
	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

## Attachment F - System Restoration Working Group Charter

### Table of Contents

1. Objectives .....	2
2. SRWG Membership and Scope of Activities.....	4
3. SRWG Monthly Meeting Format.....	6
4. SRWG Documentation, Changes to System Topology and Technical Studies	8
5. SRWG Cost Reimbursement .....	9
Attachment F Revision History .....	10

*This document is controlled when viewed on the ISO New England Internet web site. When downloaded and printed, this document becomes **UNCONTROLLED**, and users should check the Internet web site to ensure that they have the latest version.*


	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

## 1. Objectives


The SRWG was formed by and shall report to the Master/Local Control Center (M/LCC) Heads per M/LCC 12 Identification and Coordination of ISO and LCC TOP Responsibilities.

The objectives of the System Restoration Working Group (SRWG) are as follows:

- Maintain and verify the New England System Restoration Plan (the Plan) to achieve effective and coordinated Bulk Electric System (BES) restoration among ISO New England (ISO-NE) and the Local Control Centers (LCCs)/Transmission Operators (TOPs) with Transmission Owner (TO) support to meet the Plan objectives:
  - Provide off-site ac power to the New England nuclear power stations
  - Interconnect all New England TOPs (i.e., the LCCs)
  - Establish interconnections/synchronizations with contiguous Reliability Coordinator Areas (RCAs) that are normally synchronously connected to the New England RCA, advancing system restoration of the Eastern Interconnection (EI).
- The SRWG shall address:
  - New England System Restoration Plan objectives determined by the M/LCC Heads
  - Federal Energy Regulatory Commission (FERC) Requirements
  - North American Electric Reliability Corporation (NERC) Requirements
    - NERC Reliability Standard EOP-005, System Restoration from Blackstart Resources
    - NERC Reliability Standard EOP-006, System Restoration Coordination
    - Glossary of Terms Used in NERC Reliability Standards
  - Northeast Power Coordinating Council, Inc. (NPCC) Requirements
    - NPCC Regional Reliability Reference Directory # 8, System Restoration
    - NPCC Power System Restoration Reference Document
    - NPCC Glossary of Terms
  - Interrelated functions among New England stakeholders and entities that require formal communications, interactions or assessment, for coordinated system restoration.
  - Review of findings and development of recommendations from system restoration and system disturbances, restoration events, drills and exercises, not necessarily within the New England footprint.
  - Support, on an as-needed basis, the Joint Trainers Task Force (JTTF), by providing input for system restoration exercises and training plans developed by the M/LCC trainers, in assistance to ISO-NE/LCC/TOP training throughout the year.
- The SRWG shall maintain a shared drive on the ISO-NE satellite website for archiving documents and meeting materials.

	<p>© ISO New England, Inc. 2024</p>	<p><b>Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F</b></p> <p><b>Revision Number: 1.1</b>  <b>Revision Date: February 21, 2024</b></p>
<p><b>Owner: System Restoration Working Group (SRWG) Chair</b></p>		<p><b>Approved by: M/LCC Heads</b>  <b>Review Due Date: February 21, 2026</b></p>

- The SRWG shall maintain a shared folder on the ISO-NE ShareFile website for archiving technical study files.

	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

## 2. SRWG Membership and Scope of Activities

### A. SRWG Membership

SRWG membership shall be comprised of ISO-NE and LCC/TOP representatives, including main and alternate member roles, directly responsible for the development of and/or delivery of the Plan. A representative from ISO-NE shall serve as the Chair of the SRWG. Each LCC/TOP shall have at least one member with an in-depth technical knowledge of the operations of his or her LCC/TOP area and shall have someone available to perform engineering studies to evaluate proposed Plan revisions which may be impactful to the BES and/or their LCC/TOP area. ISO-NE shall support the LCC/TOP study efforts as needed.


A YYYY-SRWG Roster, containing SRWG member name, role: main/alternate, entity, office telephone number, office fax number, e-mail address, cellular telephone number and pager number, shall be developed annually, reviewed at each SRWG Monthly Meeting, maintained and posted to the SRWG shared drive.

### B. SRWG Scope of Activities


1. Review, modify and update (as needed), and accept the following ISO New England Operating Documents<sup>1</sup> in accordance with the *ISO New England Inc. Transmission, Markets, and Services Tariff*, NERC and NPCC system restoration requirements, prior to submittal to the M/LCC Heads:
  - M/LCC18-New England System Restoration Plan suite of documents
  - M/LCC11-Maintenance and Verification of New England System Restoration Plan suite of documents
  - M/LCC7H-Temporary Restoration Path
  - ISO-NE Operating Procedure No. 14, Technical Requirements for Generators, Demand Response Resources, Asset Related Demands and Alternative Technology Regulation Resources suite of documents
  - ISO-NE Operating Procedure No. 11, Blackstart Resource Administration suite of documents
  - The New England System Restoration Plan Tracker, located on the SRWG shared drive, shall be maintained to record all M/LCC18 and M/LCC11 document status.
2. Report, for information only, if updates have been made to ISO-NE SOP RTMKTS.0180.0080, Process Designated Blackstart Resource Testing.
3. Maintain adequate Blackstart Capability for the Plan by performing the following:

---

<sup>1</sup> The term, ISO New England Operating Documents, is defined in the *ISO New England Inc. Transmission, Markets, and Services Tariff*, Section I.2.2.

