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	Process Name: Implement Emergency Operations	
	Procedure Number: RTMKTS.0120.0010	Revision Number: 13
	Procedure Owner: Steve Weaver	Effective Date: June 3, 2008
	Approved By: VP Operations	Review Due Date: October 1, 2008

SOP- RTMKTS.0120.0010


Implement Operations During Abnormal Conditions

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1. Objective

The objective of this procedure is to improve the reliability of the system during critical operating periods. This procedure documents the responsibilities of ISO New England (ISO) staff in making the decision to invoke Master Local Control Center Procedure No. 2 – Abnormal Conditions Alert (M/LCC 2) and specific communication logistics. This procedure does not in any way change the intent of the M/LCC 2 procedure but rather is intended to clarify responsibilities delegated to ISO staff by M/LCC 2. In particular, M/LCC 2 directs ISO to utilize judgment in determining when to implement M/LCC 2; this procedure provides direction to ISO staff on how that judgment shall be made.

Additionally, this procedure directs ISO staff on the detailed communications required by ISO in order to support its assigned responsibilities as set forth in M/LCC 2.

2. Background

M/LCC 2 is a procedure used by ISO and the Local Control Center (LCC) s to alert power system operations, maintenance, and test personnel that abnormal power system conditions exist or are anticipated. Once notified, these personnel are expected to take precautions so that routine maintenance and test activities associated with Resources, transmission lines, substations, computer systems, and communications equipment do not further jeopardize the reliability of the power system. M/LCC 2 can be declared to mitigate an existing or imminent deficiency in Operating Reserve. This declaration allows the curtailment/reduction of specific external transactions as necessary to maintain a sufficient quantity of Operating Reserve in New England. Some abnormal power system conditions affect pool-wide reliability. Effects of other conditions may be limited to a single LCC. Accordingly, provision is made in M/LCC 2 for ISO New England Alert notifications and LCC Alert notifications.

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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 identifying situations when M/LCC 2 might be appropriately implemented or cancelled, making the decision to implement or cancel M/LCC 2 during non-business hours, and assigning System Operators the task of communicating the alert to other parties.
2. The Manager, Control Room Operations is responsible for convening a conference call, if warranted, and as time permits, to discuss the need for implementation of M/LCC 2 with the Master/Local Control Center (M/LCC) Heads during normal business hours.
3. The System Operators are responsible for communicating the alert information to the appropriate parties per this procedure when directed to do so by the Operations Shift Supervisor.
4. The Senior Short-Term Outage Coordinator is responsible for evaluating the reliability of the transmission system on a day-ahead basis and communicating anticipated conditions to appropriate parties in accordance with this procedure.
5. The Security Operator is responsible for evaluating the reliability of the transmission system on a current day basis and communicating anticipated conditions to appropriate parties in accordance with this procedure.
6. The Operations Shift Supervisor shall create Custom messages when using the Emergency Notification System (ENS) Auto Call.

4. Controls

- Only NERC Certified System Operators shall be allowed to take real-time actions involving the initiation of M/LCC 2

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5. Instructions

5.1 Decision to Implement M/LCC 2

NOTE

If in the judgment of the Operations Shift Supervisor there is insufficient time to arrange the conference call to discuss the implementation of M/LCC 2 then the Operations Shift Supervisor should render a decision independently.

5.1.1 During Business Hours

1. During business hours, the Manager, Control Room Operations or their designee shall:
 - A. Convene a conference call if required with the appropriate M/LCC Head(s) to make a decision to implement M/LCC 2 in accordance with Section 5.1.3.
 - B. Immediately notify the Operations Shift Supervisor of the decision reached in the conference call.

5.1.2 During Non-Business Hours


1. During non-business hours, the Operations Shift Supervisor shall make the decision to implement M/LCC 2 in accordance with Section 5.1.3.
2. If time permits, the Operations Shift Supervisor should contact the Manager, Control Room Operations for input into the decision process before implementation.

