

2023 ITP Market Economic Model (MEM) Benchmarking - Pass 1

- **Action Required**

SPP requests stakeholders review data of the 2023 ITP MEM Benchmarking milestone. The data provided is based on the 2023 ITP MEM – Pass 1 Update, posted on June 21, 2022 with the following updates:

- Adjusted External Demand Group Mapping
- Changed External Generators
 - Retirement Dates
 - Development Status
 - Max Capacity
- Deleted MaxCap Profile
- Edited Energy Cost Bid (from 110% to 100%)
 - Few MISO Units
- Modified MEM Input Powerflow Model
 - Powerflow Updates
 - Winter Ratings
- Removed Economic Maximum Capacity Data
- Revised Annual Energy Data
- Updated Maintenance Outages

Stakeholders should review and provide feedback on data items included in the 2023 ITP MEM Benchmarking Pass 1 PowerPoint. Specifically, assess the model behavior compared to the provided operational, Energy Information Administration (EIA), and 2022 ITP Year 2 MEM data. SPP provided the 2023 ITP MEM Benchmarking results based on a constrained model (Book of Flowgates).

SPP reviewed the 2023 ITP MEM Benchmarking results and noticed the following items that will need further review:

- Capacity Factors and Renewable Profiles
- External Must Run Designations
- MISO Regional Directional Transfer
- DC Tie Profiles
- MaxCap Profiles

Information for additional benchmarks will be included in Pass 1 Update posting.

SPP is not requesting changes to the 2023 ITP Year 2 MEM input data. Any submitted changes will be considered under Section 10.3 of the ITP Manual.

- **Entities Required to Provide Feedback:**
All interested stakeholders; primarily, ESWG members
- **Due Date and Method of Submittal**
Please provide feedback **by 5 PM Wednesday, August 3, 2022**, via the [SPP Request Management System \(RMS\)](#), using the “Submit Information” **Request Template**, “Integrated Transmission Planning (ITP)” **Subtype 1**, and “Data Submission” **Subtype 2**.
- **Notes**
 - SPP is purchasing the latest Henry Hub fuel forecast from Wood Mackenzie and will utilize it in this MEM build once available
 - We purchased and received the latest Henry Hub fuel forecast from ABB
 - Move the 2023 Year 2 MEM database to PROMOD 11.5 engine and perform qualitative analysis to ensure compatibility
- **Material Disclaimer**
CONTAINS CONFIDENTIAL AND PROTECTED MATERIAL NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL – DO NOT RELEASE
- **File location on [GlobalScape](#)**
In order to obtain access to SPP’s current PROMOD version, please email PB_Support.PGES@hitachi-powergrids.com and request to receive the delivery number “Spp104204”. **For users who have signed an NCD NDA, ABB NDA, MISO-SPP Joint NDA, and license ABB nodal simulation ready software:**
These files can be found on [GlobalScape](#) under: *ITP → ITP → NCD (CEII, RSD) → License_NDA_JointSPPMISO → 2023 ITP → MEM Benchmarking Pass 1.zip*

File Name	Description
2023_ITP_MEM_Benchmarking_Pass_1.pptx	MEM Pass 1 Benchmarking Data
2023_ITP_MEM_Benchmarking_Detail_Document_Pass_1.docx	Posted Material Overview
2023_ITP_MEM_Benchmarking_Scenario_Pass_1	Published PROMOD Scenario
2023_ITP_MEM_Benchmarking_Run_Files_Pass_1	PROMOD Run Files
2023_ITP_MEM_Benchmarking_Outputs_Pass_1	Output Reports
2023_ITP_MEM_Benchmarking_Database_Extracted_Pass_1	PROMOD Scenario in Excel

For users who have signed a NCD NDA, ABB NDA, and MISO-SPP Joint NDA:

These files can be found on [GlobalScape](#) under: *ITP → ITP → NCD (CEII, RSD) → ABBNDA_NDA_JointSPPMISO → 2023 ITP → MEM Benchmarking Pass 1.zip*

File/Folder Name	Description
2023_ITP MEM_Benchmarking_Pass_1.pptx	MEM Pass 1 Benchmarking Data
2023_ITP_MEM_Benchmarking_Detail_Document_Pass_1.docx	Posted Material Overview
2023_ITP_MEM_Benchmarking_Outputs_Pass_1	Output Reports
2023_ITP_MEM_Benchmarking_Database_Extracted_Pass_1	PROMOD Scenario in Excel

For users who have signed NCD NDA:

These files can be found on [GlobalScape](#) under: *ITP → ITP → NCD (CEII, RSD) → NDA → 2023 ITP → MEM Benchmarking Pass 1.zip*

File/Folder Name	Description
2023_ITP MEM_Benchmarking_Pass_1.pptx	MEM Pass 1 Benchmarking Data
2023_ITP_MEM_Benchmarking_Input_Powerflow_Pass_1	Input Powerflow for MEM

For users who have signed a CD NDA:

These files can be found on [GlobalScape](#) under: *ITP → ITP → CD (CEII) → NDA → 2023 ITP → MEM Benchmarking Pass 1.zip*

File Name	Description
2023_ITP MEM_Benchmarking_Pass_1.pptx	MEM Pass 1 Benchmarking Data

- Helpful Links and Access**

If you do not already have access to these documents in [GlobalScape](#), see the instructions for [confidentiality agreements](#) and submit the appropriate form via [RMS](#) using the "Initiate a System Access Action" **Request Template**, "Access" **Request Type**, and "Globalscape File Sharing (Maps, Models, Cases, etc.) / SPPDocushare / Engineering / TCR Map / Models" **SubType1**. [GlobalScape](#) frequently asked questions can be found in [Knowledgebase Article 686](#). Other helpful links can be found on [SPP.org](#).