	© ISO New England, Inc. 2024	<b>Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F</b> <b>Revision Number: 1.1</b> <b>Revision Date: February 21, 2024</b>
<b>Owner: System Restoration Working Group (SRWG) Chair</b>		<b>Approved by: M/LCC Heads</b> <b>Review Due Date: February 21, 2026</b>

- Determine which Designated Blackstart Resources (DBRs) shall support the establishment of defined Basic Minimum Power Systems (BMPS) in support of the Plan
  - Review and recommend for approval, to the M/LCC Heads, DBRs to be added to the Plan
  - Review and recommend, to the M/LCC Heads, DBRs to be removed from the Plan
  - Monitor and assess DBR Capability Testing in accordance with the ISO New England Operating Documents, NERC and NPCC requirements.
4. Review and maintain M/LCC11, Attachment D-New England System Restoration Plan Resources List (NESRPR) necessary to support the Plan.
    - Support the assigned ISO-NE Reliability & Operations Compliance Analyst in reviewing key facilities and critical component testing
    - Support the annual YYYY NPCC Criteria Compliance and Enforcement Program Certification Form Directory #8 System Restoration – Key Facilities List Self-Certification
  5. Review the Plan to:
    - Coordinate system restoration efforts
    - Develop system restoration strategies
    - Recommend procedure enhancements for the coordination of inter-LCC restoration
    - Identify where mutual assistance can be provided and the extent to which each LCC can rely on its neighboring LCC for assistance
    - Recommend procedure enhancements for the coordination of inter-Area restoration
  6. Monitor the performance of the annual wide-area system restoration exercise and the Joint ISO-NE/LCC/TOP Cycle 1 Training as part of the assessment of the adequacy of the Plan.
  7. Support, on an as-needed basis, the JTTF, by providing input for system restoration exercises and training plans developed by the M/LCC trainers.
  8. Review relevant industry events and system disturbances to determine lessons learned and recommendations towards optimizing coordinated restoration.
  9. Monitor evolving NERC, NPCC and industry activities relative to system restoration.
  10. Collaborate with other working groups and Task Forces at ISO-NE or NPCC as necessary.

	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

### 3. SRWG Monthly Meeting Format

Regular meetings of the SRWG shall be held on a monthly basis on the 2<sup>nd</sup> Tuesday of each month, or as otherwise scheduled. The SRWG members or designees shall agree on the annual plan for the SRWG Monthly Meeting schedule, duration and locations, and revisions as necessary. SRWG Monthly Meetings may take place in in-person, by WebEx or hybrid formats.

In the event of a need to cancel a scheduled meeting, an announcement by e-mail shall be sent at least 24 hours in advance of the scheduled meeting.

A YYYY-SRWG Monthly Meeting Schedule, containing dates, location, SRWG Monthly Meeting Minutes responsibility and notes, shall be developed annually, reviewed for changes as needed, at each pertinent SRWG Monthly Meeting, maintained and posted to the SRWG shared drive.

#### A. Agenda

The Agenda for each SRWG Monthly Meeting shall be developed by the SRWG Chair, with input from the assigned ISO-NE Reliability & Operations Compliance Analyst. The Agenda shall follow the tasks/functions/activities described in M/LCC11 and its companion document M/LCC11, Attachment E-Example of New England System Restoration Plan Evaluation. A standard Agenda shall be developed for each respective quarter and enhanced as needed for pertinent individual month activity and detail. The Agenda is distributed in accordance with Section 3E.

#### B. Representation and Voting

SRWG members or designees shall strive to reach consensus on all issues. Should the SRWG members or designees be unable to achieve consensus, a majority and minority position shall be sent to the M/LCC Heads.

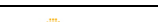
A quorum of the SRWG must be participating for any action to be taken by the SRWG on any issue other than adjournment of the meeting. The ISO-NE representative and two-thirds of the LCC/TOP members or designees, must be present and participating, to establish a quorum. LCC/TOP member or designee approval is assumed, if no comments or objections are received from the LCC/TOP member or designee on any changes/additions/deletions/edits.

Each SRWG member or designee shall have the right to express views on any matter to be acted upon at any meeting of the SRWG.

#### C. Action Items

A cumulative Action Items list for issues which cannot be resolved within a single respective SRWG Monthly Meeting, shall be maintained, discussed and updated at each SRWG Monthly Meeting.

The Action Items list shall be retained on the SRWG shared drive and distributed to the SRWG members or designees, post each SRWG Monthly Meeting, along with the distribution of the SRWG Monthly Meeting Minutes.

