




System Operating Procedures

SOP-OUTSCH.0030.0010

Evaluate Generator and DARD Outage Requests

Effective Date: March 16, 2011
Revision No. 16

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1. Objective

RCEP The objective of this procedure is to document the responsibilities of ISO New England (ISO) staff with regard to the evaluation of Generator and Dispatchable Asset Related Demand (DARD) Maintenance Outage requests that could impact constraints placed upon the bulk power system and ensures future system reliability criteria are satisfied.

This procedure does not in any way change the intent of ISO New England Operating Procedure No. 5 - Generator and Dispatchable Asset Related Demand Maintenance and Outage Scheduling (OP-5) but rather is intended to clarify responsibilities delegated to the ISO staff by OP-5.


Compliance with this procedure is necessary for reliable operation of the power system. This procedure can affect market operation and multi-settlement.

2. Background

Market Participants submit their requests and ISO schedules Generator/DARD Maintenance Outages in accordance with OP-5. The evaluation of a Generator/DARD Maintenance Outage request usually takes place well in advance of the Day-Ahead Market and relies upon the most accurate data at the time of the evaluation. Whenever possible, transmission and Generator/DARD outages will be coordinated to reduce congestion costs.

As defined in OP-5, a Generator/DARD Maintenance Outage means an outage that can be deferred beyond the end of the next weekend, but requires that the Generator/DARD be removed from service, before the next Planned Outage. Characteristically, a Maintenance Outage can occur any time during the year, has a flexible start date, may or may not have a predetermined duration, and is usually much shorter than a Planned Outage. ISO will attempt to, in accordance with the request, accommodate Maintenance Outages as soon as possible depending on system conditions, significant increases in Locational Marginal Price (LMP), and Congestion Costs. This procedure does not pertain to a real-time Generator/DARD forced outage, which is handled as a redeclaration in accordance with SOP-RTMKTS.0110.0010 - Maintain Real-Time Operational Data. Generator/DARD outage classifications (Maintenance or Forced) have an effect on Forward Capacity Market (FCM) payments as discussed in ISO New England market rules and procedures.

ISO evaluates the reliability impact of proposed Generator/DARD Maintenance Outages while considering historical and future impacts on transmission system reliability.

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3. Responsibilities


NOTE

Any North American Electric Reliability Corporation (NERC) Certified System Operator, certified at the RC level, has the authority to take action(s) required to comply with NERC Reliability Standards.

1. The Short Term Outage Coordinator is responsible for executing this procedure during normal business hours (Non-holiday weekdays 0800 through 1630).
2. The Forecaster is responsible for executing this procedure when the Short Term Outage Coordinator positions are not staffed (Daily from 1630 through 0800).
3. The Short Term Outage Coordinator or Forecaster shall evaluate, with the Local Control Center (LCC) Staff if necessary, each Generator/DARD outage request submitted by a Market Participant for the outage impact on future system reliability and congestion.
4. The Generation Operator shall be responsible for Generator/DARD outage communications during real-time operations.

4. Controls

- ISO New England Operating Procedure No. 19 - Transmission Operations (OP-19) criteria are not violated as verified by the Operations Compliance Coordinator
- ISO outage request process is occurring in accordance with the times specified in OP-5
- Each evaluated Maintenance Outage is stored in the ISO Outage Scheduling software

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5. Instructions


5.1 Evaluating a Generator/DARD Outage Request

1. The Short Term Outage Coordinator or Forecaster shall use expected future local area constraints when evaluating a Generator/DARD outage.
2. The Short Term Outage Coordinator or Forecaster shall approve each Generator outage that has de-listed from supplying capacity above the Generator Capacity Supply Obligation (CSO) into the FCM.
 - A. If a special study is requested refer to SOP-OUTSCH.0050.0010 - Determine Study Requirements.
3. The Short Term Outage Coordinator or Forecaster shall process each Generator/DARD outage on first come, first served basis while meeting all reliability criteria in OP-5.
4. Upon receipt of detailed information from an LCC or ISO concerning an adverse reliability concern, the Short Term Outage Coordinator / Forecaster shall contact both the LCC and Generator/DARD Designated Entity and discuss the proposed outage and its effect on the system and Generator.
 - A. Once the final Outage dates and times have been determined and if the transmission maintenance requires a Generator/DARD constraint or outage, Short Term Outage Coordinator or Forecaster shall perform the following:

NOTE

Unless the outage is caused by a radial line, the Short Term Outage Coordinator or Forecaster will only advise the Generator/DARD that a transmission constraint is causing the problem without detailing the exact outage.

