M-13 Revision 93

Kevin Hatch

Sr. Manager Dispatch, System Operations

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- Section 1.3 Communications
- Updated from WSE observation
  - Effective communications are critical to ensure reliability during emergency operations. PJM conducts regular conference calls with System Operations Subcommittee representatives (TOs) as well as neighboring RCs BAas and TOPs during emergency operations. Attachment B defines Teleconference Protocol Guidelines. Any operational decisions made on these calls or otherwise outside of normal control room operations should be followed with a call, as necessary, between control rooms with the coordinating entity to confirm understanding of the decision by all parties.

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- Section 3.2 Conservative Operations & 3.4 Hot Weather Alert
- Updated language from EGSTF
- Member Actions
  - Effective March 1 through November 30, between the hours of 15:00 Eastern Prevailing Time and 24:00 Eastern Prevailing Time, Generation dispatcher of natural gas fired resources will update Markets Gateway to indicate that gas supply either (1) has been procured or (2) is expected to be available, to meet their day ahead energy and/or reserve commitment for the next operating day.

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- Section 3.3.2 Cold Weather Alert
- Updated language from EGSTF
- Member Actions
- Effective December 1 through the last day of February, between the hours of 15:00 Eastern Prevailing Time and 24:00 Eastern Prevailing Time, Generation Dispatcher of natural gas fired resources will update Markets Gateway to indicate that gas supply either (1) has been procured or (2) is expected to be available, to meet their day ahead energy and/or reserve commitment for the next operating day.

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- Step 10 Manual Load Dump Action
- Added note EOP-011-4 R1.2.5.5

Note:
Member Load shed plans must recognize priority and critical load including: Essential health and public safety facilities such as hospitals, police, fire facilities, 911 facilities, wastewater treatment facilities; Facilities providing electric service to facilities associated with the Bulk Electric System including off-site power to generating stations, substation light and power; Critical gas infrastructure used to supply gas pipeline pumping plants, processing and production facilities; and Telecommunication facilities. Member load shed plans must recognize:

- Provisions to minimize the overlap of circuits that are designated for manual load shed and circuits that serve designated critical loads;
- Provisions to minimize the overlap of circuits that are designated for manual load shed and circuits that are utilized for underfrequency load shed (UFLS) or undervoltage load shed (UVLS); and;
- Provisions for limiting the utilization of UFLS or UVLS circuits for manual load shed to situations where warranted by system conditions.[1]
- Provisions for the identification and prioritization of designated critical natural gas infrastructure loads which are essential to the reliability of the BES.
    - PJM considers the critical loads listed in M-36 Attachment A: Minimum Critical Black Start Requirement, as high priority.
    - PJM considers Critical Natural Gas Infrastructure as locations with electrical loads that are involved in natural gas production, processing, intrastate and interstate transmission and distribution pipeline facility, which if curtailed, will impact the delivery of natural gas to bulk-power system natural gas fired generation. Examples of such include but are not limited to, electric driven gas compressor stations, and gas processing facilities.
    - PJM recommends Members to collaborate with their natural gas consumers in determining Critical Natural Gas Infrastructure load.

- 3.3.1 Cold Weather Advisory
- Added step based on WSE recommendation

  Prepare to take freeze protection actions such as erecting temporary windbreaks or shelters, positioning heaters, verifying heat trace systems, or draining equipment prone to freezing.

  – Test and validate that freeze protection systems are functional and ready to operate to protect plant equipment that is prone to freezing.

- 3.8.2 GMD Action
- Added a PJM Action to cross reference GMD Actions & PJM Conservative Operations in section 3.2
  - If generation re-dispatch or other controlling actions are required to control the system to GMD prescribed limits or to respond to equipment that has come out of service due to GIC, PJM Dispatch may issue Conservative Operations as outlined in Section 3.2 of this manual

- Section 5.7 Load Shed Directive Procedure
- Updated to align with recent PAI trigger changes

5.7 Load Shed Directive Procedure

Load Shed Directive

Note:

~~Issuance of this procedure will trigger a capacity **Performance Assessment Interval (PAI)** as detailed in *PJM Manual 18, PJM Capacity Market.*~~

Load shed directives need to be issued on a RTO or a Reserve Sub-zone to trigger a capacity **Performance Assessment Interval (PAI)** as detailed in PJM Manual 18, PJM Capacity Market. Issuance of a local load shed directive on an individual basis will not trigger a Performance Assessment Interval (PAI).

