

OP-21: Operational Surveys, Energy Forecasting & Reporting, and Actions During an Energy Emergency

Revision to OP-21 to clarify processes and update survey questions for more detail surrounding cold weather standards and emissions limitations



Mike Knowland

MANAGER – OPERATIONS FORECAST AND SCHEDULING



Operating Procedure Redline Overview

Proposed Effective Date: February 2025

- The ISO is proposing to revise OP-21 to streamline the surveys and associated processes
- The revisions include:
 - New and updated questions on the surveys designed to streamline the process with more relevant questions
 - Clarification to the overall process surrounding the 21-Day Energy Assessment and declaring Energy Alerts and Energy Emergencies
 - Conforming terminology changes
- The categories of proposed revisions are detailed on the following slide



Categories of Proposed OP-21 Changes

1. Terminology Changes
2. Clarifications and Process Updates
3. Focus on Emissions Limitations and Permitting Restrictions
4. Generator Fuel and Emissions Survey
5. Generator Winter Readiness Survey



Proposed OP-21 Changes – Summary

- Updated Generator Fuel and Emissions Survey process to:
 1. Add more detail on emissions or other permitting restrictions
 2. Remove coal inventory questions
 3. Change the frequency from weekly to bi-weekly in March
- Updated Generator Winter Readiness Survey questions to add NERC-defined Extreme Cold Weather Temperature (ECWT) from recently updated EOP-012 and additional environmental or permitting restrictions
 - [NERC Standard EOP-012: Extreme Cold Weather Preparedness and Operations](#)
- Other minor clarifying language changes

Summary of Feedback from December RC

- Additional clarity around the applicability of environmental/emissions and restrictions questions
 - Request for clarity around which Generators the question applies to
- More specific categorization of the type of information being requested as part of environmental/emissions limitations
 - Request to draw contrast between physical and administrative limitations
- Additional details on the applicability and calculation of the NERC defined term Extreme Cold Weather Temperature (ECWT)



Updates to OP-21 to Address Stakeholder Feedback

- All incremental revisions are minor and do not change the intent of the survey questions being asked, clarifying the following:
 - Inventory questions are applicable only to fuel oil Generators
 - Environmental/emissions questions are applicable to coal, fuel oil, and natural gas Generators and only apply to licensing and permitting
 - For the winter readiness survey, the ECWT question is only applicable to Generators that are subject to NERC Reliability Standards



OP-21: Incremental Redlines

Section	Procedure Change	Reason for Change
IV	<p>2. <u>Fuel oil Inventory</u></p> <p>2.1. <u>What is the station's</u> maximum <u>on-site</u> usable storage capacity, in gallons.</p> <p>2.2. <u>What is the station's</u> current <u>on-site</u> usable storage inventory, in gallons.</p>	Clarify the applicability of the specific questions in the Generator Fuel and Emissions survey and the Generator Winter Readiness survey
IV	<p>5. <u>Coal, Fuel Oil, and Natural Gas Generator</u> Environmental/Emissions <u>Licensing and Permitting</u> Information</p>	
V	<p>1. <u>For Generators subject to NERC Reliability Standards, what is the calculated Extreme Cold Weather Temperature (ECWT) for this Generator in accordance with NERC Standard EOP-012?</u></p>	



OP-21: Incremental Redlines

Section	Procedure Change	Reason for Change
I	<p>I. INTRODUCTION</p> <p>This Operating Procedure (OP) documents the processes, and establishes the associated requirements for ISO New England Inc. (ISO) to:</p> <ol style="list-style-type: none">1. Collect fuel availability and environmental limitation information for each <u>Generator Asset ("Generator") fueled by coal, oil and/or natural-gas, and any other Resources that ISO determines to be necessary from each respective Lead Market Participant (Lead MP);</u>	Inadvertent removal has been reverted to original. Coal stations will continue to be asked about environmental limitation information, but not inventory



