ISO New England Operating Procedure No. 5
Resource Maintenance and Outage Scheduling

Effective Date: **June 1, 2026**

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References:

North American Electric Reliability Corporation (NERC) Generating Availability Data System (GADS) - Data Reporting Instructions

ISO New England Inc. Transmission, Markets, and Services Tariff, Section II, Open Access Transmission Tariff (OATT)

Transmission Operating Agreement

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 Inc. Transmission, Markets, and Services Tariff, Attachment D, ISO New England Information Policy

ISO New England Manual for the Forward Capacity Market (FCM), Manual M-20 (M-20)

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

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

ISO New England Operating Procedure No. 8 - Operating Reserve and Regulation (OP-8)

ISO New England Operating Procedure No.14 - Technical Requirements for Generators, Demand Response Resources, Asset Related Demands and Alternative Technology Regulation Resources (OP-14)

ISO New England Operating Procedure No. 23 – Resource Auditing (OP-23)

ISO New England Operating Procedure No. 24 - Protection Outages, Settings and Coordination (OP-24)

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I. INTRODUCTION

This Operating Procedure (OP) establishes the process for a Market Participant (MP) to request a Planned Outage (PO), Maintenance Outage (MO), Overrun Planned Outage (OPO), or Forced Outage (FO) for a generator, Demand Response Resource (DRR), Dispatchable Asset Related Demand (DARD), Alternative Technology Regulation Resource (ATRR), or Import Capacity Resource. This OP also establishes the process for ISO New England (ISO) and the relevant Local Control Center (LCC) to evaluate PO and MO requests, and for ISO to approve or deny such requests.

This OP is designed to facilitate the scheduling of POs, MOs, and OPOs for an MP's generator, DRR, DARD, or ATRR and to allow:

- each MP to incorporate future maintenance in its budget forecasts
- sufficient time for an MP to respond to market signals
- sufficient time for ISO and the relevant LCC to assess the impact of each generator, DRR, DARD, or ATRR outage request on the reliability of the New England Reliability Coordinator Area/Balancing Authority Area (RCA/BAA)[1] and the New England Transmission System.

Each MP shall, to the fullest extent practicable, maintain and operate all generators, DRRs, DARDs, or ATRRs that it owns or controls in accordance with Good Utility Practice. An MP shall not take a generator, DRR, DARD, ATRR, or Qualified Generator Reactive Resource out-of-service for maintenance without ISO approval, unless there is a danger to personnel or an imminent risk of equipment damage. If a generator, DRR, DARD or ATRR is forced out-of-service due to personnel or equipment risk, the ISO Control Room Generation Operator and Forecaster shall be notified as soon as possible. ISO shall categorize an outage not approved by ISO as an FO. An MP shall request a PO, MO, or OPO with as much advance notice as possible to:

- establish outage priority
- maximize time allotted to coordinate outages
- prevent an FO

A. PO, MO, and OPO Requests

The requirements for processing PO requests are detailed in Section III.B of this OP. The requirements for processing MO and OPO requests are detailed in Section III.C of this OP.

a. Generators and Intermittent Power Resources (IPR)

- An MP shall submit a request for a PO, MO, or OPO when maintenance reduces the Seasonal Claimed Capability (SCC) of the associated Resource by ≥ 5 MW and/or when the Resource becomes unavailable.

[1] Reliability Coordinator Area and Balancing Authority Area are defined in the Glossary of Terms Used in NERC Reliability Standards.

- An MP shall submit a request for a PO, MO, or OPO when maintenance causes a Resource that is a Qualified Reactive Resource to become unavailable.
- The MP shall categorize and report each Resource outage to ISO in accordance with the NERC Generating Availability Data System (GADS) - Data Reporting Instructions and this OP.

b. DRR

- An MP shall submit a request for a PO, MO, or OPO when maintenance reduces the SCC of the associated DRR by ≥ 5 MW.

c. DARD

- An MP shall submit a request for a PO, MO, or OPO if maintenance would reduce the capability of a DARD. An MP shall not reduce the ability for a DARD to interrupt to its Nominated Consumption Limit (NCL) without ISO approval unless there is a danger to personnel or a risk of equipment damage. An MP that reduces the ability for a DARD to interrupt due to danger to personnel or a risk of equipment damage shall notify the ISO Control Room Generation Operator and Forecaster of the reduction as soon as practicable.

d. ATRR

- An MP shall submit a request for a PO, MO, or OPO when an ATRR that is modeled in the ISO topology has reduced capability from their registered Regulation value for more than 24 continuous hours.

e. Import Capacity Resources

- An MP shall notify the ISO via email utilizing an OP5 - Appendix B – Outage Request Form if there is a reduction in capability that reduces the CSO of its Import Capacity Resource backed by one or more Resources by ≥ 5 MW. ISO will create an Informational outage to track these maintenance activities within their outages scheduling software.

B. Relay Protection Systems

An MP shall submit a request for any planned or unplanned testing or maintenance outage of a relay protection system that could reduce or impact the normal operation of the New England RCA/BAA or the New England Transmission System in accordance with ISO New England Operating Procedure No. 24 - Protection Outages, Settings and Coordination (OP-24). The scheduling requirements are designed to allow sufficient time for ISO and each relevant LCC to assess the impact on reliability of each protection outage request.

C. ISO Coordination of POs and MOs/OPOs

Whenever possible, ISO shall coordinate any transmission, generator, DRR and DARD POs, MOs and OPOs to reduce Congestion Costs. For an importing area, ISO shall evaluate requested POs, MOs, and OPOs for any economic generator, DRR or DARD within the area simultaneously with transmission facilities that significantly support area import capability. For an exporting area, ISO shall coordinate any generator, DRR, and DARD outage within the area coincident with outages of transmission facilities that significantly support area export capabilities.

Transmission outage requests for Local Area Facilities that restrict or isolates a Resource(s) output, shall be communicated via a Resource outage request using this procedure.

