG Powerflow and Short-Circuit Model Build) for the different deadlines and milestones.

Information for obtaining the 2019 ITP models

In order to obtain access to these documents in TrueShare or 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 “Request TrueShare Access” or “Request Globalscape Access” Quick Pick. After the executed confidentiality agreement is received, an account will be created for the requester on TrueShare or GlobalScape. An email with instructions for logging on will be sent to the requester. For those that already have a TrueShare or GlobalScape 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 → “2019 ITP” in the “2019 ITP Short-Circuit Models” in the “Pass 1” folder and on GlobalScape in the “ITP”→ Non-Competitive” → “2019 ITP” → “2019 ITP Short-Circuit Models” → “Pass 1” folder.

FILE Information

<table>
<thead>
<tr>
<th>File Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 ITP SC Pass 1 Sav.zip</td>
<td>Short-circuit models in PSSE version 33</td>
</tr>
<tr>
<td>2019 ITP SC Pass 1 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>2019 ITP SC Pass 1 DocuCode.xlsx</td>
<td>List of possible errors that need reviewing</td>
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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. In order to update external topology, the models were merged with the latest SERC 2018 short-circuit models and MEC short-circuit models obtained on 3/14/2017. SPP will
simulate three-phase faults and single line-to-ground faults and provide the following analysis 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:
    - “Request Globalscape Access” Quick Pick for access to GlobalScape for models
    - “Request TrueShare Access” Quick Pick for access to TrueShare 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.