ISO newordland	CROP.10005 Implement Energy Emergency Remedial Actions		
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Table of Contents

Section 1 : Actions for an Energy Alert	3
Section 2 : Actions for an Energy Emergency	4
Section 3 : Actions for cancellation of an Energy Alert or Energy Emergency	

References

- 1. OP 4 Action During a Capacity Deficiency
- 2. OP 7 Action In An Emergency
- 3. OP 21 Action During An Energy Emergency
- 4. M/LCC 2 Abnormal Conditions Alert
- 5. SOP-RTMKTS.0120.0025 Implement Energy Emergency Actions
- 6. CROP.10001 Load Shed
- 7. CROP.10002 Implement Capacity Remedial Actions
- 8. CROP.25011 Implement Operations During Abnormal Conditions
- 9. CROP.50001 Reporting Procedure

Procedure Background

Energy Emergencies may occur at any time as a result of sustained national or regional shortages in fuel availability or deliverability to the New England's resources. Such shortages of fuel may come in many forms, including, but not limited to; severe drought, interruption to availability or transportation of natural gas, oil, or coal. Additionally, a sustained environmental limitation on some, or several, of New England's resources may also contribute to an Energy Emergency.

ISO New England (ISO) periodically distributes the OP-21, Generator Fuel and Emissions Survey questions to Lead Market Participants (Lead MPs) of applicable resources. The purpose of the Generator Fuel and Emissions Survey is to collect data that allows ISO to monitor fuel inventory levels, fuel replenishment plans, and actual or anticipated environmental limitations on resources within New England. Additionally, ISO utilizes data submitted on the Generator Fuel and Emissions Survey to perform periodic Energy Emergency forecasting and reporting.

ISO performs Energy Emergency forecasting and reporting based on available data that includes the information received from Lead MPs through Generator Fuel and Emissions Surveys. Energy Emergency forecasting and reporting is performed at the periodicity specified in OP-21. ISO performs Energy Emergency forecasting and reporting by using an hourly 21-day energy assessment, and comparing the results of that assessment with Energy Emergency forecast alert thresholds in order to identify and communicate potential reliability issues to regional stakeholders.

The Energy Emergency forecast alert thresholds are as follows:

- Forecast MLCC-2 (FMLCC2) indicates that available resources during any hour of the Operating Day are forecasted to be less than 200 MW above those required to meet Operating Reserve requirements.
- Forecast Energy Emergency Alert Level 1 (FEEA1) indicates that available resources during any hour of the Operating Day are forecasted to be less than those required to meet Operating Reserve requirements, and that implementation of OP-4 Actions 1 through 5 is being forecasted.
- Forecast Energy Emergency Alert Level 2 (FEEA2) indicates that available resources during any hour of the Operating Day are forecasted to be less than those required to meet Operating Reserve requirements, and that implementation of OP-4 Actions 6 through 11 is being forecasted.
- Forecast Energy Emergency Alert Level 3 (FEEA3) indicates that available resources during any hour of the
 Operating Day are forecasted to be insufficient to serve firm load requirements, and implementation of firm load
 shedding under OP-7 is being forecasted.

150 new orgland	CROP.10005 Implement Energy Emergency Remedial Actions		
© 2023	Approved By: Director, Operations	Effective Date: 06/27/2022	
Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024	

ISO declares an Energy Alert, and takes actions as described in OP-21, when either of the following conditions exist:

- FEEA2 or FEEA3 is forecasted to occur in at least 1 hour on 1 or more consecutive days in days 6 through 21 of the 21-day energy assessment, or
- Any other reason(s) that the ISO Chief Operating Officer (COO), or designee, determines that the actions described in Section III.B of OP-21 may mitigate the impact of an actual or forecasted energy deficiency

ISO declares an Energy Emergency, and takes actions as described in OP-21, when either of the following conditions exist:

- FEEA2 or FEEA3 is forecasted to occur in at least 1 hour on 1 or more consecutive days in days 1 through 5 of the 21day energy assessment, or
- Shedding of firm load under OP-7 is occurring or is anticipated to occur due to an actual energy deficiency resulting
 from a sustained shortage of fuel availability or deliverability to, or sustained environmental limitations on, some or
 several of New England's resources, or
- Any other reason(s) that the ISO Chief Operating Officer (COO), or designee, determines that the actions described in Section III.C of OP-21 may mitigate the impact of an actual or forecasted energy deficiency.