II. DEFINITIONS

Annual Maintenance Schedule (AMS) is a capacity assessment report provided and updated by the ISO Resource Outage Coordination group on a daily basis. This capacity assessment is intended to convey forecasted capacity margins to coordinate Resource and transmission outages in a reliable manner. Providing this report with two (2) rolling years of forecasted capacity margins affords sufficient lead-time to schedule POs in a proactive manner. During periods when CSO has not yet been established through the annual auction, assumed CSO will be utilized to project forecasted capacity margins. Assumed CSO will be the CSO that the Resource(s) held during the previous annual auction period.

Locational Operable Capacity Margin (LOCM) is a measure of the long-term projected weekly operable capacity margin on a New England sub-area basis, as described in OP-5 Appendix A – Operable Capacity Calculations (OP-5A). The sub-area analysis is forecast for up to nineteen (19) months and is performed in addition to the operable capacity margin analysis for the entire New England RCA/BAA.

Long-Term Operable Capacity Margin (LTOCM) is a measure of New England RCA/BAA projected weekly operable capacity margin looking ahead up to twenty-four (24) months based on the assumptions in OP-5A. A positive value of LTOCM indicates a potential surplus of operable capacity over and above the estimated load plus Operating Reserve requirement. The LTOCM formula and its components are defined in OP-5A.

Short-Term Locational Operable Capacity Margin (STLOCM) is a measure of the projected daily operable capacity margin looking ahead two (2) weeks or less on a New England sub-area basis, as described in OP-5A.

Short-Term Operable Capacity Margin (STOCM) is a measure of New England RCA/BAA projected daily operable capacity margin looking ahead two (2) weeks or less based on the assumptions in OP-5A. A positive value of STOCM indicates a potential surplus of operable capacity over and above the estimated load plus Operating Reserve requirement. The STOCM formula and its components are defined in OP-5A.

Operable Capacity Margin (OCM) is collectively the LTOCM, the LOCM, the STOCM, and STLOCM.

Sub-Area is a local area within the New England RCA/BAA requiring coordination of generator, DRR, DARD, ATRR, and transmission outages.

Outage Types:

1) **Forced Outage (FO)** is any outage or inability, in whole or in part, of a Resource to provide its claimed capability or NCL, or any DRR outage as described in Section I.A. above, that has not been approved by ISO in the form of a PO, MO, or OPO. An FO incident preceding a PO or MO shall not eliminate the requirement of the MP to report an FO for the entire actual/estimated period to repair the component(s) associated with the FO. Among other things, an FO may occur by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the

relevant portions of Section III of the Tariff and ISO New England Manuals.

2) **Maintenance Outage (MO) (identified as Short-Term Outage or "STO" in the ISO outage software)** is an outage that can be deferred beyond the end of the weekend, but requires that the generator, DRR, DARD, or ATRR be removed from service within 14 calendar days of the outage start date. During any week, if an MP requests an outage that cannot be deferred beyond the weekend, that outage shall be classified as an FO. ISO shall attempt to, in accordance with the request, accommodate an MO as soon as possible depending on system conditions, significant increases to Locational Marginal Price (LMP), and Congestion Costs. Typically, MOs are less than 14 days in duration.

3) **Overrun Planned Outage (OPO)** is an overrun of an MO or PO. Because an OPO is considered a type of MO throughout this document, an OPO must be requested in accordance with the response time required for a MO. If the MO timeline cannot be met, the request must be submitted as an FO. The outage must be limited to the original Planned Outage work scope and must not be requested for newly discovered issues (a new request shall be submitted for newly discovered work).

4) **Planned Outage (PO)** is an outage that must be requested with a minimum of 15 calendar days prior to its start date and is typically scheduled for the purpose of performing annual maintenance or more significant work that is planned and coordinated well in advance.

5) **Owner Test Request (OT)** is a request that shall be submitted to ISO when the MP has owner testing to perform and wants greater assurance that their generator, DRR, DARD, or ATRR will be able to operate at a predefined schedule during the testing period. If a request for owner testing is not submitted by an MP, previously approved transmission and/or generation outages may prevent the desired testing from occurring during real-time operations. The MP shall submit, and the LCC and ISO shall evaluate an Owner Test request in the same manner as an MO request.

6) **Reactive Capability Audit Request (RCAR)** is a request submitted to ISO when an MP has testing that will result in injection or absorption of a specific reactive power value from the Resource. The RCAR shall be submitted to ISO in accordance with ISO New England Operating Procedure No. 23 - Resource Auditing. The MP shall submit the outage as MVAr testing and ISO shall evaluate the RCAR in the same manner as an MO request, except that ISO shall respond to the RCAR within the time frame designated in the Response Time Table in Section III.C.1.

7) **Informational (INFO)** is a request that conveys pertinent information pertaining to a specific generator, DARD, DRR, or ATRR but does **not** reduce the availability of the resource. Examples include specific nuclear activities and AVR capability changes.

Outage Status:

1) **Preliminary**: Generation outage request that has been submitted by the MP to their respective LCC for LCC evaluation.

2) **Submitted**: Generation outage request that has been approved by the respective LCC and is awaiting ISO evaluation.

3) **Negotiate**: Generation outage request that indicates a Resource will **not** hold a CSO during the annual auction period in which the outage request begins. Outages in Negotiate status will transition to Approved or Study once the annual auction completes and actual CSO values can be determined.

4) **Study**: Generation outage request that is actively being evaluated and coordinated by the ISO.

5) **Interim Approved**: Generation outage request that starts during an annual auction period that has not yet been finalized. The outage currently satisfies all system security and capacity requirements for the submitted outage period. Generation outages in this state will be reevaluated once actual CSO values are known upon completion of the annual auction for the requested outage period.

6) **Approved**: Generation outage request that has been evaluated, satisfies all system security and capacity requirements, and has been accepted by the ISO.

7) **Implemented**: Generation outage request that has been started in real-time.

8) **Completed**: Generation outage request that has finished in the field and has been administratively closed out by the ISO.

