	CROP.44002 Perform a Simulated Manual Load Shed Test	
© 2023	Approved By: Director, Operations	Effective Date: 11/09/2023
Rev #12	Procedure Owner: Manager, Control Room Operations	Valid Through: 11/09/2025

## Conditions to Enter

1. Perform the Simulated Manual Load Shed Test for all Local Control Centers (LCCs) as determined by the Manager, Control Room Operations. The test is typically performed every month but is only required to be performed every other month.
2. Perform a retest of the Simulated Manual Load Shed Test for Local Control Centers (LCCs) that failed as scheduled by the Operations Shift Supervisor.

## References

1. OP 13 - Standards for Voltage Reduction and Load Shedding Capability
2. OP 7 Appendix A - Instructions for Implementation of Manual Load Shedding

## Procedure Background

The Simulated Manual Load Shed Test procedure documents how ISO New England coordinates with the Local Control Centers (LCCs) and provides training about the Load Shed process for the ISO, each LCC and any applicable Market Participant.

OP-13 establishes standards for the testing of any Market Participant that has control over a transmission/distribution facility with voltage reduction and load shedding capability. These standards require each Market Participant with control over a transmission/distribution facility to have the capability to reduce load demand when directed to do so for Bulk Electric System (BES) dispatching purposes. The Market Participant is expected to comply with the OP-13 established standard. ISO and each Local Control Center (LCC) uses the capability to reduce load to maintain system reliability. This would occur during a generating capacity deficiency, energy deficiency, and any other applicable emergency operating condition as described in ISO New England Operating Procedure No. 4 - Action during a Capacity Deficiency (OP-4) and ISO New England Operating Procedure No. 7 - Action in an Emergency (OP-7).

The performance of the procedure ensures compliance with OP-13 requirements.

## 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.

ISO newengland	CROP.44002 Perform a Simulated Manual Load Shed Test	
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**Step 1** Primary Responsibility: Operations Shift Supervisor

**Inform the Security Operator of each Local Control Center (LCC) that will participate in the test.**

**Instructions**

All Local Control Centers will participate in the monthly test. Only LCC's who fail will participate in a retest.

**Step 2** Primary Responsibility: Security Operator

**Notify each participating LCC Operator of the scheduled test.**

Standard(s) for completion:

- The LCC Operators are notified approximately 2 hours prior to the test.

**Step 3** Primary Responsibility: Security Operator

**Create a log entry using "> TEST AND AUDITS > Load Shed Test" specifying each LCC participating.**

**Step 4** Primary Responsibility: Operations Shift Supervisor

**Direct the Security Operator to implement the Simulated Manual Load Shed Test to a specific Percent of load to be shed.**

**Notes**

The percent of load to be shed will be provided to the Operations Shift Supervisor by the Manager, Control Room Operations via the Operations Shift Supervisor Outlook Calendar.

**Step 5** Primary Responsibility: Security Operator

**Activate an LCC Notification for load shedding in EMS for each participating LCC.**

**Instructions**

Perform the following:

- ☐ Click "LDSH" button in RTNET to access the Load Shed / Restoration Dashboard
- ☐ In the **LCC Loadshed Notification** block
  - ☐ If sending notification to **ALL LCCs** click "Set ALL Loadshed" button
  - ☐ If sending notification to **INDIVIDUAL LCCs** click "Set Loadshed" button for each participating LCC
- ☐ Verify Status changes from **INACTIVE** to **ACTIVE** for each participating LCC

**Step 6** Primary Responsibility: Security Operator

**Issue the simulated load shed operating instruction to each participating LCC.**

Standard(s) for completion:

- Three part communication is required to be used.

**Instructions**

An "ALL LCCs" call function can be used when testing more than one LCC.

The simulated load shed operating instruction is:

- ☐ "This is a test. Do **NOT** shed load".
- ☐ "Implement OP-7, manually shed X percent of area load".
- ☐ "This is a test. Do **NOT** shed load".

**Step 7** Primary Responsibility: Security Operator

**Access the Load Shed Test log entry and enter the time implemented and the specific percent of load shed ordered.**

ISO newengland	CROP.44002 Perform a Simulated Manual Load Shed Test	
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## Step 8 Primary Responsibility: Security Operator

### Condition(s) to perform this step:

- The LCC Operator contacts the ISO to report their required data for the test.

**Access the Load Shed test log entry and enter the required data reported by each LCC Operator.**

Standard(s) for completion:

- All participating LCC data is entered.

