

MODELING USERS FORUM (MUF)

MISSION

The Modeling Users Forum (MUF) provides a forum for power system model submitters and users of model information and opportunity to discuss challenges and opportunities with model information. The group will also discuss the additional topics related to the changing makeup of power system and incorporations of new technologies into the grid of the future. The MUF will assist Transmission Owners (TOs) with exchanging ideas and information to improve accuracy and quality of PJM's EMS model. The MUF assists the System Operations Subcommittee (SOS) by sharing EMS model and real time telemetry data associated with the Bulk Electric System (BES) and addresses emerging technologies needed to support PJM and individual Member Company EMS model updates.

ADMINISTRATIVE

The MUF meets monthly throughout the year, with ad hoc meetings scheduled to address specific and/or time-sensitive topics. The MUF reports to the Operating Committee (OC) and System Operations Committee-Transmission (SOS-T). The forum consists of TOs listed as Primary and Alternate members on the MUF roster who meet to discuss confidential, model-specific information.

- 1. The MUF is a closed stakeholder group.
- 2. MUF members are responsible for keeping their membership profiles up-to-date on the PJM website (see Notes section below).
- 3. MUF members are required to have CEII access/approvals.
- 4. Only MUF members can participate in this stakeholder group, due to the confidential data shared.
- 5. The MUF will report jointly to the SOS and OC.
- 6. PJM will designate a Forum Chair person who will report as needed to SOS.
- 7. PJM will designate a Forum Secretary to record MUF minutes.
- 8. PJM will be responsible for preparing and issuing all reports, scheduling periodic meetings and conference calls (as necessary), plus preparing the minutes of each meeting.
- 9. The MUF will meet on a monthly basis via Webex.
- 10. WebEx and teleconference will be provided for all MUF meetings.
- 11. PJM will leverage the MUF to communicate all model update-related business processes, procedures, and enhancements.

RESPONSIBILITIES

- 1. MUF members will:
 - a) Represent their company in fulfillment of responsibilities related to the electric system model build process. See PJM M03A for details.
 - b) Provide PJM with EMS electrical system model changes, in accordance with the timelines and milestones associated with the scheduled (quarterly) PJM model builds.
 - c) Provide Company ICCP telemetry information to PJM prior to EMS equipment being



energized.

- d) Submit all model changes using eDART Network Model application process.
- e) Adhere to the data exchange requirements detailed in M01, M03A, and M14D.
- 2. Report on status of company activities related to the PJM model build process.
 - a) The Forum Chair will present a summary status report of the model build process as needed at the monthly meeting of the SOS.
- 3. Provide central point of contact for all EMS data issues.
 - a) Forum members will coordinate the communication and resolution of all EMS model and data issues in a timely manner.
- 4. Forum members will participate in breakout sessions for TOs, to share information such as one-line diagrams and state estimator models for their Company facilities. Members will also exchange model information that affects neighboring Companies in accordance with the approved stakeholder body process (TOA-AC and eDART) and Non-Disclosure Agreement (NDA).
 - a) MUF members can utilize the secure PJM MUF SharePoint site for these activities.
- 5. After PJM drafts updates to the EMS Model per the Network Model request,
 - a) MUF members will be provided detailed documentation (i.e., one-line diagrams, tabular summaries in Spreadsheet and CIM format, etc.) for TOs to verify changes submitted to PJM via Network Model application were correctly modeled.
 - b) After MUF member verification, PJM will provide TOs with access to the one-line diagrams of other TOs, in accordance with the approved stakeholder body process (TOA-AC and eDART) and NDA.
 - i. TO members use of the eDART Network Model application will include monthly agreement to the NDA requirement for one-line diagrams.
 - 6. Ensure ongoing operation of communication infrastructure.
 - a) PJM report out of changes to ICCP link policies and procedures.
 - b) Review and discuss any planned enhancements by PJM or Members.
 - c) PJM report out on real time data accuracy, reliability, and performance metrics.
 - 7. Address EMS compliances/systems management standards:
 - a) Control Center standards
 - b) EMS upgrade awareness
 - c) Operational practices
 - d) Metering practices and standards
 - e) Telecommunication practices and standards.

CORE COMPETENCIES AND CAPABILITIES

MUF members should:

1. Have knowledge of the EMS electrical system model, the PJM EMS model update process.



- 2. Be accessible and available to support the model update process during the period when PJM is installing the quarterly EMS model updates.
- 3. Have knowledge and direct responsibility of the methodologies and processes associated with managing real time ICCP and/or DNP telemetry data.
- 4. Have direct responsibility and knowledge of the processes for managing ICCP telemetry links.
- 5. Collectively, the MUF members should have knowledge of, influence over, or responsibility for:
 - Energy Management Systems
 - Electric Metering
 - Telecommunications
 - Emerging Technologies

NOTES

- MUF members register new members or update their current information using the Roster Update Form on http://www.pjm.com.
- MUF members must be CEII approved to gain access to the MUF secure workplace on http://www.pjm.com where meeting materials are posted.
- MUF members must have a current, signed NDA on file in eDART to gain access to the secure MUF SharePoint site used for exchanging confidential EMS data.
- All MUF activity inquiries should be sent to: <u>MUF_Officers@pjm.com</u>