9) **Withdrawn**: Preliminary generation outage that is no longer needed by the MP.

10) **Cancelled**: Submitted, or Interim Approved, or Approved generation outage that is no longer needed by the MP.

11) **Denied**: Generation outage that violates system security and/or results in negative operable capacity margins and is rejected by the respective LCC or ISO.

NOTE

Capitalized terms used but not defined in this OP shall have the meanings ascribed to them in the Tariff.

III. PROCEDURES

A. ISO & LCC RESPONSIBILITIES

1. General

a. Evaluation Principles

ISO shall assign each outage request an outage tracking number, upon receipt. Each request shall be time- and date-stamped for prioritization purposes.

ISO and the LCC shall evaluate each generator, DRR, or DARD outage request submitted by a Lead MP for the items listed below. Known outages of transmission facilities shall be included as a part of this evaluation. Criteria contained in this Section III.A.1 pertain to each generator/DRR/DARD outage that impacts the SCC of the associated Resource. ISO and the LCC shall conduct their evaluation as follows:

i. Identify if the outage request is associated with a capacity Resource (ISO only)

ii. Identify if the proposed Resource outage results in an unacceptable Operable Capacity Margin (OCM).

iii. Identify if the proposed generator, DRR, or DARD outage results in any unacceptable system or local system security impacts.

iv. Identify opportunities where the proposed generator, DRR, or DARD outage could be adjusted with respect to a pending transmission outage to reduce or eliminate Congestion Costs.

2. PO Review Moratorium

a. Annual Forward Capacity Market (FCM) Reliability Review[1]

During the period when ISO is performing reliability reviews of the results of the third annual reconfiguration auction results for the applicable FCM Capacity Commitment Period, ISO shall time-stamp PO requests for outages that fall within June 1 and September 15 of the FCM Capacity Commitment Period to establish review priority and hold until the third annual reconfiguration auction results reliability review is completed.

[1]Annual FCM reliability reviews will be discontinued after CCP 2027-28.

b. Monthly FCM Reliability Review[2]

During the period when ISO is performing reliability reviews of FCM monthly CSO bilateral submissions and monthly reconfiguration auction results for the applicable month, ISO shall time-stamp each PO request for an outage that falls within the applicable month to establish review priority, and hold until the reliability review process is completed.

[2]Monthly FCM reliability reviews will be discontinued at the completion of the final

monthly auction that occurs under the FCM construct.

3. Outage Implications When CSO is Not Impacted/There is No CSO

An MP shall submit a PO, MO, or OPO when maintenance is occurring that reduces the SCC of the associated Resource by ≥ 5 MW but does **not** impact the CSO of the associated capacity Resource or that is associated with a Resource that does **not** have a CSO. If the annual auction is finalized for the outage request period upon submission, the outage will be Approved by the ISO. If the annual auction is not completed for the outage request period, the outage will be placed in the Negotiate state and will be evaluated once the annual auction activities have concluded.

If CSO is **not** secured once the annual auction concludes, the outage request will be Approved. If CSO is awarded at the conclusion of the annual auction, the priority date of the outage request will be changed to the annual auction completion date, and a system security study will be performed on the outage request.

The application will be Approved if the study yields acceptable system security results. If the study yields an unacceptable thermal, stability, or voltage outcome as a result of the outage in question, the MP will be asked to voluntarily move the outage to an acceptable timeframe.

If agreement cannot be met for a new outage period, the ISO may reject the outage to preserve system reliability. In the instance where outages must be rejected to preserve system capacity margins and/or system security and priority dates are equal based on annual auction completion date, the priority for rejection will be determined by the original submission dates of the outage requests in question.

4. Outage Request Approval Principles

The MP shall request ISO approval to remove a generator, DRR, or DARD from service for a PO or MO in accordance with this OP when that generator, DRR or DARD outage may impact the SCC of the associated Resource by ≥ 5 MW. When the generator, DRR or DARD outage does not impact the CSO of the associated capacity Resource or when the outage is submitted for a Resource that has no CSO, the outage will ultimately be approved after a security analysis has been completed to identify any adverse local area or system-wide impacts that have been caused by the outage. ISO may reject Resource outage requests that do have CSO and/or reject Transmission outages submitted during this same outage period to preserve system reliability because of non-CSO Resource outage approvals.

The MP shall submit outage requests required to comply with licensing and/or environmental permitting restrictions related to fish passage, rafting condition, or water release as a PO or MO with as much advance notice as possible even during times when unacceptable LTOCM or STOCM are projected. Where the outage request relates to licensing and/or environmental permitting restrictions, the MP shall include in its request detailed information evidencing the restriction in

order for ISO to promptly consider any outage prompted by such restrictions.

ISO shall approve any PO or MO request to the extent that it would not, in ISO or LCC judgment, cause an unacceptable OCM or violate any NERC, Northeast Power Coordinating Council Inc. (NPCC), or ISO operating criteria, policy or procedure. Once approved, an MP shall not subsequently be required to alter its PO request if unacceptable OCM conditions arise as a result of another generator/DRR/DARD or transmission outage. However, ISO may delay the start of an outage for reliability reasons.

ISO shall prioritize the outage requests for any given time period on a first-come, first-served basis.

ISO may reject an outage request if, in ISO judgment, the requested outage would cause an unacceptable LTOCM or LOCM (as defined in Section III.B.1.b of this OP) or STOCM or STLOCM (as defined in Section III.C.1.b of this OP).

ISO shall coordinate with the LCCs regarding any outage repositioning. The daily posting of the "Annual Maintenance Schedule" (AMS) shall provide the LCCs with information regarding any repositioned outages occurring later in the year. The LCC shall notify ISO if an outage repositioning poses any local system reliability impact within its local area. Additionally, to reduce or eliminate Congestion Costs, the LCCs and ISO shall promote the continuous flow of information between them and the Transmission Owners (TOs) in an effort to match proposed generator, DRR, or DARD POs or FOs with pending transmission outage work to the fullest extent practicable.