- (1) Contact the Generator/DARD and communicate the following:
 - a. Estimated reduction capability
 - b. Estimated times the constraint or outage will be required.
- (2) Verify the Generator is explicitly referenced on the “Short Term Study” tab of the “Transmission Outage Requested Form” under the “Gen Must Run” or “Gen Limitation” area of the display.

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(3) No later than the day prior to the Operating Day, enter any Generator/DARD constraint or reduction as “Transmission Constrained Down” or “Must Run” in the ISO Outage Scheduling software.

5. If the Market Participant takes the Generator/DARD out of service after being denied an outage, the priority of the outage form shall be changed from “Planned Outage” or “Maintenance Outage” to “Forced Outage”.

NOTE

SOP-OUTSCH.0050.0010 - Determine Study Requirements provides guidance on coordinating outages to reduce congestion. Long-Term Outage, Short-Term Outage and Real Time groups may perform this function through study tools, commitment tools and system expertise.

6. Whenever possible, the Long-Term Outage, Short-Term Outage and Real Time groups shall coordinate transmission, Generator and DARD outages to reduce congestion costs.

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5.2 Denying a Generator/DARD Outage Request


NOTE

Immediately prior to removing a Generator/DARD from service, Market Participants must obtain ISO Control Room approval for a Generator / DARD outage request prior to removing the Generator/DARD from service in accordance with OP-5. For a Generator/DARD under FCM, such approval will not be withheld from a previously approved outage unless the consequences of granting the approval would result in a risk of: ISO New England Operating Procedure No. 4 - Action During a Capacity Deficiency (OP-4), Action 4; ISO New England Operating Procedure No. 7 - Action in an Emergency (OP-7); or other serious reliability risk.

An outage request classified as postponable only provides information to the System Operators to assist evaluation of a scheduled outage that may be shifted to a better time.

5.2.1 During Normal Conditions

1. The Short Term Outage Coordinator or Forecaster working with the Operations Shift Supervisor shall consider the following conditions and determine if a Generator/DARD outage request will be denied:
 - Estimated area protection requirements and/or inter-area transfer capabilities will be violated
 - Estimated OP-5 criteria for Short Term Operable Capacity Margin (STOCM) will be violated at the time of the outage
2. The Short Term Outage Coordinator or Forecaster shall **NOT** deny any fully de-listed Generators/DARDs outage request.
3. If violations occur, the Short Term Outage Coordinator or Forecaster working with the Operations Shift Supervisor shall deny a Generator / DARD outage as follows:
 - A. For a system capacity problem or specific transmission facility limitation:
 - (1) On a last in, first out basis, disapprove any necessary Generator/DARD outage requests that is classified as postponable.
 - (2) On a last in, first out basis, disapprove any other necessary Generator/DARD outage request.
 - (3) On a priority basis, disapprove any other outage request for a Generator/DARD that is participating in an ISO New England VAR Program and is needed for voltage support.


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B. For local area protection requirements:

- (1) On a last in, first out basis, disapprove any applicable outage request that is classified as postponable if the Generator/DARD is necessary within the local area.
 - (2) On a last in, first out basis, disapprove any other applicable Generator/DARD outage request if the Generator/DARD is necessary within the local area.
 - (3) On a priority basis, disapprove any other outage request for a Generator/DARD that is participating in an ISO New England VAR Program and is needed for voltage support.
4. Whenever significant congestion occurs resulting from a Generator/DARD outage request, the Short Term Outage Coordinator or Forecaster shall deny the outage request and attempt to coordinate transmission and Generator/DARD outages to develop alternative outage schedules to minimize potential congestion costs associated with the original outage plans.