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- Attachment E: Manual Load Dump Allocation Tables
- Annual update of table
- Added note for recent EOP-011-4 Emergency Operations Standard update

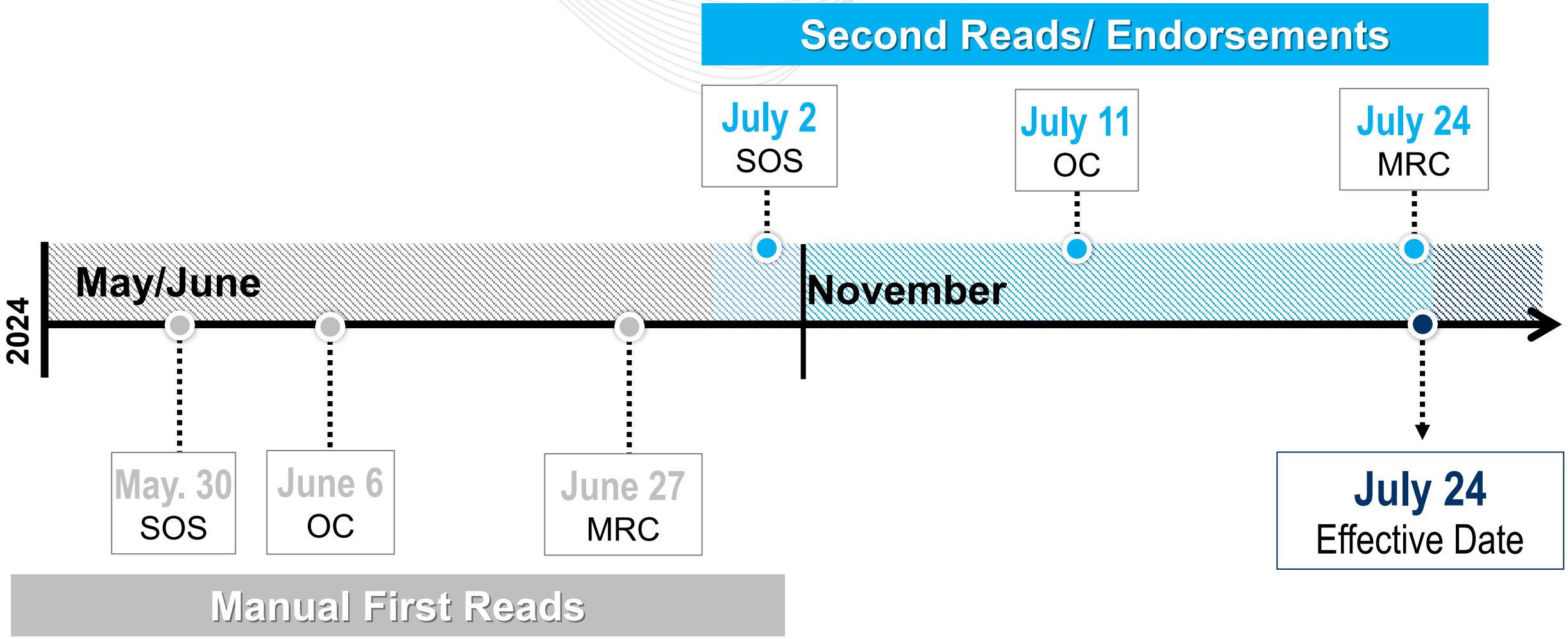
Note: In accordance with NERC Reliability Standard EOP-001-4 R7, PJM as the Transmission Operator, has identified in PJM M-13 Emergency Operations, Attachment E: Manual Load Dump Allocation Tables, Attachment F: PJM Manual Load Dump Capability, and PJM M-36 System Restoration, Attachment H: Under Frequency Load Shed (UFLS) Tables, the Distribution Providers, UFLS-Only Distribution Providers and Transmission Owners, as entities that are required to assist with the mitigation of Operating Emergencies in its Transmission Operator Area through operator-controlled manual load shedding, undervoltage load shedding, or underfrequency load shedding.

- Attachment F: PJM Manual Load Dump Capability
  - Annual update of table
  - Added note for recent EOP-011-4 Emergency Operations Standard update

Note: In accordance with NERC Reliability Standard EOP-001-4 R7, PJM as the Transmission Operator, has identified in PJM M-13 Emergency Operations, Attachment E: Manual Load Dump Allocation Tables, Attachment F: PJM Manual Load Dump Capability, and PJM M-36 System Restoration, Attachment H: Under Frequency Load Shed (UFLS) Tables, the Distribution Providers, UFLS-Only Distribution Providers and Transmission Owners, as entities that are required to assist with the mitigation of Operating Emergencies in its Transmission Operator Area through operator-controlled manual load shedding, undervoltage load shedding, or underfrequency load shedding.

- Grammatical Updates
  - Updated manual owner from Donnie Bielak to Kevin Hatch
  - Updated BA in section 1.3
  - Grammatical correction in section 3.4
  - Removed blank note in section 6.4
  - Added hour format in Attachment J

Timeline



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M-13 Version 93 Revisions

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