An outage that the ISO has not approved in the form of a PO, OPO, or MO shall be considered an FO.

B. PLANNED OUTAGE REQUEST AND EVALUATION PROCESS

Where the PO request affects the SCC of an associated Resource, or of the associated DRR as described in Section I.A., or is associated with a generator that is a Qualified Reactive Resource, an MP shall request ISO approval to schedule a PO in accordance with this OP. Outages for Resources that have no CSO for the current annual auction period and outages that indicate a Resource will not hold a CSO for future auction annual auction periods must be submitted if the associated Resource SCC will be reduced by ≥ 5 MW or if the generator or IPR becomes unavailable. Outages for Resources that have no CSO will be Approved within the actual annual auction period after they have been evaluated for system security impacts to identify any adverse local area or system-wide impacts that have been caused by the outage.

1. PO Request Processing

a. ISO and the respective LCC shall respond to MP PO requests on a first-come, first-served basis for any defined submittal period. The respective LCC shall review the PO request and continue the requested PO progression for ISO review if the impact on local system security within its area is acceptable.

b. ISO shall evaluate the impact of the PO request on the OCM (as defined in OP-5A) and evaluate if approved transmission outages would interfere with the PO request. A PO shall not be approved if the security analysis considering all approved transmission outages identifies a violation(s) of ISO, LCC, NERC or NPCC criteria.

c. If ISO determines that the requested PO is not acceptable, then ISO shall discuss with the LCC, alternative dates when system security and capacity margins are projected to be more favorable. The LCC shall work with the TO and the generator, DRR, or DARD MP to reposition the PO. If the MP is not willing or not able to move the PO to a period where capacity and security criteria can be met, the PO request shall be denied.

d. In an effort to reduce Congestion Costs, ISO shall also compare the generator, DRR, or DARD PO request against approved transmission outage schedules to identify cases where the generator, DRR, or DARD PO schedules could be adjusted to meet this objective. If a potential schedule adjustment is identified, ISO shall discuss PO rescheduling with the LCC. The LCC shall coordinate rescheduling with the respective TO and the generator, DRR, or DARD MP. (Throughout this process, ISO shall work with the respective LCC, as needed, to develop alternative PO schedules.)

e. Upon coordination of generator, DRR, or DARD PO and transmission outage schedules, ISO shall perform its final review to confirm that the New England RCA/BAA and LCC security and capacity requirements are satisfied, coordination actions are in order, and Congestion Costs have been reduced or eliminated. Following this review, ISO shall notify the MP if its request is approved as submitted, or approved with modifications in accordance with this OP.

2. ISO Reporting

ISO shall publish the current AMS to the ISO external website daily. If the published AMS poses any unacceptable local system capacity impact within its local area, each LCC shall notify ISO's Resource Outage Coordination staff by electronic media (email) at generationoutagecoor@iso-ne.com within five (5) Business Days. [Local system capacity issues identified at this point should be minimal since each generator, DRR, or DARD PO request is forwarded to the respective LCC(s) for review and approval following ISO's initial evaluation.]

ISO shall aggregate approved MP PO requests, and ISO shall provide the projected weekly LTOCM for the New England RCA/BAA for two (2) consecutive calendar years. This process provides the MPs with a planning tool for reviewing their maintenance requirements and timing of their own operable capacity needs with the market signals of the New England RCA/BAA. This process provides ISO with a method for coordinating generator, DRR, or DARD maintenance requirements to avoid OP-4 or OP-7 actions, and as a result, ISO can identify potential capacity-deficient periods. Additionally, the process provides ISO and the LCCs with the necessary

information to identify situations where generator, DRR, or DARD and transmission outages could potentially be coordinated to reduce Congestion Costs.

3. Resolution of a Capacity or Security Issue

If ISO determines that a capacity or security issue exists after it has approved a PO, ISO shall work with the LCC and MP(s) to reposition previously approved generator, DRR, or DARD PO(s) to avoid or eliminate unacceptable forecasted LTOCM, LOCM, or system security issues that have arisen since approvals was granted.

Where a reliability issue cannot be eliminated through ISO and LCC discussions with the affected MP(s) the ISO shall perform the following steps depending on the reliability issue encountered:

a. **Forecasted negative capacity margins**: ISO will deny Resource outages on a last in, first out basis until forecasted capacity margins are ≥ 0 MW. Outages for Resources that have no CSO or indicate they will not hold CSO shall **not** be denied during this process.

b. **System security violations**: ISO will deny Resource and/or transmission outages that contribute to the violation on a last in, first out basis until the security violation is resolved and system analysis yields acceptable results. Outages for Resources that have no CSO or indicate they will not hold CSO shall **not** be denied during this process.

C. MAINTENANCE OUTAGE AND OVERRUN PLANNED OUTAGE REQUEST AND EVALUATION PROCESS

1. Processing of MO and OPO Requests

ISO and the respective LCC shall respond to each MO and OPO request as follows:

a. Response time shall be based on the following table:

Response Timetable	
Submission of Planned Request (PO/MO/OPO) for an Outage Start of:	**Response Time by ISO**
≥ 90 Calendar Days in the future	Within 30 Calendar Days
≥ 15 and < 90 Calendar Days in the future	Within 10 Calendar Days
5 Business Days in the future (RCAR)*	Within 4 Business Days
7 to 14 Calendar Days in the future	Within 3 Business Days
4 to 6 Calendar Days in the future	Within 1 Business Day
2 to 3 Calendar Days in the future**	Within 1 Calendar Day
Overnight or next day, submitted by 0700***	By 0900

Overnight or next day, submitted/requested 0700 - 2400	Within current day****

* Involves testing that will result in injection or absorption of a specific reactive power value from the Resource per OP-23. 4 Business Days provides the LCC time to assess the outage prior to submitting it to ISO for validation.

** During any particular week, if an MP requests an outage that cannot be deferred beyond the weekend, that outage shall be classified as a Forced Outage.

