	© ISO New England Inc. 2007	Procedure: Perform Simulated Manual Load Shed Test
	Process Name: Monitor Resource Performance	
	Procedure Number: RTMKTS.0180.0060	Revision Number: 7
	Procedure Owner: Steve Weaver	Effective Date: December 20, 2007
	Approved By: VP Operations	Review Due Date: October 1, 2008

SOP-RTMKTS.0180.0060


Perform Simulated Manual Load Shed Test

Contents

1.	Objective	2
2.	Background	2
3.	Responsibilities.....	2
4.	Controls	3
5.	Instructions.....	3
	5.1 Prerequisites to Performing the Test	3
	5.2 Performing the Test.....	3
6.	Performance Measures.....	4
7.	References.....	5
8.	Revision History	5
9.	Attachments	5
	Attachment A: Simulated Manual Load Shedding Log	6

*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. In addition, a Controlled Copy is available in the Master Control Room procedure binder.*

The information contained in this document is for use by ISO New England staff only and is subject to modification. ISO New England Inc. is not responsible for any reliance on this document by others, or for any errors or omissions or misleading information contained herein.

	© ISO New England Inc. 2007	Procedure: Perform Simulated Manual Load Shed Test
	Process Name: Monitor Resource Performance	
	Procedure Number: RTMKTS.0180.0060	Revision Number: 7
	Procedure Owner: Steve Weaver	Effective Date: December 20, 2007
	Approved By: VP Operations	Review Due Date: October 1, 2008

1. Objective

The Objective of this procedure is to document how ISO New England coordinates with the Local Control Centers to perform a simulated manual load shed test.

Compliance with this procedure ensures that the manual load shed test is performed as required in ISO New England Operating Procedure No. 13 - Standards for Voltage Reduction and Load Shedding Capability (OP-13).

2. Background

OP-13 states that every second month the ISO will conduct a simulated manual load shed test to train the ISO, Local Control Center and Market Participant with control over transmission/distribution facilities in all aspects of manual load shedding procedures.

3. Responsibilities


NOTE

Any Control Room Operator has the authority to take action(s) required to comply with NERC Standards.

1. The Operations Shift Supervisor is responsible for authorizing the start of the test.
2. Control Room Operators conducting the load shed test are responsible for the performing this procedure.

NOTE

The Security Operator will normally perform this procedure.

	© ISO New England Inc. 2007	Procedure: Perform Simulated Manual Load Shed Test
	Process Name: Monitor Resource Performance	
	Procedure Number: RTMKTS.0180.0060	Revision Number: 7
	Procedure Owner: Steve Weaver	Effective Date: December 20, 2007
	Approved By: VP Operations	Review Due Date: October 1, 2008

4. Controls

- Only NERC certified operators are authorized to perform these activities
- All communications with Local Control Centers shall be made on recorded phone lines
- The Simulated Load Shed Test is performed at least once every second month and as soon as possible in the following month if a test is missed


5. Instructions

5.1 Prerequisites to Performing the Test

1. When authorized by the Operations Shift Supervisor, perform the Simulated Load Shed Test each month to ensure familiarity with the load shed process. This also ensures the requirement of a Load Shed Test at least once every second month is met to comply with OP 13 requirements.
2. If the Simulated Load Shed test is unable to be performed every month, the ISO shall perform a test as soon as possible in the following month to ensure OP 13 requirements are met.
3. Use Attachment A - Simulated Manual Load Shedding Log to record the test events.
4. Prior to performing the Simulated Load Shed Test (approximately 2 hours prior) the Operations Shift Supervisor shall notify the Local Control Centers of the upcoming test.

5.2 Performing the Test


1. Determine the amount of simulated load to be shed as follows:
 - A. Use the equation in Attachment A to determine the Step.
 - B. Determine which step number is applicable per ISO New England Operating Procedure No. 7, Action in an Emergency (OP-7) Appendix B.

