Disclosure of EMS data to Transmission Owners

Operating Agreement Requirements and Recent Questions

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18.17.6 Disclosure of EMS Data to Transmission Owners

a) While the Office of the Interconnection has overall power system reliability in the Office of the Interconnection region, Transmission Owners within the Office of the Interconnection region perform certain reliability functions with respect to their individual Transmission Facilities and distribution systems. In order to facilitate reliable operations between the Office of the Interconnection and the Transmission Owners, the Office of the Interconnection may, without written authorization from any Member, install a read-only terminal in any Transmission Owner’s secure control room facility, with access to Office of the Interconnection’s Energy Management System (EMS) and its associated data transmission and generation data under the terms and conditions set forth in this section 18.17.6.

b) The data and information produced by the Office of the Interconnection’s EMS are confidential and/or commercially sensitive because it will display the real-time status of electric transmission lines and generation facilities, the disclosure of which could impact the market and the commercial interests of its participants. In addition, the responsive information will contain detailed information about real-time grid conditions, transmission lines, power flows, and outages, which may fall within the definition of Critical Energy Infrastructure Information (CEII) as set forth in 18 CFR §388.112. The Office of the Interconnection shall not release any generator cost, price or other market information without written authorization pursuant to section § 18.17.1 (c) supra. The only generator information that will be made available is real-time MW/MVAR output and Minimum/Maximum MW Range.

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c) The confidential or CEII information provided to the Transmission Owner on a read-only PJM EMS terminal shall only be held in the secure control room facility of the Transmission Owner. Such data shall be used for informational and operational purposes within the control room by Transmission Function employees as defined in the FERC’s rules and regulations, 18 C.F.R. § 358.3 (j). No “screen-scraping” or other data transfer of information from the read-only terminal to other Transmission Owner systems or databases shall be permitted. No storage of information from the read-only terminal shall be permitted. The data shall be held confidential within the transmission function environment and not be disclosed to other personnel within the Transmission Owners’ company, subsidiaries, marketing organizations, energy affiliates or independent third parties. The Transmission Owner may use the confidential or CEII information only for the purpose of performing Transmission Owner’s Reliability Function and shall not otherwise use the confidential information for its own benefit or for the benefit of any other person.

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d) In the event of any breach:

(i) The Transmission Owners shall promptly notify the Office of the Interconnection, which shall, in turn, promptly notify FERC and any Affected Member(s) of any inadvertent or intentional release, or possible release, of confidential or CEII information disclosed as provided above.

(ii) The Office of the Interconnection shall terminate all rights of the Transmission Owner to receive confidential or CEII information as provided in this section 18.17.6; provided, however, that the Office of the Interconnection may restore a Transmission Owners' status after consulting with the Affected Member(s) and to the extent that: (a) the Office of the Interconnection determines that the disclosure was not due to the intentional, reckless or negligent action or omission of the Authorized Person; (b) there were no harm or damages suffered by the Affected Member(s); or (c) similar good cause shown. Any appeal of the Office of the Interconnection’s actions under this section shall be to FERC.

(iii) The Office of the Interconnection and/or the Affected Member(s) shall have the right to seek and obtain at least the following types of relief: (a) an order from FERC requiring any breach to cease and preventing any future breaches; (b) temporary, preliminary, and/or permanent injunctive relief and/or damages with respect to any breach; and (c) the immediate return of all confidential or CEII information to the Office of the Interconnection.

(iv) Any dispute or conflict requesting the relief in section (d)(ii) or (d)(iii)(a) above, shall be submitted to FERC for hearing and resolution. Any dispute or conflict requesting the relief in section (d)(iii)(b) and (c) above may be submitted to FERC or any court of competent jurisdiction for hearing and resolution.

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Recent Questions and Answers

• Why does PJM want the terminals in TO’s control rooms only / can terminals be made available for transmission owners support staff?
  – OA 18.17.6(a) states terminals can be installed in “any Transmission Owner’s secure control room facility”. OA 18.17.6(c) prohibits “data transfer of information from the read-only terminal to other Transmission Owner systems or databases”.

• Why doesn’t PJM provide multiple terminals?
  – Per OA 18.17.6(a) “without written authorization from any Member, install a read-only terminal in any Transmission Owner’s secure control room facility” Current interpretation has been that this limits terminals to one per transmission control room. If a single owner has multiple transmission control rooms that manage PJM designated transmission facilities, PJM does provide a terminal for each control room.

• Can PJM provide access to PJM’s EMS study functions and/or study results?
  – Technically, the current terminals could be extended to provide the access, with a few potential concerns. 1) Would require R/W access to underlying EMS databases which is currently blocked if actual study work would need to be performed, 2) would require UI changes to restricted generation information that is available in study (or changes to the OA to allow the information), and 3) would require server enhancements and reconfiguration to support additional study users, and avoid impacts to PJM dispatcher’s use of the system.
Recent Questions and Answers

- **Can PJM EMS data be displayed on video walls?**
  - It depends on the location of the video wall, and who has access to it. Members need to comply with OA 18.17.6 which states “The data shall be held confidential within the transmission function environment and not be disclosed to other personnel within the Transmission Owners’ company, subsidiaries, marketing organizations, energy affiliates or independent third parties.”

- **Are there any additional concerns if OA were updated to allow for multiple terminals outside the TO’s control room?**
  - Technically, the PJM EMS could be expanded to support multiple users from each TO. The potential concerns are 1) Development and support of additional servers and infrastructure to support the expanded use, 2) The potential need to re-design the current security model to move from a single read-only shared control room terminal to access controls on multiple terminals in multiple locations.
Recent Questions and Answers

• What do TO’s need to provide?
  – Members need to supply a windows PC with a web browser and internet access in the control room, and supply PJM with networking details. In general, the requirements have not changed significantly from what was needed for PJM’s previous EMS displays.

• What is the expected timeline for roll-out?
  – PJM is expecting to roll out for the first member in July, and then proceed with configuring and rolling out terminals on a phased basis. We expect it to be completed by the end of the year. We will be able to provide better estimates after we gain more experience with the configuration and roll-out process.

• Why is PJM looking to change the manuals to add clarification around use of PJM’s EMS terminals?
  – PJM has used the OA language to help support our compliance review of the current configuration. As part of the review, we identified the potential benefits of clarifying the documentation and expectations related to the use of the terminals. Based on the scope of the clarifications, there was no identified need to update the OA, so the manuals were a logical place to add the clarifications.
• What are the planned manual 1 changes being discussed?

2.5.7 Disclosure of EMS Data to Transmission Owners

PJM will implement a technical solution to provide Transmission Owners with read-only access to PJM’s EMS system. In order to ensure that this solution is implemented in a secure, protected manner, members are required to implement the following:

• Implement procedural controls to ensure that this information is viewed only from a location within the member’s control center.

• Provide PJM’s Network Infrastructure department configuration information needed for establishing and authenticating connections.

• Access to the workstation utilized in viewing PJM’s EMS screen shall be limited to those with authorized access to the member’s control center.

• Credentials for this access should only be shared with individuals who have authorized access to the member’s control center. This should be documented in accordance with the member’s controls for CIP 004 R4.

• Any incidents leading to loss, theft or destruction of the authentication devices should be reported to PJM immediately.

• Data Security: Protect the information displayed in accordance with PJM’s OA section 18.17, as well as member’s own policies, standards and procedures.

PJM may request evidence for any or all of these steps during PJM’s TO Audit.