

ISO New England Operating Procedure No. 21

Action During an Energy Emergency

Effective Date: June 1, 2010

Revision No. 2

ISO New England Operating Procedure No. 21 - Action During An Energy Emergency

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References:

NPCC Operating Reserve Criteria A-6

ISO New England Operating Procedure No. 4 – Action During a Capacity Deficiency (OP4)

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

ISO New England Operating Procedure No. 10

Emergency Incident and Disturbance Notifications (OP10)

Master/Local Control Center Procedure No. 2 - Abnormal Conditions Alert (M/LCC 2)

Local Control Center Instructions:

CONVEX: None

MAINE: None

NEW HAMPSHIRE: None

REMVEC: None

VELCO: None

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Appendix A - Fuel Survey Form

PART I - INTRODUCTION

This Procedure establishes criteria and guides for actions in anticipation of and during energy emergencies as directed by the ISO and as implemented by the ISO and the Local Control Centers. Energy emergencies may occur as a result of sustained national or regional shortages in fuel availability or deliverability to the New England region's generation 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, liquefied natural gas (LNG), oil, or coal. If the impact of the fuel shortage is projected to result in the loss of operable generating capability that would prevent the ISO from meeting system load and ten minute operating reserve requirements on four or more consecutive days, such conditions will be considered an "Energy Emergency." In response to a projected Energy Emergency, the ISO must take action to commit, schedule, and dispatch the system in such a way as to preserve stored fuel resources in the region to minimize the loss of operable generating capability due to fuel shortages.

Energy Emergencies are envisioned to last longer than capacity deficiencies, which are managed through ISO Operating Procedure No. 4 – Actions During a Capacity Deficiency (OP 4) and, under extreme circumstances, through ISO Operating Procedure No. 7 – Actions in an Emergency (OP 7). Operable capability deficiencies are typically experienced at seasonal peak load conditions or upon the occurrence of other emergent system conditions and tend to last for a few hours per event. Because fuel shortages may impact the New England region's ability to fully meet system load and ten minute operating reserve requirements for weeks or months at a time, actions may need to be taken in advance of a projected Energy Emergency to manage and preserve adequate fuel supplies for the region. Unless actions are taken to address projected Energy Emergencies, shortages of fuel may lead to significant losses of operating capacity, and more use of extreme OP 4 and OP 7 actions.

The objectives in establishing this Procedure are:

1. To collect fuel availability information from Market Participants to support the determination of energy adequacy for the region's electric power requirements;
2. To raise the awareness of New England consumers, Market Participants, New England State officials, regional and national regulators, and regional and national reliability organizations of potential electricity shortages that may be faced by the region; and,
3. To allow for timely implementation of relief available in actions of ISO OP 4 or through implementation of load shedding through ISO OP 7 to address future capacity shortages expected as a result of an Energy Emergency.

PART II - PROCEDURE

A. DATA COLLECTION AND EVALUATIONS

The ISO will initiate fuel surveys whenever information received from the media, fuel suppliers, or generators warrants that the ISO conduct a fuel survey, e.g., based on reports of fuel shortages or fuel deliverability issues. The fuel survey will use the fuel survey form in Appendix A of this procedure. The ISO shall not modify the availability of any generating resource based on the fuel survey information without confirming that status with the generator owner.

When in effect, these surveys will be performed at least every week, and may be performed on a daily basis under severe Energy Emergency conditions (i.e., when advanced Steps of this Procedure are forecasted to be required), for the duration of the period considered to have a potential Energy Emergency. Any information collected in the surveys that is not publicly available information will be considered Confidential Information and handled by the ISO in accordance with the ISO Information Policy.

Recognizing the sensitive nature of the Generator Fuel Information and the unique nature of ISO's request, the ISO further commits as follows:

- a. The Generator Fuel Information will be used by ISO only for the purposes of identifying and addressing prospectively potential fuel supply and delivery issues/concerns that may exist ("Fuel Supply Concerns").
- b. Only those ISO employees whose duties are directly related to identifying and addressing such Fuel Supply Concerns shall have access to the Generator Fuel Information. Each ISO employee who is granted access to the Generator Fuel Information shall be made aware of these confidentiality commitments and agree to abide by them.
- c. ISO shall not disclose the Generator Fuel Information to any other party, either on its own initiative or upon request (including but not limited to requests under the Information Policy), without notifying the furnishing Governance Participant and obtaining such Participant's affirmative consent, unless such disclosure is required by law, as described in the Information Policy or is required to be delivered to FERC pursuant to the Information Policy, in which case ISO shall promptly notify the furnishing Governance Participant as further described in such paragraph.
- d. ISO-NE shall allow all furnishing Governance Participants to review before release to any other entities any report or summary that ISO produces using the Generator Fuel Information in order to insure that the report or summary would not directly disclose, or together with other available information could reasonably permit other Governance Participants to learn of the furnishing Governance Participants' Generator Fuel Information. If any furnishing Governance Participant reasonably determines that such report or summary would result in the direct or indirect

disclosure of Generator Fuel Information, ISO-NE shall revise the report or summary before release to any other entities so as not to directly or indirectly disclose such Generator Fuel Information.