*** An OPO is not applicable in this timeframe.

**** Request shall be evaluated considering Day-Ahead Energy Market and Reserve Adequacy Analysis results.

b. If an MO request results in the forecast of any actions of OP-4 or OP-7, ISO shall attempt to relocate the MO request to an acceptable period in which reliability issues would not be expected to arise. If a request for an OPO results in any actions of OP-4 or OP-7, ISO shall deny the OPO request.

c. With prospective MO or OPO dates identified (that do not affect system reliability), the ISO shall provide the MO or OPO request information to the respective LCC.

d. The LCC shall notify ISO if the MO or OPO request poses a local transmission reliability problem. If it does, ISO shall work with the LCC and the MP to resolve the issue.

e. In an effort to reduce Congestion Costs, ISO shall compare the generator, DRR, or DARD MO or OPO request against approved transmission outage schedules to identify cases where the generator, DRR, or DARD MO or OPO schedules could be adjusted to meet this objective. If a potential schedule adjustment is identified, ISO shall discuss rescheduling with the LCC. The LCC shall coordinate rescheduling with the respective TO and the MP. (Throughout this process, ISO shall work with the respective LCC, as needed, to develop alternative outage schedules.)

f. ISO, coordinating with the respective LCC, shall proceed as follows depending on whether the case involves:

(1) an importing area,

(2) Generators, DRRs, or DARDs or an exporting area involving a single MP, or

(3) an exporting area involving multiple generators, DRRs, or DARDs involving multiple MPs.

i. Importing area

For an importing area, the simultaneous outage of transmission supplying the area along with generators, DRRs, or DARDs within the area can increase Congestion Costs and, in severe cases, jeopardize system reliability. To relieve this, the following actions shall be taken to try to position the transmission and generators, DRRs, or DARDs

MOs or OPOs so that they occur at different times.

- The LCC shall contact the MP for the generators, DRRs, or DARDs to determine if there is additional flexibility in the MO or OPO position.
- The LCC shall contact the TO for additional flexibility in the TO's schedule. (Generator, DRR, or DARD outage information may be discussed with the TO, as needed.)
- If needed, the LCC shall continue to alternately contact the TO and the MP until a determination is made on whether or not activities can be positioned to reduce/eliminate Congestion Costs. [Note: If the above actions are not sufficient to relieve congestion, then ISO shall dispatch generators/DRRs/DARDs in accordance with the congestion management process or change the timing of the transmission outage.]

ii. Generator, DRR, or DARD or exporting area involving a single MP

This scenario involves a transmission outage that would restrict the commitment or dispatch of a generator, DRR, or DARD involving a single MP (i.e., a line leaving a generator, DRR, or DARD station). The following actions shall be taken as soon as possible to try to change or create outage positions so that generator, DRR, or DARD and transmission outages occur simultaneously, thereby relieving the potential locked-in generator, DRR, or DARD.

- The LCC shall contact the MP for the generator, DRR, or DARD to determine if there is additional flexibility for the timing of the generator, DRR, or DARD MO or OPO.
- The LCC shall contact the TO for additional flexibility in the TO's timing of the outage (generator, DRR, or DARD MO or OPO outage information may be discussed with the TO, as needed).
- If the transmission outage involves a radial circuit to a generator, DRR, or DARD, this information may be shared with the MP. Additionally, non-radial transmission outage information may be shared with the MP if the transmission outage solely affects that MP.
- If needed, the LCC shall continue to alternately contact the TO and the generator, DRR, or DARD MP until a determination is made on whether or not activities can be scheduled to reduce/eliminate Congestion Costs.
- The TO may contact the MP directly to facilitate positioning of MOs or OPOs.

iii. Exporting area involving multiple generators, DRRs, or DARDs and multiple MPs

This case involves a transmission outage that would restrict the commitment or dispatch of generators, DRRs, or DARDs within an exporting area with several generators, DRRs, or DARDs involving multiple MPs. The following actions shall be taken to try to change or create outage positions so that generators, DRRs, or DARDs and transmission outages occur simultaneously, thereby relieving the potential locked-in generator, DRR, or DARD.

- The LCC shall contact the applicable MPs, in the order in which MO or OPO requests were received to determine if there is additional flexibility in their generators', DRRs', or DARDs' outage position.
- The LCC shall contact the TO for additional flexibility in its position. (Generator, DRR, or DARD MO or OPO information may be discussed with the TO, as needed.)
- If needed, the LCC shall continue to alternately contact the TO and MPs until a determination is made on whether or not outages may be positioned to reduce/eliminate Congestion Costs.
- If generators, DRRs, or DARDs with MO or OPO requests cannot be repositioned or no MO or OPO requests exist, the LCC shall contact affected MPs to inform them that a transmission outage may result in their generator, DRR, or DARD being restricted and to determine if they desire to coordinate an MO or OPO of their generator, DRR or DARD with the transmission outage.
- If needed, the LCC shall continue to alternately contact the TO and MPs until a determination is made on whether or not outages may be positioned to reduce/eliminate Congestion Costs.

g. Upon agreement among ISO, the relevant LCC, the TO, and the MPs for the generators, DRRs, or DARDs involved, ISO shall:

(1) perform a final analysis to confirm that the New England RCA/BAA-wide and LCC reliability requirements are satisfied and that Congestion Costs have been reduced or eliminated;

(2) notify the MP for the generators, DRRs, or DARDs that the request is either approved as submitted, or approved with modifications in accordance with this OP; and

(3) if applicable, update short-term transmission outage information on the

ISO external website.