For the purposes of OP-21, ISO declares Normal Conditions any time when neither an Energy Alert nor an Energy Emergency has been declared.

Common Procedure Information

- A. Any ISO-NE qualified Control Room Operator has the authority to take actions required to comply with NERC Reliability Standards. A qualified ISO-NE Control Room Operator has met the following requirements:
 - 1. Have and maintain a NERC certification at the RC level (per R.1 of PER-003-2)
 - 2. Applicable Requirements of PER-005-2
 - 3. Approved to cover a Control Room Operator shift position by the Manager, Control Room Operations
 - 4. Is proficient at the current qualified level.
- B. Real time operation is defined as the current hour and the current hour plus one.
- C. Future hours are those beyond real time operation.
- D. All verbal communications with Local Control Centers (LCC), neighboring Reliability Coordinators/Balancing Authorities (RC/BA), Designated Entities (DE), Demand Designated Entities (DDE) and/or SCADA centers shall be made on recorded phone lines unless otherwise noted.
- E. For all communications:
 - 1. Use the Basic Protocol for All Operational Communications as prescribed in M/LCC 13
 - 2. Use 'ISO New England' or 'New England'. Refrain from using 'ISO'.
 - 3. Use Asset ID's when communicating with DE/DDEs.
 - 4. Use three-part communication in all situations where its use will enhance communications.
- F. Primary responsibilities are stated for each step within the procedure, but any ISO Control Room Operator qualified at that position or higher can perform the step. The Primary Responsibility may be delegated to an Operator in a lower qualified position, but the responsibility for its completion remains with the identified individual.
- G. The use of "ensure" within this document means that a verification has been performed and if the item is not correct, corrective actions will be performed.

1SO new orgland	CROP.10005 Implement Energy Emergency Remedial Actions		
© 2023	Approved By: Director, Operations	Effective Date: 06/27/2022	
Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024	

Procedure

Condition(s) to perform this section:

- An Energy Alert has been declared based on the results of the Energy Emergency forecast and reporting process, or
- An Energy Alert has been declared at the discretion of the ISO Chief Operating Officer (COO) or designee, based on a determination that the actions described in OP-21 may mitigate the impact of an actual or forecasted energy deficiency

Section 1 : Actions for an Energy Alert

Notes

- Declaration of an Energy Alert shall not be performed without approval of the ISO Chief Operating Officer, or designee.
- ISO-NE Control Room System Operators shall utilize the actions of OP-4 and/or OP-7 to manage Capacity Deficiencies during Real-Time operations.
- To the extent possible, Energy Alerts will be declared on a daily boundary.

Step 1.1 Primary Responsibility: Operations Shift Supervisor

Log the implementation of an Energy Alert.

Instructions

- ☐ Use log entry: > EMERGENCY PROCEDURE EVENTS > OP 21 > Energy Alert > Declared [WEB]
- ☐ Enter the following:
 - ☐ Start Date and Time

Notes

This log entry will create a posting of Energy Alert to the ISO-NE website calendar and update the Power System Status, the posting may take up to five minutes.

Step 1.2 Primary Responsibility: Any Control Room Operator

Initiate an "All LCCs" call and verbally notify each LCC that an Energy Alert has been declared.

Step 1.2.1 Primary Responsibility: Any Control Room Operator

Update the Energy Alert implementation log entry for the completion of the LCC notifications.

Step 1.3 Primary Responsibility: Senior System Operator

Verbally notify the NPCC RC/BAs that an Energy Alert has been declared.

Sten 1.3.1 Primary Responsibility: Senior System Operator

Update the Energy Alert implementation log entry for the completion of the NPCC RC/BA notifications.

Step 1.4 Primary Responsibility: Senior System Operator

Use ENS to perform notifications of the Energy Alert.

Notes

Energy Alert ENS notification will go to ISO Management and Staff and DEs and DDEs

Step 1.5 Primary Responsibility: Control Room Manager

Notify External Affairs and Corporate Communications for state agency reporting.

1SO new organd	CROP.10005 Implement Energy Emergency Remedial Actions		
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Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024	

Condition(s) to perform this section:

- An Energy Emergency has been declared based on the results of the Energy Emergency forecast and reporting process, or
- An Energy Emergency has been declared due to actual or anticipated shedding of firm load under OP-7 due to an
 actual energy deficiency resulting from a sustained shortage of fuel availability or deliverability to, or sustained
 environmental limitations on, some or several of New England's resource, or
- An Energy Emergency has been declared at the discretion of the ISO COO, or designee, based on a determination that the actions described in OP-21 may mitigate the impact of an actual or forecasted energy deficiency.