	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

#### **D. Minutes**

The responsibility for recording SRWG Monthly Meeting Minutes shall be rotated among LCCs/TOPs, proposed in the SRWG Monthly Meeting Schedule, and assigned in the prior month's SRWG Monthly Meeting Agenda.

A template for the SRWG Monthly Meeting Minutes will be provided along with the SRWG Monthly Meeting Agenda.


SRWG Monthly Meeting Minutes shall undergo an internal ISO-NE review by the Chair and the assigned ISO-NE Reliability & Operations Compliance Analyst, prior to release to the SRWG members or designees.

SRWG Monthly Meeting Minutes shall be distributed to all SRWG members or designees, post-SRWG Monthly Meeting and posted to the SRWG shared drive. SRWG members or designees are expected to review the SRWG Monthly Meeting Minutes and provide any comments at the subsequent SRWG Monthly Meeting.

#### **E. Timetable for SRWG Monthly Meetings**





	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

## 4. SRWG Documentation, Changes to System Topology and Technical Studies

SRWG shall develop and retain documentation on the SRWG shared drive to support:

- SRWG members or designees in determination of language to be incorporated into the M/LCC18 suite of documents and the M/LCC11 suite of documents.
- Inquiries from the M/LCC Heads
- Evidence requirements for NERC/NPCC audits.
- Archival retention of pertinent documents

### A. Documentation

System Restoration impactful documentation regularly reviewed by the SRWG includes

- ISO-NE Operating Procedures (OPs)
- ISO-NE System Operating Procedures (SOPs)
- M/LCC Procedures

Documents shall be posted to the SRWG shared drive and presented for review, comment and acceptance, during the SRWG Monthly Meetings, prior to submittal to the M/LCC Heads for approval.

### B. Changes to System Topology

Power system network changes (planned or unplanned) can impact the Plan and must be reviewed at each scheduled SRWG Monthly Meeting and documented in the SRWG Monthly Meeting Minutes.

Documentation to be reviewed includes:


- Proposed Plan Applications (PPAs) from the most current NEPOOL Reliability Committee (RC) Meeting Minutes and Consent Agendas, for planned permanent BES changes<sup>2</sup>
- Information on unplanned permanent changes, obtained from the ISO-NE Outage Scheduling software.
- Information on outages and BES changes obtained by each SRWG member or designee from its respective planning and outage scheduling departments.

### C. Technical Studies

It is necessary to conduct and document technical studies of restoration paths, including changes to system topology, contained in the Plan. The studies should be scoped and approved by the SRWG and contain details of the study paths including models, equipment ratings, minimum source requirements, and load necessary to successfully energize the path. The approved study

<sup>2</sup> Review of Market Participant's Proposed Plans is discussed in the *ISO New England Inc. Transmission, Markets, and Services Tariff*, Section I.3.9.



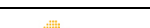
	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

report should be archived for both ISO-NE and the LCC/TOP in the SRWG shared drive, serving as compliance evidence for both entities. The study files, if available, including system model and simulation results, should be archived for both ISO-NE and the LCC/TOP in the SRWG folder on the ISO-NE ShareFile website.

## 5. SRWG Cost Reimbursement

All costs incurred by any SRWG member entity for materials, facilities and ancillary support services for administering authorized activities, shall be reimbursed by all participant entities on a pro-rata participation basis.

There shall be an equitable sharing of expenses among ISO-NE and the LCCs/TOPs for all approved work and travel. This requirement is to encourage active participation by all SRWG member entities for continued support of stated objectives and training goals.

	© ISO New England, Inc. 2024	Master/LCC Procedure No. 11 - Maintenance and Verification of New England System Restoration Plan, Attachment F
		Revision Number: 1.1 Revision Date: February 21, 2024
Owner: System Restoration Working Group (SRWG) Chair		Approved by: M/LCC Heads
		Review Due Date: February 21, 2026

## Attachment F Revision History

Rev. No.	Date	Reason
0	12/17/13	Original version
0.1	10/23/15	Annual review performed requiring no changes; Made administrative changes required to publish a new Minor Revision;
0.2	10/17/16	Annual review performed requiring no changes; Made administrative changes required to publish Minor Revision 0.2
0.3	10/02/17	Annual review performed requiring no changes; Made administrative changes required to publish Minor Revision 0.3
0.4	09/15/18	Periodic review (document review frequency is being returned to biennial) by procedure owner requiring no changes; Made administrative changes required to publish Minor Revision 0.4 (including updating the Procedure Owner);
0.5	09/10/20	Periodic review by procedure owner requiring no changes; Made administrative changes required to publish Minor Revision 0.5 (including updating the Procedure Owner);
1	08/08/22	Periodic review performed by procedure owner; Detailed global re-write of the document.
1.1	02/21/24	Biennial review performed by procedure owner requiring no changes; Made administrative changes required to publish a Minor Revision.