

Attachment F: Overview and Requirements for Remote Operations of Market Operations Centers during the COVID-19 Pandemic

Note:

June 30, 2021

This attachment will be effective on April 24, 2020 and will automatically expire on December 31, 2020 unless removed by PJM prior to that date.

PJM recognizes that, as a consequence of the COVID-19 pandemic, Market Participants who maintain Market Operations Centers (MOCs) may find it necessary to move some or all of their control center operations to one or more non-traditional remote locations, such as a new temporary facility or the residences of control center personnel, in order to avoid the risk of spreading infection while maintaining control room functions. For purposes of this document, it is assumed that member company's Energy Management System (EMS) is still functional and that only the MOC dispatch function is relocating to alternate (non-traditional) location. PJM has identified potential risks in moving to such remote control center operations which must be mitigated through compliance with the requirements set forth in this attachment such as:

- Reduced reliability of voice and data communications with PJM and other operating entities
- Reduced physical and cyber security controls
- Reduced operator situational awareness or visibility of relevant data associated with possible equipment limitations at the remote site
- Reduced effectiveness of communications

The North American Electric Reliability Corporation (NERC) has recently provided [guidance](#) with regards to remote control center operations. PJM recognizes that a Market Participant's transition to remote MOC operations may be necessary as an absolute "last resort" when operations cannot be continued in a traditional primary or backup control room facility due to an imminent risk of COVID-19 infection and the associated control centers being uninhabitable due to risk of such infection, and after notifying PJM that all other options are exhausted. PJM Market Participant's MOCs that are operating from a remote control center in accordance with this Attachment shall resume traditional MOC control center operations in compliance with the PJM Manuals other than this Attachment as soon as possible. Timely updates and notification to PJM as to the status of MOCs is critical to and required under this Manual provision.

The use of MOCs is an integral component of ensuring the reliable operation of generation and transmission facilities in the PJM System. Having operators work remotely is inconsistent with PJM Manual requirements.

Any Market Participant that transitions its MOC to remote control center operations will comply with each of the requirements set forth in this Attachment. Market Participants' MOCs will be expected to meet or exceed these requirements throughout the period of the operation of a remote MOC.

Compliance with the requirements in this Attachment does not absolve the Market Participant from its obligations to comply with all applicable laws, regulations, or NERC Reliability Standards, including the PJM Governing Agreements other than the MOC control center