2. MO and OPO Requests ISO Reporting

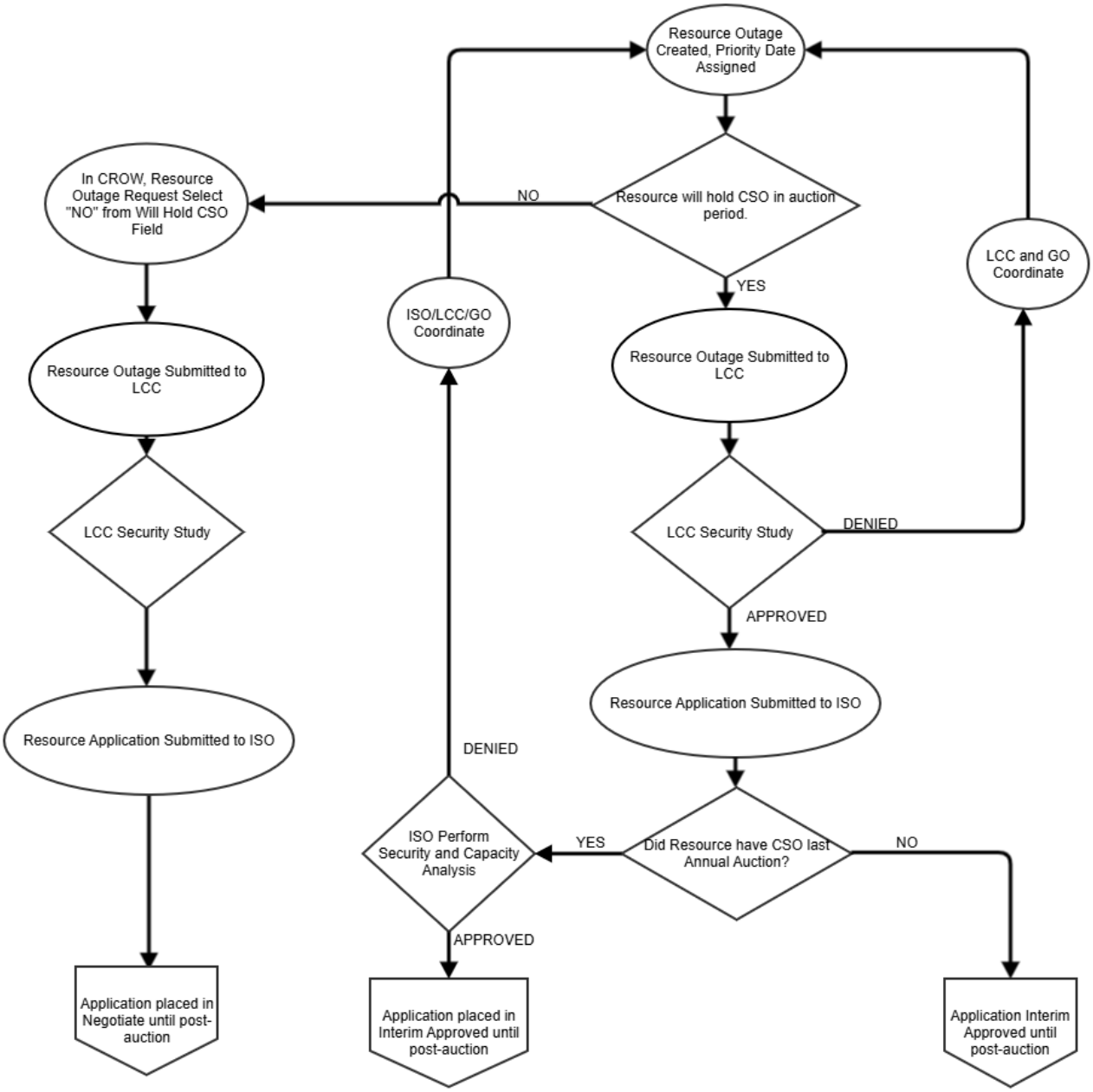
ISO shall notify the submitter of the MO or OPO request of the decision made by ISO, but shall not have an obligation to notify any other person or entity with an ownership or contractual interest in the Resource for which the MO or OPO has been submitted. Notification shall be made through the outage scheduling software and its associated MP interfaces or by email.

