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		Revision Number: 4 Revision Date: December 7, 2022
Owner: ISO Manager, Control Room Operations		Approved by: M/LCC Heads
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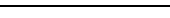
Master/ Local Control Center Procedure No. 20

(M/LCC 20)

Operating Plan for Operating Emergencies

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1. References

NERC Reliability Standard EOP-011 - Emergency Operations

NERC Reliability Standard IRO-014 - Coordination Among Reliability Coordinators

NERC Reliability Standard TOP-001 - Transmission Operations

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. 13 - Standards for Voltage Reduction and Load Shedding Capability (OP-13)

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.19 - Transmission Operations (OP-19)

ISO New England Operating Procedure No. 21 – Operational Surveys, Energy Forecasting & Reporting and Actions During An Energy Emergency (OP-21)

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

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

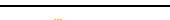
Master/Local Control Center Procedure No. 4 - Emergency Load Reduction Plans for Mitigating IROL Violations (M/LCC 4)

Master/Local Control Center Procedure No. 12 - Identification and Coordination of ISO and LCC TOP Responsibilities (M/LCC 12)

Master/Local Control Center Procedure No. 13 - ISO and LCC Communication Practices (M/LCC 13)

Master/Local Control Center Procedure No. 15 - System Operating Limits Methodology (M/LCC 15)

Master/Local Control Center Procedure No. 16 - Seasonal Preparations (M/LCC 16)

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2. Purpose

This document describes the comprehensive “Operating Plan” of both ISO New England (ISO) and the Local Control Centers (LCCs) to prepare for and mitigate Operating Emergencies on the Bulk Electric System (BES) in the New England Reliability Control Area (RCA). This Operating Plan is comprised of this procedure as well as the other procedures identified herein. The purpose of this Operating Plan is to identify ISO and LCC roles, responsibilities and processes to prepare for and mitigate Operating Emergencies. The provisions of the Operating Plan also assist to meet certain requirements of North American Electric Reliability Corporation (NERC) Reliability Standards, including the following:

- EOP-011 Emergency Operations
- IRO-014 Coordination Among Reliability Coordinators
- TOP-001 Transmission Operations

3. Introduction

NOTE

ISO, performing actions as a Reliability Coordinator (RC), Balancing Authority (BA) and Transmission Operator (TOP) and the LCCs, performing actions as TOPs, implement the procedures identified as part of the Operating Plan to prepare for and mitigate abnormal and emergency system conditions. The term “Operating Emergency” as defined by ISO and the LCCs in Master/Local Control Center Procedure No. 13 - ISO and LCC Communication Practices (M/LCC 13) and as used in ISO and LCC procedures fully encompasses the NERC terms “Emergency”, “BES Emergency”, “Capacity Emergency” and “Energy Emergency” defined in the Glossary of Terms Used in NERC Reliability Standards.


NOTE

Related implementing procedures, such as ISO Control Room Operating Procedures (CROPs) and LCC-specific implementing procedures are **not** considered part of the Operating Plan.

ISO and LCC responsibilities and actions listed in this Operating Plan are described at a high level. The specifics of the actions are contained in the identified associated OPs and M/LCC Procedures.

As detailed in Section 5.1, the following documents are considered part of the Operating Plan to prepare for and mitigate Operating Emergencies:

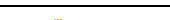
- ISO New England Operating Procedure No. 4 - Action During a Capacity Deficiency (OP-4)
- ISO New England Operating Procedure No. 7 - Action in an Emergency (OP-7)

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- ISO New England Operating Procedure No. 13 - Standards for Voltage Reduction and Load Shedding Capability (OP-13)
- 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 Operating Procedure No. 19 - Transmission Operations (OP-19)
- ISO New England Operating Procedure No. 21 - Operational Surveys, Energy Forecasting & Reporting and Actions During An Energy Emergency (OP-21)
- ISO New England Operating Procedure No. 23 - Resource Auditing (OP-23)
- Master/Local Control Center Procedure No. 2 - Abnormal Conditions Alert (M/LCC 2)
- Master/Local Control Center Procedure No. 4 - Emergency Load Reduction Plans for Mitigating IROL Violations (M/LCC 4)
- Master/Local Control Center Procedure No. 13 - ISO and LCC Communication Practices (M/LCC 13)
- Master/Local Control Center Procedure No. 15 - System Operating Limits Methodology (M/LCC 15)
- Master/Local Control Center Procedure No. 16 - Seasonal Preparations (M/LCC 16)
- Master/Local Control Center Procedure No. 20 - Operating Plan for Operating Emergencies (M/LCC 20)