NOTE

The LCC is responsible for notifying ISO if a Generator/DARD outage poses a local system reliability impact within its area. The LCC is required to present detailed supporting information (for example, load flow data) to ISO about any local area reliability concern.

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5.2.2 During Cold Weather Conditions

1. Whenever Cold Weather Conditions exist as defined in SOP-RTMTKS.0050.0007 – Perform Cold Weather Condition Operations the Short Term Outage Coordinator or Forecaster shall review and either approve, deny or cancel each applicable Maintenance Outage request in accordance with the timelines listed in ISO New England - ISO New England Inc. Transmission, Markets and Services Tariff Section III, ISO New England Market Rule 1 - Standard Market Design (Market Rule 1), Appendix H Attachment 1.

NOTE

If during Cold Weather Conditions conflicts between OP-5 and Market Rule 1 occur, the provisions of Market Rule 1 shall govern.

2. Whenever Cold Weather Conditions exist and a Maintenance Outage request results in the forecast of any actions of OP-4 or OP-7, the Short Term Outage Coordinator or Forecaster shall attempt to move the outage to an acceptable period when an adverse reliability condition would not be expected to occur.
3. Whenever Cold Weather Conditions exist, the Short Term Outage Coordinator or Forecaster may deny a Maintenance Outage request if the outage would cause a violation of criteria set in OP-19 or Market Rule 1, Appendix H, Attachment 1.

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5.3 Communications

1. The Short Term Outage Coordinator or Forecaster shall notify the applicable Designated Entity of each approved or disapproved Generator/DARD outage as soon as possible.
2. The Short Term Outage Coordinator or Forecaster shall notify the applicable LCC via the ISO Outage Scheduling software, when a Generator/DARD outage is approved / disapproved in the LCC local area.
3. If, at the request of ISO, a generation outage is moved outside of its planned annual maintenance scheduled times, the Short Term Outage Coordinator shall send an e-mail to the Long Term Outage Coordinator responsible for maintaining the Annual Maintenance Schedule directing the Long Term Outage Coordinator to inform Settlements of the condition.

NOTE

The objective of a weekly Northeast Power Coordinating Council (NPCC) teleconference is to gain an understanding of any upcoming events (weather, generation and transmission outages, etc.) that will affect another Reliability Coordinator Area (RCA) within the next 10 days. Among the entities participating with ISO in this weekly call are IESO, NBSO, TransEnergie, NYISO, PJM, and NPCC representatives.

4. Control Room personnel shall participate in planning procedures with neighboring RCAs via a weekly NPCC teleconference.

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6. Performance Measures

This procedure is deemed to be properly followed as evidenced by the following:

- Corporate Goal for NPCC Reliability Compliance and Enforcement Program (RCEP) non-compliance letters received by the ISO in regards to Operating Reserve is met

7. References

NPCC Document A-8, NPCC Inc., Reliability Compliance and Enforcement Program

ISO New England - ISO New England Inc. Transmission, Markets and Services Tariff Section III, ISO New England Market Rule 1 - Standard Market Design (Market Rule 1)

ISO New England Operating Procedure No. 4 - Action During a Capacity Deficiency (OP-4)

ISO New England Operating Procedure No. 5 - Generator and Dispatchable Asset Related Demand Maintenance and Outage Scheduling (OP-5)

ISO New England Operating Procedure No. 7 - Action in an Emergency (OP-7)

ISO New England Operating Procedure No. 19 - Transmission Operations (OP-19)


SOP-OUTSCH.0050.0010 - Determine Study Requirements

SOP-RTMTKS.0050.0007 - Perform Cold Weather Condition Operations


SOP-RTMKTS.0110.0010 - Maintain Real-Time Operational Data

8. Revision History

Rev. No.	Date	Reason	Contact
0	02/13/03	Initial procedure for SMD	Joe Mercer
1	06/06/03	Update procedure for current practice	Joe Mercer