Section 2 : Actions for an Energy Emergency

Notes

- Declaration of an Energy Emergency shall not be performed without approval of the ISO COO (or designee).
- ISO-NE Control Room System Operators shall utilize the actions of OP-4 and/or OP-7 to manage Capacity Deficiencies during Real-Time operations.
- To the extent possible, Energy Emergencies will be declared on a daily boundary.

Step 2.1 Primary Responsibility: Operations Shift Supervisor

Log the implementation of an Energy Emergency.

Instructions

- ☐ Use log entry: > EMERGENCY PROCEDURE EVENTS > OP 21 > Energy Emergency > Declared [WEB]
- ☐ Enter the following:
 - ☐ Start Date and Time

Step 2.2 Primary Responsibility: Any Control Room Operator

Initiate an "All LCCs" call and verbally notify each LCC that an Energy Emergency has been declared.

Sten 2.2.1 Primary Responsibility: Any Control Room Operator

Update the Energy Emergency implementation log entry for the completion of the LCC notifications.

Step 2.3 Primary Responsibility: Senior System Operator

Verbally notify the NPCC RC/BAs that an Energy Emergency has been declared.

Step 2.3.1 Primary Responsibility: Senior System Operator

Update the Energy Emergency implementation log entry for the completion of the NPCC RC/BA notifications.

Step 2.4 Primary Responsibility: Senior System Operator

Use ENS to perform notifications of the Energy Emergency.

Notes

Energy Emergency ENS notification will go to ISO Management and Staff, and DEs and DDEs

180 new organd	CROP.10005 Implement Energy Emergency Remedial Actions		
© 2023	Approved By: Director, Operations	Effective Date: 06/27/2022	
Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024	

Step 2.5 Primary Responsibility: Operations Shift Supervisor

If there is a fuel in short supply which is contributing to the Energy Emergency, instruct the TSO Administrator or the Forecaster to contact each dual fuel generator that is scheduled to operate and determine if the generator will voluntarily switch to operation using the fuel source that is NOT in short supply.

Notes

The TSO Administrator position is not staffed 24/7 therefore the Forecaster will perform the call to the DE when the TSO is unavailable.

Step 2.6 Primary Responsibility: Operations Shift Supervisor

Perform "Fuel Supply emergencies that could impact electrical power system adequacy or reliability" of CROP.50001 Reporting Procedure.

Step 2.7 Primary Responsibility: Operations Shift Supervisor

Make an RCIS posting for implementation of an Energy Emergency stating that "ISO-New England is implementing Energy Emergency Actions" in the Free Form category.

Instructions

- ☐ Select ONLY the following in the "Send to" field:
 - Regions
 - ☐ Reliability Coordinators

Step 2.8 Primary Responsibility: Control Room Manager

Notify External Affairs and Corporate Communications for state agency reporting.

Step 2.9 Primary Responsibility: Operations Shift Supervisor

Implement M/LCC 2 Abnormal Conditions Alert in accordance with CROP.25011 Implement Operations During Abnormal Conditions.

Step 2.10 Primary Responsibility: Operations Shift Supervisor

As necessary, implement actions of OP-4, excluding Action 11, in accordance with CROP.10002 Implement Capacity Remedial Actions, to provide relief from the Energy Emergency.

Step 2.11 Primary Responsibility: Operations Shift Supervisor

If the above steps do not result in the necessary relief from the Energy Emergency, implement OP-4 Action 11, in accordance with CROP.10002 Implement Capacity Remedial Actions, to provide relief from the Energy Emergency.

Step 2.12 Primary Responsibility: Operations Shift Supervisor

If the above steps do not result in the necessary relief from the Energy Emergency, implement ISO New England Operating Procedure No. 7 Action in an Emergency (OP-7), in accordance with CROP.10001 Load Shed, to provide relief from the Energy Emergency.

1SO new orgland	CROP.10005 Implement Energy Emergency Remedial Actions		
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Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024	

Condition(s) to perform this section:

• An Energy Alert or an Energy Emergency has been cancelled

Section 3: Actions for cancellation of an Energy Alert or Energy Emergency

Notes

To the extent possible, Energy Alerts and Energy Emergencies will be cancelled on a daily boundary.