Conclusion

- Updates to OP-21 to be more reflective of current system operations and provide the ISO with more relevant information
- Survey process-updates for enhanced relevance and streamlined process
- Changes to the overall process for added clarity to the language surrounding Energy Alerts and Energy Emergencies
- Proposed effective date in February following stakeholder review and approval



Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
Reliability Committee December 17, 2024	Initial presentation and questions
Reliability Committee January 22, 2025	Respond to any remaining questions and vote
Participants Committee February 6, 2025	Vote

Questions

Mike Knowland

TKNOWLAND@ISO-NE.COM



APPENDIX

~~Reference of changes to~~ OP-21 ~~Revisions that were~~ Presented
at ~~previous~~ December Reliability Committee Meeting



OP-21: (1) Terminology Changes

Section	Procedure Change	Reason for Change
I	<p>1. Collect fuel availability and environmental limitation information for each <u>Generator Asset ("Generator") fueled by coal, oil, and/or natural-gas-fired</u>, and any other Resources that ISO determines to be necessary <u>[referred-to-as "applicable Resource(s)" for the purposes of this OP]</u> from each respective Lead Market Participant (Lead MP);</p> <p>This OP also documents the responsibilities of Lead MPs of applicable <u>Resources Generators</u> for completion of periodic surveys, related communications and reporting</p>	Terminology changes to better align procedure language; does not change the intent of the Operating Procedure
I	<p>3. To alert regional stakeholders of actual or anticipated near-term <u>reserve deficiency or energy deficiency-shortfall</u> conditions such that stakeholders with Resources in short supply of fuel, or with potential environmental limitations, can take action to replenish fuel supplies and/or <u>take action to</u> mitigate environmental limitations;</p>	

OP-21: (1) Terminology Changes (cont'd)

Section	Procedure Change	Reason for Change
II.B	<ul style="list-style-type: none">Routine monitoring of interstate natural gas pipeline EBBs notices for indications of potential pipeline curtailments and/or restrictions. If there are indications of possible curtailments or restrictions, ISO is responsible for contacting the Lead MP through its DE for each applicable gas-fueled generator and seeking confirmation that each applicable gas-fueled generator has sufficient gas scheduled to its meter(s) to support its scheduled commitment for the <u>current or</u> next Operating Day.	Terminology changes to better align procedure language; does not change the intent of the Operating Procedure
II.B	<ul style="list-style-type: none">Reviewing natural gas <u>nominations</u>s<u>scheduled quantities</u>, via each interstate natural gas pipeline EBB, and contacting the applicable Lead MP through its DE for its respective gas-fueled generator that may indicate a deficient natural gas supply for the current or next Operating Day.	

OP-21: (2) Clarifications and Process Updates

Section	Procedure Change	Reason for Change
II.A	<p>ISO shall declare an Energy Alert, and take actions as described in Section III.B of this OP, when:</p> <ul style="list-style-type: none">o FEEA2 or FEEA3 is forecasted to occur in at least 1 hour on 1two or more consecutive days in days 6 through 21 of the 21-day energy assessment, oro Any other reason(s) for which the ISO Chief Operating Officer (COO), or designee, determines that the actions described in Section III.B of this OP may mitigate the impact of an actual or forecasted energy deficiencyshortfall. <p>ISO shall declare an Energy Emergency and take actions as described in Section III.C of this OP, when:</p> <ul style="list-style-type: none">o FEEA2 or FEEA3 is forecasted to occur in at least 1 hour on 1two or more consecutive days in days 1 through 5 of the 21-day energy assessment, oro Shedding of firm load under OP-7 is occurring or is anticipated to occur due to an actual energy deficiencyshortfall resulting from a sustained shortage of fuel availability or deliverability to, or sustained environmental limitations on, some or several of New England Resources, oro Any other reason(s) for which the ISO COO, or designee, determines that the actions described in Section III.C of this OP may mitigate the impact of an actual or forecasted energy deficiencyshortfall.	<p>Two or more consecutive days to define an Energy Alert or an Energy Emergency to alleviate confusion caused by original language</p> <p>Terminology changes to better align procedure language with other ISO efforts that do not change the intent of the Operating Procedure</p>