- e. ISO shall in best efforts either destroy all Generator Fuel Information in its possession (in any form) or return such information to the applicable Furnishing Governance Participant when ISO is finished with the Generator Fuel Information within, but no later than, 3 months after the Energy Emergency Event.

In conjunction with the fuel surveys, the ISO will perform an assessment of system generation requirement by fuel type to estimate the amount of generation required to serve expected New England system load requirements. This assessment will be used to better quantify fuel inventory impacts and highlight potential supplemental fuel needs. These studies will normally be updated on a weekly basis and will cover up to an eight-week operating horizon, concentrating on the first four-week period as the most critical for use in identifying the possible need for mitigating measures to address operable generating capacity shortfalls resulting in an Energy Emergency. These studies will use currently available information for generator availability and operating characteristics, including current maintenance schedules and any known forced outages. Under severe fuel shortage conditions, this analysis will be updated daily to provide necessary guidance to the ISO for implementation of all necessary dispatch actions to address the Energy Emergency. The ISO will indicate the forecasted need for OP 21 actions on the seven-day load and capacity forecast posted on the ISO website.

http://www.iso-ne.com/sys_ops/op_frctng/7day_frct/index.html

B. IMPLEMENTATION

Whenever the above analysis indicates that fuel shortage conditions are forecasted to result in an Energy Emergency within the upcoming seven-day load and capacity forecast study horizon, the ISO will implement Step 1 and all other necessary Steps in this Procedure. Under potentially severe and sustained fuel shortage conditions, it may be necessary to implement Steps in this Procedure for periods greater than the normal seven-day load and capacity forecast horizon. Use of these Steps, for periods outside of the seven-day load and capacity forecast horizon, will be approved by the ISO Chief Operating Officer or his/her designee.

If the ISO has determined that the region is faced with an Energy Emergency and implementation of Part II B. of this Procedure is required, one or more of the following Steps beyond Step 1 will be implemented in any order to address the Energy Emergency conditions. The ISO shall report on its website its reason for declaring an Energy Emergency and shall update the Participants Committee on a monthly basis on the implementation of OP 21 and its reasons for declaring an Energy Emergency. To the extent that a Step has more than one possible action, any or all of those actions may be implemented as part of that Step:

Step 1: Alert the Local Control Centers and Market Participants promptly any time implementation of Part II.B. of this Procedure is warranted. Alert the surrounding Control Areas and coordinate with these Areas in accordance with NPCC Document A6 - NPCC Operating Reserve Criteria, and NPCC Document C20 - Procedures During Abnormal Operating Conditions. The alerts will be issued in accordance with Master/Local Control Center Procedure No. 2 – “Abnormal Conditions Alert” (M/LCC 2). **(An ISO responsibility)**

Step 2: Request that dual-fuel units, that are scheduled to operate, voluntarily switch to operation on the fuel source that is not in short supply. **(An ISO responsibility)**

Step 3: Implement specific relief measures available through Actions of ISO Operating Procedure No. 4 – Actions During a Capacity Deficiency, excluding requesting New England Governor’s to reinforce appeals for voluntary load curtailment. **(An ISO and LCC responsibility)**

If the actions in Steps 1 – 3 above do not result in the necessary relief from the forecasted regional Energy Emergency, the following Steps may be taken as approved by the ISO Chief Operating Officer or his/her designee:

Step 4: Implement a New England Governor’s appeal in accordance with Operating Procedure No. 4 – Action During a Capacity Deficiency: Request New England State Governors to reinforce appeals for voluntary load curtailment and the declaration of a Power Warning.

Under extreme conditions, the ISO will seek relief through load shedding actions available through implementation of ISO Operating Procedure No. 7 – Action in an Emergency. **(An ISO responsibility and LCC)**

Cancellation of This Procedure

Typically, the Steps taken under this Procedure will be cancelled once the Energy Emergency no longer exists and forecasts indicate no near-term recurrence.

Reports

The ISO will file all required reports in accordance with ISO New England Operating Procedure No. 10 - Emergency Incident and Disturbance Notifications. The ISO will notify Market Participants and regional state officials on the implementation and cancellation of steps under this procedure.

OP 21 REVISION HISTORY

Rev. No.	Date	Reason
Rev 0	11/04/2005	Original Version for Winter 2005/2006
Rev 1	10/13/06	Revised OP for permanent use
Rev 2	06/01/10	Updated for the changes to OP #4 actions for FCM