### Instructions

Each LCC Operator will contact ISO and report the following:

- ☐ Load prior to the simulated load shed test (Load at time of implementation)
- ☐ MW amount of simulated load shed
- ☐ Time the LCC took to shed enough load to satisfy the test requirement.
- ☐ Load shed electronic notification confirmed

## Step 9 Primary Responsibility: Security Operator

### Condition(s) to perform this step:

- All participating LCCs have reported their required data for the test.

**Set the LCC Notification for load shedding in EMS to inactive for each participating LCC.**

### Instructions

Perform the following:

- ☐ Click “LDSH” button in RTNET to access the Load Shed / Restoration Dashboard
- ☐ In the **LCC Loadshed Notification** block:
  - ☐ If sending notification to **ALL** LCCs click “Set ALL Inactive” button
  - ☐ If sending notification to **INDIVIDUAL** LCCs click “Set Inactive” button for each participating LCC
- ☐ Verify Status changes from **ACTIVE** to **INACTIVE** for each participating LCC

## Step 10 Primary Responsibility: Security Operator

**Inform the Operations Shift Supervisor that the Load Shed test log entry is ready for review.**

## Step 11 Primary Responsibility: Operations Shift Supervisor

**Determine the pass/fail test result for each individual LCC and ISO-NE. ISO-NE pass/fail is only applicable for a test with all LCCs participating.**

### Instructions

To meet the load shed test requirement:


- ☐ Each LCC shall have shed enough load to meet the test requirement in 10 minutes or less.
- ☐ The simulated load shed of equal to or greater than the percentage of load shed.

The calculated percentage is determined by:

$$\text{Calculated percent} = [\text{MW Simulated Shed} / \text{Load prior to the simulated load shed test}] \times 100$$

The Time for the LCC to execute is determined by:

$$\text{Time for the LCC to execute} = \text{Time the LCC states enough load was shed} - \text{Time Simulated Load Shed test was implemented.}$$

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**Step 12** Primary Responsibility: Operations Shift Supervisor

**Access the Load Shed test log entry and enter the pass, fail, or not applicable (N/A) results.**

**Instructions**

- ☐ If an LCC failed, indicate if the failure was due to time or MW amount shed by entering in “-time” or “-MW” after the fail.
- ☐ If a retest was performed place an N/A in the pass/fail well for the LCCs **NOT** participating and ISO-NE.

**Step 13** Primary Responsibility: Operations Shift Supervisor

**Condition(s) to perform this step:**

- An LCC failed the Simulated Manual Load Shed test.

**Schedule a retest for the affected LCC using the Operations Shift Supervisor outlook calendar.**

**Instructions**

Normally the retest is scheduled for the next business day but the Operations Shift Supervisor can schedule the retest for a different day due to forecasted system conditions.

**Step 14** Primary Responsibility: Operations Shift Supervisor

**Condition(s) to perform this step:**

- An LCC failed the Simulated Manual Load Shed test.

**Notify each LCC that failed when the retest is scheduled.**

**Step 15** Primary Responsibility: Operations Shift Supervisor

**Condition(s) to perform this step:**

- An LCC failed the Simulated Manual Load Shed test.

**Enter a comment specifying each LCC being retested, the date of the retest, and the reason the LCC failed the test if known.**

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## Revision History

Rev. No.	Date (MM/DD/YY)	Reason	Contact
-	12/01/15	For previous revision history, refer to Rev 2 available through Ask ISO	Steven Gould
3	10/14/16	Update language in Step 6	Steven Gould
4	04/24/17	Modified Step 6 to be consistent with OP-7 & CROP.10001	Steven Gould
5	06/14/17	Administrative change for modification to procedure format	Steven Gould
6	08/29/17	Update instructions for load value to be used in Step 7	Steven Gould
7	03/06/18	Addition of Steps for the use of the LCC Notification tool and updated language for OP-7 Appendix A changes	Steven Gould
8	04/05/18	Removed step to notify the MLCC Heads for even months	Steven Gould
9	03/28/19	Modified step 7 to not log ISO-NE load Added information for notification and the determination of LCC performance	Steven Gould
10	12/02/19	Delete Step 9 due to entry well in the log for time has been removed.	Steven Gould
11	11/22/21	Biennial review. Updated "Common Procedure Information"	Steven Gould
12	11/09/23	Biennial review	Jonathan Gravelin