	© ISO New England Inc. 2007	Procedure: Perform Simulated Manual Load Shed Test
	Process Name: Monitor Resource Performance	
	Procedure Number: RTMKTS.0180.0060	Revision Number: 7
	Procedure Owner: Steve Weaver	Effective Date: December 20, 2007
	Approved By: VP Operations	Review Due Date: October 1, 2008

2. Fill in the Implement Simulated Step number and Time Implemented for the test on Attachment A.
3. Send out the following message to all Local Control Centers and record each of the Local Control Centers that participate:
 - “This is a simulated load shedding test DO NOT SHED LOAD.”
 - “Implement OP-7, Manually shed load thru step #.”
 - “This is a simulated load shedding test DO NOT SHED LOAD”
4. Fill in the loads at the time of implementation for New England and each of the Local Control Centers.
5. After the Local Control Centers report back to the ISO, fill in the Local Control Center Response section of Attachment A with the following:
 - MW Simulated Shed
 - Time Local Control Center Reports Back
 - Time Local Control Center Would Have Completed All Simulated Load Shedding Using Normal Communication Channels
 - Additional Remarks
6. Fill in the Total MW Shed and the Total time To Execute Had Normal Communications Been Used.
7. Initial, Sign and date Attachment A – Simulated Manual Load Shedding Log. Retain completed test records in accordance with the ISO retention policy recommendation for audit and review purposes.
8. Log the performance of the test in the Control Room Event Logserver.

6. Performance Measures

None.

	© ISO New England Inc. 2007	Procedure: Perform Simulated Manual Load Shed Test
	Process Name: Monitor Resource Performance	
	Procedure Number: RTMKTS.0180.0060	Revision Number: 7
	Procedure Owner: Steve Weaver	Effective Date: December 20, 2007
	Approved By: VP Operations	Review Due Date: October 1, 2008

7. References

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)

8. Revision History

Rev. No.	Date	Reason	Contact
0	03/01/03	Original	Don Gates
1	01/26/04	Changes to the Controls and Performance Measures sections	Don Gates
2	03/25/04	Revised to add signature to Attachment A	Don Gates
3	02/01/05	Update SOP for RTO terminology	Steve Weaver
4	03/29/05	Revised to incorporate the VELCO Local Control Center	Steve Weaver
5	11/30/06	Revised SOP as a result of annual review, clarified steps to current practice	Steve Weaver
6	10/04/07	Added notifications prior to test commencing	Steve Weaver
7	12/20/07	Revised for NSTAR LCC status	Steve Weaver

9. Attachments

Attachment A – Simulated Manual Load Shedding Log

	© ISO New England Inc. 2007	Procedure: Develop, Perform Manual Load Shed Test
	Process Name: Monitor Resource Performance	
	Procedure Number: RTMKTS.0180.0060	Revision Number: 7
	Procedure Owner: Steve Weaver	Effective Date: December 20, 2007
	Approved By: V P Operations	Review Due Date: October 1, 2008

Attachment A: Simulated Manual Load Shedding Log

Simulated Manual Load Shedding Log
TEST ONLY DO NOT SHED LOAD

Equation for step determination during simulated load shedding = $\frac{\text{Total MW Load to simulate shed or Restored} \times 100}{\text{Instantaneous New England Load}}$

Implement Simulated Step # _____ Time Implemented _____

ISO to (check all that apply): ALL __ CONVEX ___ MAINE _____ New Hampshire ___ NSTAR ___ REMVEC __ VELCO__

MESSAGE: "This is a simulated load shedding test **DO NOT SHED LOAD**"

"Implement OP-7 Manually shed load thru step # _____"

"This is a simulated load shedding test **DO NOT SHED LOAD**"

Loads at Time of Implementation: NEW ENGLAND _____ CONVEX _____ MAINE _____
New Hampshire _____ NSTAR _____ REMVEC _____ VELCO _____

Local Control Center Response

Local Control Center	MW Simulated Shed	Time Local Control Center Reports Back	Time Local Control Center Would Have Completed All Simulated Load Shedding Using Normal Communication Channels	Additional Remarks
CONVEX				
MAINE				
New Hampshire				
NSTAR				
REMVEC				
VELCO				

Total MW Shed: _____

Operator: _____

Total Time to Execute Had Normal Communications Been Used: _____

Signature: _____ Date: _____