NOTE

The appropriate execution of M/LCC 2 may avert a contingency that the system might not be able to withstand. The intent is to implement M/LCC 2 when the system is at, or anticipated to be close to or beyond the limits of reliability. The M/LCC 2 procedure is intended to reduce or eliminate the risk of equipment loss due to testing or other high risk activities when the system is stressed.

5.1.3 Decision Making Process


1. If the reduction of “RT Only MWs” on export transactions can prevent a capacity deficient condition, either for the current hour or the next hour, M/LCC 2 should be issued.
 - A. System Operators can utilize the NOP4 Recall Stacker display in the EES-MOI to review the “RT Only MW” for the current hour or for the next hour.
 - B. If review of this information indicates that reduction of the “RT Only MWs” can prevent the capacity deficiency, M/LCC 2 should

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be issued and the amount of exports necessary to maintain Thirty-Minute Operating Reserve (TMOR) should be reduced, as necessary, for the current or next hour in accordance with SOP-RTMKTS.0100.0010 – Curtail External Transactions or SOP-RTMKTS.0090.0010 – Schedule Next Hour Transactions, respectively.

- C. When issuing M/LCC 2 to maintain TMOR, Go To step 5.1.4.
2. If Operating Reserve amounts drop within 200MW of maintaining the TMOR requirement and the “RT Only MWs” export transactions will not resolve the condition, then consider implementing M/LCC 2.
 3. If any of the following conditions exist or are anticipated, implement M/LCC 2:
 - Transmission voltages and/or reactive reserves are low (see ISO New England Operating Procedure No. 12 – Voltage and Reactive Control (OP-12), Appendix A)
 - It is not possible to provide contingency protection in accordance with ISO New England Operating Procedure No. 19 – Transmission Operations (OP-19)
 - Cold Weather Event is declared
 - Other system conditions exist in which the bulk power system is being credibly threatened to the extent that operation within accepted reliability standards might be difficult to maintain

Examples: severe ice storm, hurricane, severe Solar Magnetic Disturbance (SMD), act of terrorism, the President or a U.S Government agency (Department of Health and Human Services) has implemented the National Response Plan (NRP) to mitigate a possible Pandemic Influenza incident or any other credible threat to power system security.

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NOTE

An LCC may independently implement M/LCC 2 for its region and issue an “LCC M/LCC 2 Abnormal Conditions Alert” on its own. In this case the LCC will notify ISO prior to the alert for concurrence and request ISO to notify the Resources within its LCC of the implementation.

5.1.4 M/LCC 2 Implementation Notifications

1. If M/LCC 2 is implemented the Operations Shift Supervisor shall notify ISO management and staff by using the “Control Rm Emergency Event Rpt” E-mail Group list.


NOTE

The following is an example of the message:


The ISO is initiating Master/LCC Procedure #2, Abnormal Conditions Alert today at <Time>.

After receipt of the e-mail, Market Support Services and Corporate Communications will confirm actions being taken by the Control Room by calling (in the following order) the Manager Operations, Manager, Control Room Operations or the Shift Supervisor, prior to making external notifications involving Control Room emergency actions.

2. The Operations Shift Supervisor shall assign System Operators depending on workload to make verbal notifications to the following:
 - CONVEX
 - Maine
 - New Hampshire
 - NSTAR
 - REMVEC
 - VELCO
 - NYISO
 - NBSO
 - HQ (TransEnergie)

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3. If the declaration of M/LCC 2 is to mitigate an existing or imminent deficiency in Operating Reserve and no other system wide or local area reliability condition exists:
 - LCCs shall be verbally notified that the declaration of M/LCC 2 is to mitigate an existing or imminent deficiency in Operating Reserve and no curtailment of maintenance, construction or test activities is required.
 - If system conditions change and curtailment of maintenance, construction and test activities is subsequently required, the LCCs shall be notified.
 - NYISO, NBSO and HQ shall be verbally notified that the declaration of M/LCC 2 is to mitigate an existing or imminent deficiency in Operating Reserve and that Real Time Hourly External Transactions will be reduced as necessary to maintain TMOR.
4. Initiate the M/LCC 2 Auto Call Out Program in accordance with Section 5.2.
5. Log the declaration of M/LCC 2 conditions in the Control Room Logserver as follows:
 - Time event started
 - LCC notifications
 - Expected duration of M/LCC 2

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NOTE

If an LCC has declared an “LCC Alert”, the ISO shall use the Auto Call Program to notify Resources within the LCC’s region.