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Rev. No.	Date	Reason	Contact
2	8/21/03	Added communications for Transmission Output Limited outages	Joe Mercer
3	11/12/03	Modified Controls and Performance Measures to align with ISO 9001 standards	Joe Mercer
4	01/9/04	Added note that Any Control Room Operator has the authority to take action(s) required to comply with NERC Policy.	Joe Mercer
5	10/29/04	Revise DA TRAGO to the effect that Delisted units shall not be submitted for DA Case	Joe Mercer
6	12/08/04	Revised to reflect denial/cancellation of Economic Outages during Cold Weather Conditions, changed Procedure Owner	Seamus McGovern
7	02/01/05	Updated SOP for RTO terminology	Seamus McGovern
8	11/28/05	Revised to include changes for Cold Weather Conditions (MR1 App H revision)	Seamus McGovern
9	05/05/06	Updated for Control Room Forecaster Split, removed Cold Weather condition actions (MR1 App H retired)	Peter Harris
10	08/10/06	Updated task responsibilities	Peter Harris
11	09/25/06	Revised for ASM Phase 2	Peter Harris
12	12/14/06	Revised to include changes for Cold Weather Conditions (MR1 App H revision)	Peter Harris
13	03/05/07	Substituted reference for RTSC with TRAGO	Peter Harris
14	03/19/09	Reviewed and updated for organizational changes.	Mike Courchesne
15	06/01/10	In Header, changed copyright date to 2010; Changed "Generation and Dispatchable Asset Related Demand" in title to "Generator and DARD"; Globally made minor editorial changes including use of acronyms, clarification of responsibilities for directed actions, improve grammar to be consistent with current practices; Globally replace titles Senior Outage Coordinator with Short Term Outage Coordinator/Engineer, added /Engineer to Short Term Specialist, Section 3 replaced NOTE text with statement provided by Director; Operations; Various updates to Sections 2 and 5 steps to reflect new FCM rules.	Mike Courchesne

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Rev. No.	Date	Reason	Contact
Rev 16	03/16/11	<p>Biennial review by procedure owner;</p> <p>Global replaced page numbering in footers with Page X of Y</p> <p>Global minor editorial; grammar changes to clarify information, directed actions, and responsibilities; punctuation; spelling & format changes including singular subject/object in directed actions;</p> <p>Section 2 Defined acronym NERC;</p> <p>Section 3 & Global replaced all a.m. & p.m. times with 24 hour time;</p> <p>Section 4 provided full title for OP-19, deleted 2nd bullet;</p> <p>Global replaced “SAM” with ISO Outage Scheduling software;</p> <p>Section 5.1 title modified;</p> <p>Step 5.1.1 and globally replaced “Short Term Outage Coordinator/Engineer, Short Term Outage Specialist or Forecaster” with “Short Term Outage Coordinator”;</p> <p>Section 5.1.2 deleted former step, renumbered remaining steps, modified 5.1.2, 5.1.3, 5.1.4, 5.1.4.A.(1) a. & B., added new 5.1.4.A.(2), modified 5.1.4.A.A.(3), 5.1.5, NOTE prior to 5.1.6 and step 5.1.6;</p> <p>Section 5.2 modified title;</p> <p>Sub-section 5.2.1 modified NOTE, steps 5.2.1.1, 5.2.1.2, 5.2.1.3, 5.2.1.3.A.(1) & (2), added new step 5.2.1.3.A.(3), modified steps 5.2.1.3.B, 5.2.1.3.B.(1), (2), added new step 5.2.1.3.B.(3), modified step 5.2.1.4 and the following NOTE;</p> <p>Sub-section 5.2.2 modified steps 5.2.2.1, 5.2.2.2, and 5.2.2.3;</p> <p>Section 5.3 modified steps 5.3.1, 5.3.2, deleted former steps 5.3.2 & 5.3.3 and renumbered remaining steps, modified steps 5.3.3, 5.3.4 & following NOTE, and step 5.3.5</p> <p>Section 7 corrected title for Market Rule 1</p>	Mike Courchesne

9. Attachments

None.