4. Responsibilities

1. ISO and each LCC are responsible for meeting NERC Reliability Standard requirements applicable to a TOP that pertain to preparing for and mitigating Operating Emergencies, as set forth in Master/Local Control Center Procedure No. 12 - Identification and Coordination of ISO and LCC TOP Responsibilities (M/LCC 12).
2. The respective responsibilities of ISO and the LCCs for performing actions specified in the various documents that constitute the ISO and LCC Operating Plan for mitigating Operating Emergencies are specified in Operating Plan documents.
3. As part of its normal periodic review of this procedure and other procedures that are part of the Operating Plan, in coordination with the LCCs, ISO is responsible for ensuring that the responsibilities and identified actions of ISO and the LCCs are compatible and coordinated, so as to avoid wide-area reliability risks.
4. Each LCC is responsible for working with ISO to modify this procedure, as necessary, to address any reliability risks identified by ISO during its review of this procedure.

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5. Instructions

5.1 ISO and LCC Preparation for and Mitigation of Operating Emergencies

- A. Actions to be taken by ISO and LCC System Operators to prepare for and mitigate Operating Emergencies are described below.

Energy Emergency Alerts

1. ISO shall make a Reliability Coordinator Information System (RCIS) posting to declare an Energy Emergency Alert (EEA) whenever it takes the actions described below:
 - EEA level 1 - when ISO implements OP-4 Action 2, or when ISO cancels all of OP-4 Actions 6, 8, 10, and 11, one or more of which it had previously implemented
 - EEA level 2 - when ISO implements OP-4 Actions 6, 8, 10 or 11 or when ISO cancels OP-7 actions it had previously implemented
 - EEA level 3 - when OP-7 load shedding actions directed by ISO are imminent or have been implemented
 - EEA level 0 - when ISO has declared an EEA level 1, and has taken both of the following actions:
 - (1) when ISO cancels all of OP-4 Actions 6, 8, 10, and 11, one or more of which it had previously implemented; and
 - (2) ISO also cancels OP-4 Action 2
2. During an EEA level 2, ISO shall:
 - Notify neighboring RCs/BAs and Designated Entities (DEs) and Demand Designated Entities (DDEs) to communicate its needs
 - Update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the neighboring RCs/BAs and LCCs
 - Review transmission outages and work with the TOP(s) to determine if it is possible to return to service any transmission elements that may relieve the loading on System Operating Limits (SOLs) or Interconnection Reliability Operating Limits (IROLs)
3. While in an EEA level 2, before declaring an EEA level 3, the ISO must have made full use of all available Resources, including but **not** limited to:
 - All generation is on-line that is capable of being on-line in the time frame of the

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Operating Emergency

- Activation of all Demand-Side Management available in the time frame of the Operating Emergency and within the provisions of applicable agreements
4. During an EEA level 3 ISO shall:
- Continue to take all actions initiated during EEA level 2
 - Update the energy deficiency information posted on the RCIS website as changes occur and pass this information on to the neighboring RCs/BAs and LCCs
 - Evaluate the risks of revising SOLs and IROLs for the possibility of mitigating the energy deficiency, in coordination with neighboring RC/BAs and with the agreement of any LCC that has Transmission Owner (TO) equipment that would be affected. System Operating Limits (SOLs) and Interconnection Reliability Operating Limits (IROLs) shall only be revised as long as an EEA 3 condition exists, or as allowed by the TO whose equipment is at-risk.
5. During any EEA declared by another RC, ISO shall coordinate with the energy deficient RC, as appropriate.

Coordination Among Reliability Coordinators (RCs)

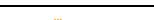
6. If ISO and another RC disagree on the existence of an Operating Emergency that potentially impacts one or both of them, ISO shall:
- Operate as though the Operating Emergency exists
 - Develop an action plan to resolve the Operating Emergency, if ISO is the RC that identifies the Operating Emergency in the ISO RCA
 - Implement the action plan developed by the RC that identifies the Operating Emergency, unless such actions would violate safety, equipment, regulatory, or statutory requirements

ISO Assistance to LCCs and RCs

7. ISO shall assist LCCs and RCs that are experiencing Operating Emergencies, if requested and able, provided that the requesting entity has implemented its emergency procedures, unless such assistance involves actions that **cannot** be physically implemented or would violate safety, equipment, regulatory, or statutory requirements.

LCC Assistance to other LCCs

8. Each LCC shall assist other LCCs that are experiencing Operating Emergencies, if requested and able, provided that the requesting entity has implemented its emergency procedures, unless such assistance involves actions that **cannot** be

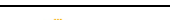
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physically implemented or would violate safety, equipment, regulatory, or statutory requirements.