5.2 Initiation of M/LCC 2 Auto Call

5.2.1 M/LCC 2 Notifications using the Auto Call Emergency Notification System

1. Initiate the M/LCC 2 notification as follows:
 - A. Click on the Desktop Icon labeled Auto Call Emergency Notification System.
 - B. Select the ‘Messages’ folder.
 - C. Select ‘Master/Local Control Centers Procedures’ folder.
 - D. Select M/LCC 2 in the drop down menu.
 - E. Select the appropriate M/LCC 2 Action to be implemented or cancelled (whichever is applicable).
 - F. Enter correct time.
 - G. Select the appropriate reason.
 - H. Select the applicable entities to be notified.
2. When all of the above are correct select “Make Call”.
3. A dialog box will open advising that “An M/LCC 2 Implementation callout is about to be initiated. Click on “Yes” in the dialog box to initiate the M/LCC 2 notifications.


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NOTE

Only the Operations Shift Supervisor Console PC has the Access rights to allow creation of Custom messages.

**5.2.2 M/LCC 2
Auto Call
Custom
Message**

1. If the M/LCC 2 Auto Call program “Canned Message” is not applicable to the Real Time situation and a different message is more applicable then initiate the Auto Call Custom message program as follows:
 - A. Click on the Desktop Icon labeled Auto Call Emergency Notification System.
 - B. Select the “Maintenance” folder.
 - C. Create a custom message by performing one of the following:
 - (1) Select an existing message within the Messages display
 - a. Click Edit to customize the message
 - b. Adjust the message to conform to the current needs.
 - (2) Select the Add New button at the right side of the display
 - a. Ensure the message Template data field has the Default Template selected.
 - b. Select where the new message will be located by using the available drop down menus.
 - c. Enter the applicable data for the message in the data fields.
 - d. Ensure that the “Text to Speech Message” button is toggled.
 - e. Click OK.
 - D. Select the Messages folder.
 - E. Select the newly created Custom message.
 - F. Select the applicable Resources to be notified.
 - G. When all of the above are correct select “Make Call”.
 - H. A dialog box will open advising that a notification is about to be initiated. Click on ‘Yes’ in the dialog box to initiate the notification.
 - I. If there are communication failures then refer to Section 5.3.

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- J. The Operations Shift Supervisor or their designee shall log the use of the Auto Call program in the Control Room Logserver and include the start and end times.

NOTE


Priority levels affect the timing and speed of delivery of a message compared to other messages currently being sent.

5.3 Communication Failures

1. The Senior System Operator or their designee shall identify Auto Call message errors (intended party did not receive a notification).

NOTE	
The following Message Statuses may require manual response by the System Operators:	
Message Status	Message Description
Callback	Call was received and user requested callback
Incomplete Call	Call was received but user did not confirm receipt of the message
Busy/No Answer	Phone line was busy or call was not answered within the 3 ring constraint
Cancelled by Operator	Call was cancelled by the dispatch operator
Hardware Failure	Auto Call or telephone Hardware Failure (requires IT notification to resolve)
Data Error	Software protocol error (requires IT notification to resolve)
Cancelled	Possible timeout/in the queue for too long (requires IT notification to resolve)

2. The Senior System Operator or their designee shall manually call and deliver the message to parties when Auto Call message errors occur (intended party did not receive a notification). These errors should be highlighted in yellow in the Message Status column.

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3. If Auto Call program fails, the Senior System Operator shall:
 - A. Along with the Loader Operator and Generation Operator (as available), manually call the Resources listed in the Manual Call Out Procedure folder.
 - B. Make an entry into the Control Room Logserver stating the Auto Call Program failure.
 - C. Notify the IT On Call Technician about the Auto Call Program failure so corrective actions can occur.