OP-21: (2) Clarifications and Process Updates (cont'd)

Section	Procedure Change	Reason for Change
III.A	<div>Data Collection During Normal Conditions, on the following frequency basis, ISO shall distribute a Generator Fuel and Emissions Survey to the Lead MPs of applicable Resources<u>Generators</u>:<ul style="list-style-type: none">Weekly, in the months of December through March<u>February</u> (i.e. winter months), andBi-weekly, in the months of April<u>March</u> through November (i.e., non-winter months),</div>	Bi-weekly Survey in March <ul style="list-style-type: none">The ISO may continue weekly surveys and assessments, but will default to bi-weekly



OP-21: (3) Updates on Emissions Limitations and Permitting Restrictions

Section	Procedure Change	Reason for Change
II.B	<p>Responsibilities of each Lead MP through its DE:</p> <ul style="list-style-type: none">Communicating to ISO, when such change in conditions is known, the available information regarding anticipated or actual reductions in generator availability, including but not limited to the ability to procure fuel and physical limitations, <u>or permitting restrictions</u> that could reduce generator output or availability for the Operating Day.	Several changes focused on emissions and permitting limitations; see later slides



OP-21: (4) Generator Fuel and Emissions Survey

- Optimized surveys to improve efficiency and user experience (*i.e.*, faster response times in Salesforce)
 - Significant rearrangement of the survey questions within the OP to better align with the online survey form
 - Specific revisions available in redline document
- Removed inventory questions for coal stations
- Enhanced modeling capabilities via inclusion of more detailed information on environmental and emissions constraints or limitations Specifically asking for limitations in terms of hours or MWh at Seasonal Claimed Capability (SCC) rather than assuming conversion from other limitations
 - Now separately asking about daily, seasonal (*e.g.*, ozone), and longer-term limitations
- Remaining survey questions remain consistent with current effective version with non-substantive clarifications and language updates

OP-21: (4) Generator Fuel and Emissions Survey (cont'd)

Section	Procedure Change	Reason for Change
IV.B	<p><u>5.2. Would emission limit exemptions or waivers increase the station's maximum generation ability, including return from outage?</u></p> <p><u>i. Does the station currently require an emissions waiver to operate, or anticipate requiring one within the next 21 days? If yes, please describe the details of the waiver, to the best of your ability.</u></p> <p><u>iii. Is the limitation automatically relaxed under specific conditions (e.g., ISO-NE declares an Energy Emergency or Energy Alert)? If yes, please describe the conditions under which limitations are relaxed.</u></p>	<p>Same basic questions – ISO is not expecting changes to the responses provided in previous iterations of the surveys</p> <p>One additional question that provides a conduit for Generators to communicate-the need for an emissions waiver to the ISO</p>

OP-21: (5) Generator Winter Readiness Survey

Section	Procedure Change	Reason for Change
V.B	<p>B. SURVEY QUESTIONS</p> <p>ISO shall include the following questions on the annual Generator Winter Readiness Survey. ISO may modify the survey questions, as necessary, if it determines that additional information is needed to accomplish the objectives of the Generator Winter Readiness Survey process, as described above.</p> <p><u>1. What is the calculated Extreme Cold Weather Temperature (ECWT) for this Generator in accordance with NERC Standard EOP-012?</u></p> <p><u>5. Is there an identified environmental constraint or limitation on this Generator during periods of cold weather operations? If yes, please provide additional clarifying information to describe the environmental constraint or limitation.</u></p>	Updated to reflect new NERC definition of ECWT and further expand ISO's awareness of environmental constraints or limitations