D. OUTAGE REQUEST ON NON-CSO RESOURCE ENROLLED IN SCHEDULE 2 CAPACITY COST COMPENSATION PROGRAM

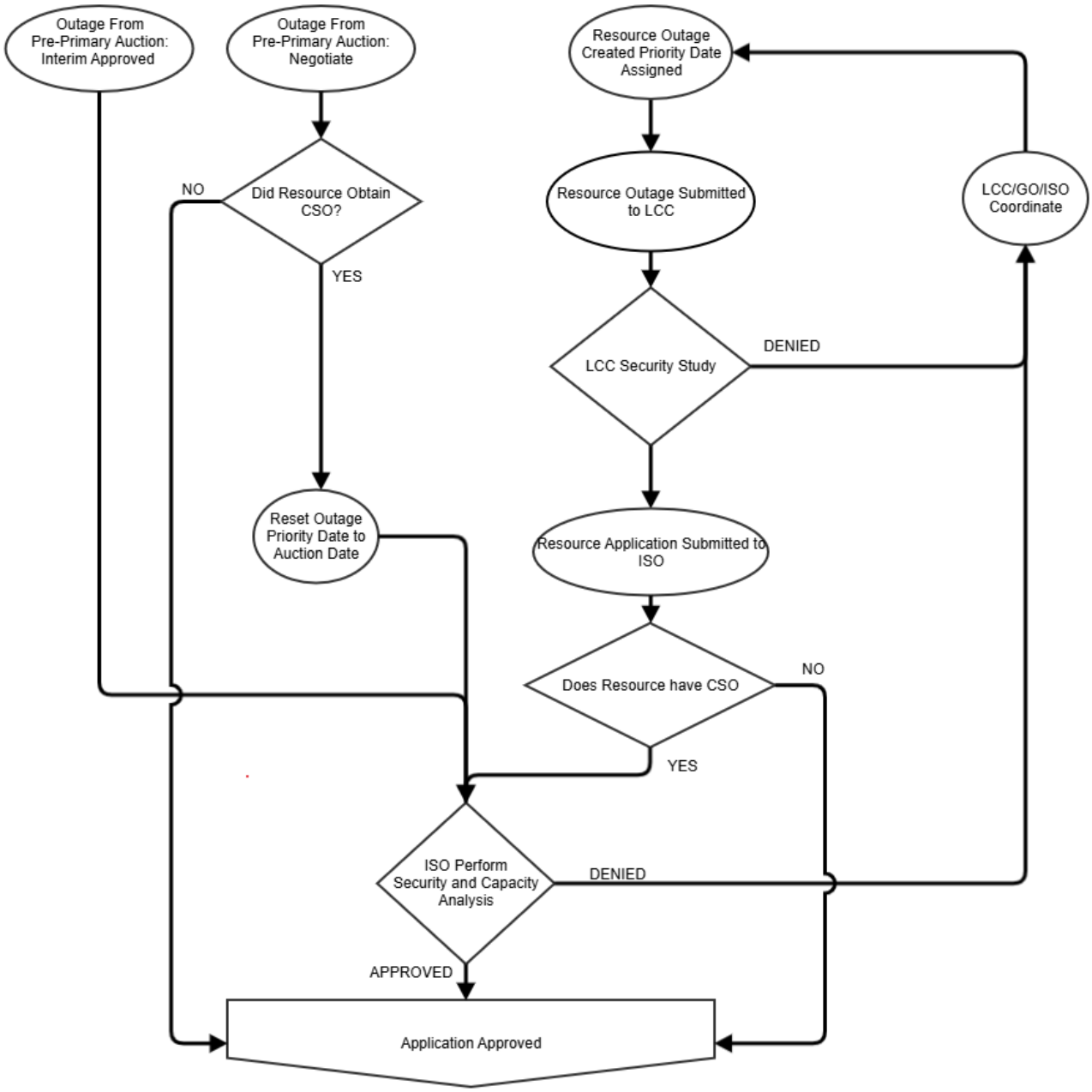
An MP for a Qualified Reactive Resource without a CSO shall submit a PO and MO or OPO request when the associated SCC is reduced by ≥ 5 MW and/or when the Resource becomes unavailable. Such requests shall be subject to ISO and LCC review and approval in accordance with this OP with the following exceptions:

1. There shall be no OCM evaluation performed.
2. Security analyses shall be limited to voltage studies.

Pre-Annual Auction Flowchart



Post-Annual Auction Flowchart



IV. MARKET PARTICIPANT RESPONSIBILITIES

1. Information Requirements

a. The changes made during an outage (such as those described in the following list) may require prior approval from ISO (Planning). If required, the approval from ISO Planning must be obtained before the Resource returns to service. An MP must submit an outage request as soon as practical, but no later than the time frames identified in this procedure for any reactive control equipment, including, but not limited to:

   i. Automatic Voltage Regulators,

   ii. Synchronous Condensers,

   iii. Flexible AC Transmission Systems [ex. Static Synchronous Compensator (STATCOM) or Dynamic Volt-Amp Reactive (DVAR) or Static VAR Compensator (SVC)],

   iv. Power Plant Controllers,

   v. Distributed Control Systems,

   vi. Reactive Control Systems, and

   vii. Power System Stabilizers

b. When submitting a PO, MO or OPO request, an MP shall provide the following information for each request:

   i. “Capacity Resource ID”, only applicable if outage is associated with an Import Capacity Resource.

   ii. For generator/DARD/ATRR: “Asset ID” and “Asset Name”.

   iii. For DRR: “DRR ID” and “DRR Name”.

   iv. MW amount of the physical reduction.

   v. Select Yes or No for “Will Hold CSO”

   vi. Blackstart status during the outage, for blackstart capable Resources only.

   vii. Outage start date and time.

   viii. Outage end date and time.

   ix. Outage reason and description of work to be accomplished during the outage.

   x. Flexibility of the requested outage schedule dates.

   xi. For an MO, whether the outage can be postponed.

c. An MP shall submit a generator PO, MO or OPO request that crosses capability period boundaries as two separate outage requests.

- The summer capability period is comprised of the months June through September.
- The winter capability period is comprised of the months of October through May.

2. Information Submittal Process

Each MP shall submit the required information as follows:

a. PO request:

- Submit a PO request for a generator, electronically through the ISO outage application software.
  - The timestamp for the PO request shall be the time at which the MP last updates the PO request
- When the outage application software is not available, submit a PO request for a generator, DRR, DARD or ATRR by email to generationoutagecoor@iso-ne.com using the standard form [Appendix B to this OP - Outage Request Form (OP-5B)].
  - The timestamp for the PO request will be the time at which the email is received

b. Request for an MO or OPO

- The MP shall submit an MO or OPO request for a Resource, electronically through the ISO outage application software.
  - Except that the MP shall not submit an MO into the ISO outage application software after 0900 hours the day before the start of the outage; a request for an MO made after 0900 hours the day before the start of the MO shall be submitted by contacting the ISO Resource Analyst or ISO Control Room Forecaster.
  - The timestamp of the MO or OPO request shall be the time at which the MP last updates the MO or OPO request.
- The MP for a DRR, DARD or ATRR shall submit an MO or OPO request to the ISO Resource Analyst by telephone at (413) 535-4378 from 0700 hours to 1530 hours or the ISO Control Room Forecaster by telephone at (413) 535-4340 from 1530 hours to 0700 hours by providing the information required by this OP.
  - The timestamp for the MO or OPO request shall be the time at which the phone call is received

3. Changes To Previously Submitted Outage Requests

An MP request to modify a previously submitted PO, MO, or OPO shall follow the same process as described in Section III of this OP. ISO shall accept a change that reduces the scope or duration of the PO, MO, or OPO without impacting the timestamp of the PO, MO, or OPO. ISO shall accept a change that increases the scope or changes the dates of the PO, MO, or OPO such that a new outage evaluation is required as a new PO, MO, or OPO request, which shall be timestamped accordingly.