NOTE

A Manual Call Out Procedure folder is located at the Senior Operator, Loader Operator and Generation Operator desks. This folder contains Resource lists and telephone numbers for M/LCC 2 Auto Call programs.

5.4 Canceling M/LCC 2


1. When the conditions for M/LCC 2 as described in Section 5.1.3 no longer exist or are no longer anticipated the Operations Shift Supervisor shall cancel M/LCC 2.

NOTE

The following is an example of the message:

The ISO is canceling Master/Local Control Center Procedure #2, Abnormal Conditions Alert today at <Time>. Please resume normal operations.

An LCC may independently cancel M/LCC 2 for its region and issue a “Cancellation” on its own. In this case the LCC will notify ISO prior to canceling the alert for concurrence and request ISO to notify the Resources within its LCC of the cancellation.

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**5.4.1 M/LCC 2
Cancellation
Notifications**

1. If M/LCC 2 is cancelled the Operations Shift Supervisor shall notify ISO management and staff by using the “Control Rm Emergency Event Rpt” E-mail Group list.


NOTE

After receipt of the e-mail, Market Support Services and Corporate Communications will confirm actions being taken by the Control Room by calling (in the following order) the Manager Operations, Manager, Control Room Operations or the Shift Supervisor, prior to making external notifications involving Control Room emergency actions.

2. The Operations Shift Supervisor shall assign System Operators depending on workload to make verbal notifications to the following:
 - CONVEX
 - Maine
 - New Hampshire
 - NSTAR
 - REMVEC
 - VELCO
 - NYISO
 - NBSO
 - HQ (TransEnergie)
3. Initiate a cancellation notice using the M/LCC 2 Auto Call Out Program in accordance with Section 5.2.
4. Log the declaration of M/LCC 2 conditions in the Control Room Logserver as follows:
 - Time event cancelled
 - LCC notifications

NOTE

If an LCC has cancelled a “Local Control Center Alert”, the ISO shall use the Auto Call Program to notify Resources within the LCC’s region.

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6. Performance Measures

This procedure is deemed to be properly followed as evidenced by the following:

- Goal for Corporate performance in CPS1, CPS2 and DCS (Disturbance Control Standard) compliance met

7. References

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

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

ISO New England Operating Procedure No. 12 – Voltage and Reactive Control (OP-12)


ISO New England Operating Procedure No. 19 – Transmission Operations (OP-19)

ISO New England Operating Procedure No. 9 – Scheduling and Dispatch of External Transactions (OP 9)

ISO New England Manual for Market Operations Manual M-11

8. Revision History

Rev. No.	Date	Reason	Contact
0	02/13/03	Initial procedure for SMD	Don Gates
1	05/06/03	Incorporate email address change	Don Gates
2	10/24/03	Changed criteria for decision on declaring MS 2 due to changes in Replacement Reserves	Don Gates
3	11/16/03	Modified Controls and Performance Measures to align with ISO 9001 standards	Don Gates
4	5/10/04	Updated for new Auto Call software	Don Gates
5	9/9/04	Added that a confirmation is needed from Operations prior to Corporate communications posting or disseminating information to external parties involving Control Room emergencies.	Don Gates
6	02/01/05	Updated SOP for RTO terminology	Steve Weaver
7	03/29/05	Revised to incorporate the VELCO Local Control Center	Steve Weaver

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8	08/25/05	Revise SOP to reflect current communications of M/LCC 2	Steve Weaver
9	05/30/06	Revised to reflect Replacement Reserve Requirement going to zero and incorporated response for National Response Plan actions	Steve Weaver
10	09/25/06	Revised for ASM Phase 2	Steve Weaver
11	11/30/06	Revised for changes to MR 1 Appendix H	Steve Weaver
12	12/20/07	Revised for NSTAR LCC Status	Steve Weaver
13	06/03/08	Globally defined acronym LCC for Local Control Center for use as applicable after first use in document. Step 3.5 changed to Operator instead of Coordinator Revised various parts to allow the curtailment/reduction of specific contracts as necessary to maintain a sufficient quantity of Operating Reserve in New England.	Steve Weaver

9. Attachments

None.