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## References

- 1. CROP.10002 Implement Capacity Remedial Action
- 2. CROP.50001 Reporting Procedure
- 3. M/LCC 13 ISO and LCC Communication Practices
- 4. M/LCC 4 Emergency Load Reduction Plans for Mitigating IROL Violations
- 5. OP 7 Action In An Emergency
- 6. OP 7 Appendix A Instructions for Implementation of Manual Load Shedding

## **Procedure Background**

RTNET loads include an Ignore Load Shed flag. The Ignore Load Shed flag is applied to the special load class (e.g., ILC, SMD, SPS, Voltage SPS loads) to prevent the load shed tool from modifying the MW value associated with the special load.

Loads that have a red MW value on the RTNET Loads tab in Network Load Summary display are either a load that runs to a schedule or a part of the special load class. Typically, these loads have a zero Allocation Factor and thus, have zero Model MW and MVAr values.

When using the Loadshed/Restoration Dashboard, loads that run to a schedule and are **NOT** a part of the special load class have a manual MW and MVAr flag applied.

Upon Loadshed ACTIVATION when the "Set Manual Loads" is enabled, it will set the RTNET MW and MVAr flags for all NEPEX loads that do **NOT** have a good SCADA measurement or are **NOT** a special load class with the Ignore Load Shed flag set

To filter on load type, go to the RTNET Loads tab in Network Load Summary display and right click on the down arrow next to the word Model in the MW column. A popup menu will be displayed with the options of: Show Schedule Loads, Show Pseudo Loads, Show Negative Loads, and Show All Loads.

If the State Estimator has been placed in the load shed or restoration solution mode and load has been shed or restored, 30 minutes needs to elapse or at least 10 RTNET executions needs to occur. This is required to allow the State Estimator to update its load model; visually you will see the Parent Fraction MW amount change on the RTNET Load Areas tab in the Network Load Summary display. It is **NOT** recommended to stay in the load shed or restoration solution mode longer than required since it limits the tools the State Estimator has to correct to solution errors or bad data.

The load shed and restoration solution modes functions exactly the same. The reason for having separate modes is to provide the operators with an indication of where they are in the load shed/restoration event and provide alarming when specific actions are taken.

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## **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 System 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.

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## **Procedure**

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

• System conditions require load shed.

## **Section 1: Manual Load Shedding**

Step 1.1 Primary Responsibility: Security Operator

## Determine the amount and locations of load to shed.

#### **Instructions**

## For System Wide Load Shed:

ISO shall issue an operating instruction with the quantity of load to be shed system wide by specifying a percent of area load.

Percent = Total MW Load to be Shed X 100
Instantaneous New England Load

Instantaneous New England Load as found in RTGEN

## For System Wide Load Shed with the exclusion of an area:

ISO shall issue an operating instruction with the quantity of load to be shed system wide by specifying a percent of area load that takes into account an area excluded.

Percent = Total MW Load to be Shed X 100
(Instantaneous New England Load - Instantaneous Area Load)

For the Instantaneous Area Load value for an excluded area: Use "Actual MW" value for the load area as found on the "Load Area" display in RTNET.

#### For Affected Area or IROL Load Shed:

ISO shall issue an operating instruction with the quantity of load to be shed in an area by specifying a (MW) amount. The affected LCC Operator shall convert the MW amount into a percent value.

M/LCC 4 Emergency Load Reduction Plans for Mitigating IROL Violations identifies and provides direction for determining where to shed load for the appropriate IROL Interfaces.

#### **Notes**

If ISO and the LCC **cannot** agree on the problem, ISO and the LCC shall re-evaluate the cause of the disagreement (bad data, status, study results, tools, etc.). If time permits, this re-evaluation shall be done before taking corrective actions. If time does **NOT** permit, ISO shall operate to the most conservative decision until the disagreement is resolved. In instances where there is a difference in derived operating limits, ISO and LCC shall always operate the BES to the most limiting parameter.

Step 1.2 Primary Responsibility: Operations Shift Supervisor

Notify the Control Room Operators of the start of M/LCC 13 Operating Emergency Conditions communications requirement.

Step 1.2.1 Primary Responsibility: Operations Shift Supervisor

Log the start of M/LCC 13 Operating Emergency Communications.

#### Instructions

Use log entry: > COMMUNICATION > M/LCC 13 > Operating Emergency, Started

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Step 1.3 Primary Responsibility: Security Operator

## Activate LCC Notification for load shedding for the applicable LCCs.

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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 1.4 Primary Responsibility: Security Operator

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

• If shedding load System Wide.

## Contact the applicable LCC Operator(s) and issue the System Wide load shed operating instruction.

Standard(s) for completion:

• Three part communication is required to be used.