Other Actions by ISO and LCCs

9. Other actions that can be taken by ISO and LCCs to prepare for and mitigate Operating Emergencies that are contained in other Operating Plan documents are listed in the following table:

Actions to Prepare for or Mitigate Operating Emergencies	RC, BA, and/or TOP Action	Other Operating Plan Document(s) Detailing Action(s)
Notifications and Communications	RC, TOP	M/LCC 2, M/LCC 13
Cancelling outages	RC, BA, TOP	M/LCC 2
Reconfiguring the transmission system	TOP	OP-19, M/LCC 4, M/LCC 15
Redispatching generation	RC, BA, TOP	OP-4, OP-19
Shedding load	BA, TOP	OP-7, OP-13, M/LCC 4, M/LCC 15
Addressing reliability impacts of extreme weather conditions	BA, TOP	OP-19, OP-21, OP-23, M/LCC 2, M/LCC 16
Managing generating Resources to address capability and availability	BA	OP-4, M/LCC 2
Managing generating Resources to address fuel supply and inventory concerns	BA	OP-21
Managing generating Resources to address fuel switching capabilities	BA	OP-4, OP-21
Managing generating Resources to address environmental constraints	BA	OP-4, OP-14, OP-21, OP-23, M/LCC 2, M/LCC 16
Making public appeals for voluntary Load reductions	BA	OP-4
Requesting government agencies to implement their programs to achieve necessary energy reductions	BA	OP-4, OP-21
Reducing internal utility energy use	BA	OP-4, OP-13
Using Interruptible Load and curtailable Load	BA	OP-4

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6. Review of Operating Plan Documents

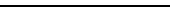
NOTE

For purposes of meeting NERC Standard EOP-011, ISO and each LCC maintain the documents that are part of the Operating Plan by reviewing them as part of the normal M/LCC Heads process for reviewing, updating and approving OP and M/LCC procedures. As part of this process, ISO also adheres to SOP-RTMKTS.0210.0010 - Develop, Revise & Control SOP, OP, M/LCC Documents. This process is how ISO and the LCCs address applicable EOP-011 requirements for:

1. the LCC to submit an Operating Plan document to ISO;
2. ISO to review that Operating Plan document;
3. ISO and LCCs to address any reliability risks in the Operating Plan document; and
4. ISO to notify the LCC of the results of its review of the Operating Plan document.

All of these actions regarding an Operating Plan document (LCC submittal to ISO, ISO review, ISO/LCC modification of document to address identified reliability risks and ISO notification to LCCs of the results of its review) are all considered to occur on the same day that the M/LCC Heads (ISO and the LCCs) conduct their final review and approval of a given revision of the document

- A. As part of its review of an Operating Plan document, ISO shall ensure that the various responsibilities and identified actions of ISO and the LCCs identified in the Operating Plan document are compatible and coordinated with other Operating Plan documents, with consideration of inter-dependency of the various Operating Plan documents, so as to avoid wide-area reliability risks.
- B. ISO and each LCC shall work together to address any reliability risks identified by ISO during such reviews, by modifying each appropriate Operating Plan document, as necessary.
- C. The ISO shall have the authority to modify Operating Procedures or develop new Operating Procedures without such coordination or consultation when the ISO does not have sufficient time to undertake such coordination or consultation due to emergent and unanticipated circumstances.
- D. The ISO shall have the authority, as the System Operator with ultimate authority for the Real-Time operation of the New England Transmission System, to implement any new Operating Procedures or modified Operating Procedures.

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7. M/LCC 20 Revision History

Rev. No.	Date	Reason
Rev 0	03/31/17	Initial draft;
Rev 1	06/01/18	Changes made to reflect changes being made to the PRD: Section 1 and Section 3 changed OP-14 title (added "Response"; Section 5.1.A.1 changed OP-4 Actions in the 1 st and 4 th bullets (replaced "Action 6 and Action 5" with "Action 2"); Section 5.1.A.5 ("Other Actions by ISO and LCCs table last data row" deleted "...and demand Response";
Rev 1.1	02/05/19	Periodic review (biennial) performed requiring no changes; Made administrative changes required to publish a Minor Revision (including global updates for OP-23 title);
Rev 2	12/21/20	Periodic review (biennial). Made administrative changes to correct the title of OP-21. Corrected wording in 5.1.A.1. Correct numbering pg. 7-8.
Rev 3	07/12/21	Added TOA language of authority to 6.C & D. based on discussions during the 2021 NPCC Operations & Planning Audit
Rev 4	12/07/22	Biennial review performed by procedure owner; Updated Table in Section 5.1.A.9; Made administrative changes.

8. Attachments

None