4. Requesting Implementation Of Outage

Immediately prior to commencing scheduled work, the MP shall obtain ISO Control Room approval for any generator, DRR, DARD, or ATRR PO and MO request. ISO shall not withhold such approval unless the consequences of granting approval would result in a risk of the OP-4 action where a Power Watch is declared (Action 4) or higher, or OP-7 actions, or other serious reliability risk. ISO shall inform the respective LCC when the generator, DRR, or DARD is offline and out-of-service. For a DRR, a request for implementation of a PO, MO or OPO shall be entered in eMarket as the DRR's bid parameters reflecting the implemented PO, MO or OPO.

5. Notification of an FO

If an FO is declared, the MP shall notify the ISO Control Room Generation Operator with an appropriate redeclaration for the current Operating Day. Additionally, the ISO Resource Analyst shall be contacted at (413) 535-4378 from 0700 to 1530, or the ISO Control Room Forecaster by telephone at (413) 535-4340 from 1530 to 0700, for the purpose of providing an expected FO return date, and to provide any necessary redeclaration for any future days for which the bidding deadline has passed. These notifications shall be made as soon as practicable.

6. Notifying ISO Of Return-To-Service

An MP shall notify ISO of the completion of the PO, MO, OPO, or FO by releasing the generator, DRR, DARD, or ATRR to ISO for dispatch. If the MP does not expect to return the generator, DRR, DARD, or ATRR to service on the Planned End Date indicated on the PO, MO, OPO, or FO request, then the MP shall notify ISO as soon as possible of the new expected return date for the generator, DRR, DARD, or ATRR. This may be captured in a new PO, MO, or OPO request, or require the extension of the current FO request. For a DRR, the notification of return-to-service after the PO, MO, or OPO has been completed shall be entered in eMarket via the DRR's bid parameters reflecting their availability.

ATTACHMENTS:

OP-5 Appendix A - Operable Capacity Calculations

OP-5 Appendix B - Outage Request Form

OP-5 Appendix C - Retired (09/17/12)

OP-5 Appendix D - Retired (06/01/18)

OP-5 REVISION HISTORY

Document History (This Document History documents action taken on the equivalent NEPOOL Procedure prior to the RTO Operations Date as well revisions made to the ISO New England Procedure subsequent to the RTO Operations Date.)

Rev. No.	Date	Reason
- -	02/04/21	For previous revision history, refer to Rev 20 available through Ask ISO
Rev 21	02/04/21	Biennial review completed by procedure owner Added reference for OP-23; Included definition of RCAR; Included Response Time for RCAR in Response Time Table; Clarified information requirements for MP in regards to reactive control equipment
Rev 22	05/06/21	Globally changed AMS publication from daily to monthly; Modified language for Resolution of a Reliability Issue to align with daily AMS publication; Removed reference to annual CSO bilaterals;
Rev 23	01/12/23	Biennial review completed by procedure owner; Updated Maintenance Outage and Overrun Planned Outage definitions; Removed transmission outage information revision applicability; Updated Response Time Table, clarified responsibilities for response time when start date of application is less than 6 days, and added clarifying information of RCAR and Force outage; Updated Market Participant Responsibilities Information Requirements; Made minor grammatical edits; Updated Generator to Resource when term is utilized as a general identification; Removed Generator from Qualified Generator Reactive Resource to align with OP-23.
Rev 24	01/09/25	Biennial review completed by Procedure Owner; Made minor grammatical edits; Included language for outage requests relating to fish passage, rafting conditions, and water release to Section III.A.3.; Removed “Publish the PO in the next update of the AMS” from Section III.B.1.e. as this is accomplished upon outage request submittal; Globally changed “Generation Coordinator” to “Resource Analyst”; Renamed Section IV.5. from “Notifying FO” to “Notification of an FO” for clarity; Added clarification to Section IV.6. to include FOs and outages that will not end on their original Planned End date; Added clarification to the first * in the Response Time Table.
Rev 24.1	07/10/25	Periodic review completed by the procedure owner; Updated the email link for OP-5 Appendix B submittals in Section IV.2; Changed Long-Term to Resource under Annual Maintenance Schedule and ISO Reporting in order to reflect change in Outage Coordination organizational structure.

Rev. No.	Date	Reason
Rev 25	06/01/26	Periodic review completed by the procedure owner; Included the Transmission Operating Agreement in the References Section; Globally incorporated resource outage coordination changes to support prompt auction structure; Combined generators and intermittent power resources in Section I.A.a. and changed requirement for outage submission from “any reduction to CSO” to “≥ 5MW reduction to SCC and/or resource becomes unavailable” based on prompt design impacts; Changed DRR outage submission requirement to reduction in SCC ≥ 5MW in Section I.A.b.; Included verbiage for DARD outage submission in Section I.A.c. for clarity; Clarified outage requirements for Import Capacity Resources in Section I.A.e; Altered process in Section I.C. for non-CSO impacts to align with prompt design structure in outage coordination; Included verbiage in Section I.D. for Local Area Facility to parallel preexisting language in OP3; Moved STOCM, STLOCM, and Sub-Area from “Outage Types” to “Definitions” in Section II.; Simplified language of an MO, redefined OPO, and included an INFO outage definition in Section II.; Defined each Outage Status for resource applications in Section II.; Included an ISO evaluation principle to determine if outage requests are associated with a capacity resource in Section III.A.1.; Added verbiage in Section III.A.2. to indicate that annual and monthly reliability reviews will cease once the first prompt auction occurs; Added clarifying language to Section III.A.3. Outage Approval Principles to align with prompt auction structure; Included language in Section III.B. to support prompt auction structure; Simplified the reliability resolution process in Section III.B.3.; Added ISO response times for resource outages submitted ≥15 days in advance of start to the table in Section III.C.1.; Included pre and post annual auction flowcharts to Section III.D.; Added a step for MPs to indicate yes or no for “Will Hold CSO” in Section IV.1.b.; Deleted the Outage Notification process in Section IV.2.c. based on outage notification change to SCC reduction from preexisting CSO reduction requirement; Made minor editorial changes throughout the entire document.