#### **Instructions**

ISO shall issue a concise verbal operating instruction and shall await LCC repeat back, which should be received from each LCC in alphabetical order (CONVEX, Maine, NGrid, NH, NSTAR, RIE and VELCO). ISO shall acknowledge each LCC repeat back of the operating instruction as correct or reissue the operating instruction.

#### Operating instruction by ISO:

ISO to all LCCs: "ISO-NE is declaring an M/LCC 13 Operating Emergency. Implement OP 7, manually shed X percent of area load."

## Acknowledgment by Affected LCC:

■ Each LCC to ISO: "ISO-NE is declaring an M/LCC 13 Operating Emergency. Implement OP 7, manually shed X percentage of area load."

#### Acknowledgment by ISO:

■ ISO to each LCC: "That is correct."

(If a misunderstanding occurs, ISO shall reissue the operating instruction)

Step 1.4.1 Primary Responsibility: Operations Shift Supervisor

**Update the M/LCC 13 Operating Emergency log entry for the completion of the LCC notifications.** 

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Step 1.5 Primary Responsibility: Security Operator

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

• If shedding load in an Affected Area.

# Contact the applicable LCC Operator(s) and issue the Affected Area load shed operating instruction.

## Standard(s) for completion:

• Three part communication is required to be used.

#### **Instructions**

ISO shall issue a concise verbal operating instruction to each affected LCC and receive an accurate acknowledgment or reissue the operating instruction.

## Operating instruction by ISO:

■ ISO to the affected LCC: "ISO-NE is declaring an M/LCC 13 Operating Emergency. Implement OP 7, manually shed (XXX) MW of load."

## Acknowledgment by Affected LCC:

• Affected LCC to ISO: "ISO-NE is declaring an M/LCC 13 Operating Emergency. Implement OP 7, manually shed (XXX) MW of load."

## Acknowledgment by ISO:

ISO to the affected LCC: "That is correct."

(If a misunderstanding occurs, ISO shall reissue the operating instruction)

Step 1.5.1 Primary Responsibility: Operations Shift Supervisor

**Update the M/LCC 13 Operating Emergency log entry for the completion of the LCC notifications.** 

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Step 1.6 Primary Responsibility: Security Operator

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

• If shedding load for an IROL.

## Contact the applicable LCC Operator(s) and issue the IROL load shed operating instruction.

#### Standard(s) for completion:

• Three part communication is required to be used.

#### **Instructions**

ISO shall issue a concise verbal operating instruction to each affected LCC and receive an accurate acknowledgment or reissue the operating instruction. Typical message (that may vary given specific plans and circumstances) for emergency load reduction for IROL contingencies.

#### Operating instruction by ISO:

■ ISO to the affected LCC: "ISO-NE is declaring an M/LCC 13 Operating Emergency. To alleviate the (XXX) IROL contingency, implement load shed of (XXX) MW in (XXX Substation Area) of Table 'X' of M/LCC-4."

## Acknowledgment by Affected LCC:

 Affected LCC to ISO: "ISO-NE is declaring an M/LCC 13 Operating Emergency. Implement load shed of (XXX) MW on (XXX Substation Area) using Table 'X' of M/LCC-4 to alleviate the (XXX) IROL contingency."

#### Acknowledgment by ISO:

ISO to the affected LCC: "That is correct."

(If a misunderstanding occurs, ISO shall reissue the operating instruction)

Step 1.6.1 Primary Responsibility: Operations Shift Supervisor

**Update the M/LCC 13 Operating Emergency log entry for the completion of the LCC notifications.** 

Step 1.7 Primary Responsibility: Security Operator

#### Activate the RTNET Load Shed solution mode.

#### Instructions

Perform the following to activate the RTNET Load Shed solution mode:

- ☐ If Network Sequence is in Fast Mode, Change Network Sequence to Normal Mode;
- ☐ Click "LDSH" button in RTNET to access the Load Shed / Restoration Dashboard;
- ☐ Click "Start Loadshed ACTIVATION" button.

#### Notes

This step will Set Manual Loads and set the manual MW and MVAr flag for all scheduled loads and also Set SE Parameters.

Step 1.8 Primary Responsibility: Security Operator

## Condition(s) to perform this step:

• Notified by all applicable LCCs that load shedding actions have been completed.

## Set the LCC Notification for load shedding to inactive for the applicable LCCs.

#### Notes

Per M/LCC 13 – ISO and LCC Communication Practices, LCCs have the responsibility to report completion of an Operating Instruction to the ISO during an Operating Emergency.

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Step 1.9 Primary Responsibility: Security Operator

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

If necessary.

## Verify and update the manual loads.

#### **Instructions**

- ☐ When the LCC Operator specifies the stations that load was shed, verify the load at the station(s) matches the value specified by the LCC Operator.
- ☐ If the value is **NOT** correct, perform the following:
  - ☐ Set the manual MW and MVAr flag, if **NOT** already set.
  - ☐ Enter the MW value specified by the LCC Operator.