Step 3.1 Primary Responsibility: Operations Shift Supervisor

Condition(s) to perform this step:

• OP-7 actions have been implemented to provide relief from the Energy Emergency

Cancel OP-7 actions in accordance with CROP.10001 Load Shed.

Step 3.2 Primary Responsibility: Operations Shift Supervisor

Condition(s) to perform this step:

• OP-4 actions have been implemented to provide relief from the Energy Emergency

Cancel OP-4 actions in accordance with CROP.10002 Implement Capacity Remedial Actions.

Step 3.3 Primary Responsibility: Operations Shift Supervisor

Condition(s) to perform this step:

MLCC-2 has been implemented to provide relief from the Energy Emergency

Cancel MLCC-2 in accordance with CROP.25011 Implement Operations During Abnormal Conditions.

Step 3.4 Primary Responsibility: Operations Shift Supervisor

Log the cancellation of the Energy Alert or Energy Emergency.

Instructions

- ☐ Use log entry: > EMERGENCY PROCEDURE EVENTS > OP 21 > Energy Alert > Cancelled [WEB], or
- ☐ Use log entry: > EMERGENCY PROCEDURE EVENTS > OP 21 > Energy Emergency > Cancelled [WEB]
- ☐ Enter the following:
 - ☐ End Time

Notes

This log entry will terminate the posting of Energy Alert or Energy Emergency to the ISO-NE website calendar and update the Power System Status, the posting may take up to five minutes.

Step 3.5 Primary Responsibility: Any Control Room Operator

Initiate an "All LCCs" call and verbally notify each LCC that the Energy Alert or Energy Emergency has been cancelled.

Step 3.5.1 Primary Responsibility: Any Control Room Operator

Update the applicable log entry for the completion of the LCC notifications.

1SO now organd	CROP.10005 Implement Energy Emergency Remedial Actions		
© 2023	Approved By: Director, Operations	Effective Date: 06/27/2022	
Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024	

Step 3.6 Primary Responsibility: Senior System Operator

Verbally notify the NPCC RC/BAs that an Energy Alert or Energy Emergency has been cancelled.

Step 3.6.1 Primary Responsibility: Senior System Operator

Update the Energy Emergency implementation log entry for the completion of the NPCC RC/BA notifications.

Step 3.7 Primary Responsibility: Senior System Operator

Use ENS to perform notifications of the cancellation of Energy Alert or Energy Emergency.

Notes

ENS notification will go to: ISO Management and Staff, DEs and DDEs

Step 3.8 Primary Responsibility: Operations Shift Supervisor

Condition(s) to perform this step:

• An Energy Emergency is being cancelled

Make an RCIS posting for cancellation of the Energy Emergency.

Instructions

- □ Select <u>ONLY</u> the following in the "Send to" field:
 - ☐ Regions
 - ☐ Reliability Coordinators

180 now organd	CROP.10005 Implement Energy Eme	ergency Remedial Actions
© 2023	Approved By: Director, Operations	Effective Date: 06/27/2022
Rev #7	Procedure Owner: Manager, Control Room Operations	Valid Through: 06/27/2024

Revision History

Rev. No.	Date (MM/DD/YY)	Reason	Contact
0	10/03/18	Initial issue of this CROP	Steven Gould
1	11/06/19	Updated a Condition to Enter the procedure Evaluated Notes and Instructions	Steven Gould
2	12/10/19	Administrative corrections	Steven Gould
3	10/22/20	Added RCIS Instruction to Steps 2.7 and 3.8	Steven Gould
4	05/24/21	Updated References, Updated Step 2.6	Steven Gould
5	12/07/21	Added steps in section 1 and 2 to contact External Affairs and Corporate Communications. Updated common procedure information.	Steven Gould
6	05/11/22	Updated Background Information based on the retirement of OP21 Appendix – A; Updated Section 1 for position of individual declaring Energy Alert to align with OP21.	Jonathan Gravelin
7	06/27/23	Updated Step 2.5 and added a Note; Removed standard for completion in Steps 1.2, 1.3, 2.2, 2.3, 3.5 & 3.6 as these are not IAW the defined Operating Emergencies of MLCC13 where 3 part communication is required, this is a best operating practice.	Jonathan Gravelin