

2020 ITP Short-Circuit Pass 3 Model Information

The Pass 3 2020 ITP Short-Circuit models and supplemental data have been posted to GlobalScape. The posted models were built using the final ITP Base Reliability (BR) powerflow model posted on 2/8/2019.

Any applicable updates that are applied to the ITP BR powerflow models will be applied to the final Short-Circuit models. The model will not be finalized until November 2019.

As a reminder, the year 2 summer peak Short-Circuit model will be used for the 2020 ITP Short-Circuit assessment in consideration of NERC Standard TPL-001-4.

Material Disclaimer

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

Information for obtaining the 2020 ITP model(s)

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 3” folder.

FILE Information

File Name	Description
2020 ITP SC Pass 3 Sav.zip	Short-Circuit models in PSSE version 33.11
2020 ITP SC Pass 3 Raw & Seq.zip	Short-Circuit models in raw and seq format
Max_Fault_Offline_Facilities.idv	Facilities that should not be online for the max fault scenario
2020 ITP SC Pass 3 DocuCode.xlsx	List of possible errors that need reviewing
2019MDWGPX_Exception_Template_File_for_PF_SC.xlsx	Exceptions list for Powerflow and Short-Circuit
Preliminary Fault Currents.zip	Preliminary bus-fault and line-outs results

Brief Description of Short-Circuit Models:

The Short-Circuit models have the same topology as the BR 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 model 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 (ANSI) 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 generators 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.