

2024 ITP Market Economic Models (MEM) For Approval

- **Action Required**

SPP staff requests stakeholders' approval for the following 2024 ITP MEM posted to GlobalScape:

- Future 1 Year 2, Year 5, and Year 10
- Future 2 Year 5 and Year 10

This information includes supporting model data and documentation.

SPP is **not** requesting changes to economic model input data. Any changes submitted will be considered under Section 10.3 of the ITP Manual.

When performing PROMOD simulations with the existing event files, SPP noticed outlier results in the adjusted production costs and locational marginal prices. SPP is investigating these simulation results and the event files.

SPP also noticed a discrepancy in the operating and spinning reserves. SPP observed that the new PROMOD "engine e" caused the difference in the spinning and operating energy and their requirements.

SPP will post an updated constraint workbook on Tuesday, December 12, 2023. SPP plans to post PROMOD simulation files and outputs later this week that utilize the updated constraints.

- **Applicable Entities**

All interested stakeholders; primarily, ESWG members

- **Due Date and Method of Submittal**

SPP will solicit ESWG's approval for the final 2024 ITP MEM during the Tuesday, December 19, 2023 meeting.

- **Changes from Last Posting**

- Modeling Updates

- Added LES' ownership percentage for Walter Scott Jr Energy Center units 3 and 4
- Adjusted the ownership percentage for the following generators:
 - 24ITP RP Solar PV #33 – Gordon Evans EC 138
 - 24ITP RP Solar PV #33A – Gordon Evans EC 138
 - 24ITP RP Solar PV #49 – Longwood 345
 - 24ITP RP Wind #50 – Oklaunion 345
 - 24ITP RP Wind #60 – Sooner-Spring Creek 345
- Altered Flat Ridge 4 wind farm point of interconnection for years 5 and 10 scenarios
- Changed the pool emergency energy report flag from "No" to "Yes"
 - Impact Adjusted Production Cost results
- Included Rocking R Solar generator in the year 5 and year 10 scenarios
- Included updated branch ratings to reflect Notifications to Construct (NTCs)
 - Wolf Creek - Blackberry 345 kV (year 2 scenario)
 - Oahe - Sully Buttes - Whitlock - Glenham 230 kV (all scenarios)

- Added winter ratings to Future 2 Year 5 scenario
- Modified the annual energy data for all wind farms
 - Incorporated 80-m hub height criteria
- Removed the following items:
 - Capacity curtailment price data for Wisconsin Public Service Corporation
 - Inadvertently, added the data trying to remove monthly flat load shapes by adjusting the annual energy data
 - Maximum capacity profiles
 - Indy Solar I Project:PV1
 - Vega Community Solar:PV1
 - Montsun:PV 1
 - Sunrise Community Solar:PV3
 - Paynesville Community Solar:PV4
 - Wavesun:PV 1
 - Redstone Arsenal Army Base:PV1
- Updated event files (SPP-recommended final event files)

• **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 PROMOD “engine e”. SPP ran simulations using PROMOD IV 11.5 software.

For users who have signed an NCD NDA, HITACHI NDA, MISO-SPP Joint NDA, and license Hitachi PROMOD nodal simulation ready software:

These files can be found on GlobalScape under: *ITP → ITP → NCD (CEII, RSD) → License_NDA_JointSPPMISO → 2024 ITP → 2024_ITP_MEM_Final_Pass.zip*

File/Folder Name	Description
2024_ITP_MEM_Detail_Document_Final_Pass.docx	Posted Material Overview
2024_ITP_MEM_Scenarios_Final_Pass	Published PROMOD Scenarios
2024_ITP_MEM_Run_Files_Final_Pass	PROMOD Run Files
2024_ITP_MEM_Database_Extracted_Final_Pass	PROMOD Scenarios in Excel
2024_ITP_MEM_Outputs_Final_Pass	Output Reports

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

These files can be found on GlobalScape under: *ITP → ITP → NCD (CEII, RSD) → HITACHI_NDA_JointSPPMISO → 2024 ITP → 2024_ITP_MEM_Final_Pass.zip*

File/Folder Name	Description
2024_ITP_MEM_Detail_Document_Final_Pass.docx	Posted Material Overview
2024_ITP_MEM_Database_Extracted_Final_Pass	PROMOD Scenarios in Excel
2024_ITP_MEM_Outputs_Final_Pass	Output Reports

For users who have signed NCD NDA:

These files can be found on [GlobalScape](#) under: *ITP* → *ITP* → *NCD (CEII, RSD)* → *NDA* → *2024 ITP* → *2024_ITP_MEM_Input_Powerflows_Final_Pass.zip*

File/Folder Name	Description
2024_ITP_MEM_Input_Powerflows_Final_Pass	Input Powerflows for MEM

- **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" **SubType 1** "Add User" **SubType 2** "SPPDocushare / Engineering / TCR Models" **SubType 3**. [GlobalScape](#) frequently asked questions can be found in [Knowledgebase Article 686](#). Other helpful links can be found on [SPP.org](#).