#### Notes

It is expected that the load with a SCADA measurement will be consistent with system conditions. It is verified to ensure the security tools/applications will have proper solutions.

Step 1.10 Primary Responsibility: Security Operator

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

• Load was shed in an individual area and NOT system wide.

## Notify the unaffected LCC(s) of the individual area load shed event.

#### **Instructions**

Each unaffected LCC shall be notified by ISO after an affected LCC has been issued an operating instruction to implement OP 7. A typical notification and message for ISO and each unaffected LCC Operator is:

## Notification of Implementation by ISO:

☐ ISO to each unaffected LCCs: "ISO-NE is declaring an M/LCC 13 Operating Emergency. This is a notification that OP- 7 is being implemented in (specify area). (Specify area) has been issued an operating instruction to manually shed (XXX) MW load."

#### Acknowledgment by each unaffected LCC:

Each unaffected LCCs to ISO: "ISO-NE is declaring an M/LCC 13 Operating Emergency. (Specify area) has manually shed (XXX) MW of load."

#### Acknowledgment by ISO:

☐ ISO to each unaffected LCCs: "That is correct."

(If a misunderstandings occurs, ISO shall reissue the notification)

Step 1.10.1 Primary Responsibility: Operations Shift Supervisor

**Update the M/LCC 13 Operating Emergency log entry for the completion of the LCC notifications.** 

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Step 1.11 Primary Responsibility: Senior System Operator

Notify neighboring RC/BAs of the load shed event and the declaration of an Operating Emergency Condition.

## **Instructions**

Required Notifications:

- NYISO
- ☐ HOTE
- ☐ NBP-SO

**Step 1.11.1** 

Primary Responsibility:

Operations Shift Supervisor

**Update the M/LCC 13 Operating Emergency log entry for the completion of the RC/BA notifications.** 

Step 1.12 Primary Responsibility: Operations Shift Supervisor

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

• Load shedding actions have mitigated the exceedance.

Notify the Control Room Operators of the end of M/LCC 13 Emergency Conditions communications requirement.

Step 1.12.1 Primary Responsibility: Senior System Operator

Notify neighboring RC/BAs of the end of the load shed event and the end of the Operating Emergency Condition.

#### **Instructions**

Required Notifications:

- ☐ NYISO
- HOTE
- ☐ NBP-SO

Step 1.12.2 Primary Responsibility: Security Operator

Notify all LCCs of the end of the M/LCC 13 Operating Emergency Conditions.

Step 1.12.3 Primary Responsibility: Any Control Room Operator

Log the end of M/LCC13 Operating Emergency Conditions communications.

## **Instructions**

Use log entry: > COMMUNICATIONS > M/LCC 13 > Operating Emergency, Ended

Step 1.13 Primary Responsibility: Security Operator

Log the load shed event.

#### **Instructions**

Use log entry: > EMERGENCY PROCEDURE EVENTS > OP 7 > Implement

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Step 1.14 Primary Responsibility: Operations Shift Supervisor

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

If performed due to a New England System Wide Capacity Deficiency.

## Make an RCIS posting declaring an EEA Level 3.

#### **Instructions**

Select **ONLY** the following in the "Send to" field:

- Regions
- ☐ Reliability Coordinators
- Add clarifying information in the Notes as to what system conditions have changed, ie: Load Forecast, Resource availability, neighboring RC/BA deficiency etc.

## **Notes**

If RCIS is inaccessible, initiate a NERC RC Hotline call declaring an EEA Level 3 (procedure is on the Control Room SharePoint site).

Step 1.15 Primary Responsibility: Operations Shift Supervisor

Update the load shed event log entry for the completion of the applicable notifications and RCIS posting if EEA Level 3 has been declared.

Step 1.16 Primary Responsibility: Operations Shift Supervisor

Perform reporting using CROP.50001 Reporting Procedure.

Step 1.16.1 Primary Responsibility: Operations Shift Supervisor

Update the load shed event log entry for the DOE-417 report submitted.

Step 1.17 Primary Responsibility: Security Operator

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

- 30 minutes has passed since the load was shed; Or
- 10 RTNET sequence executions have occurred since the load was shed.

## Deactivate the RTNET Load Shed solution mode.

#### **Instructions**

Perform the following to deactivate the RTNET Load Shed solution mode:

- ☐ Click "LDSH" button in RTNET to access the Load Shed / Restoration Dashboard;
- ☐ Click "Start Loadshed DEACTIVATION" button.

#### **Notes**

- Allow 30 minutes to pass prior to deactivating the RTNET Load Shed solution mode following the most recent load shed event If the 30 minutes **cannot** be allowed to pass, 10 RTNET executions are required.
- It is **NOT** recommended to stay in the load shed or restoration solution mode longer than required because of SE Parameter change effects on the State Estimator long term.
- If all of the load originally shed has been restored and the required adjustments to modeled loads have been implemented for the required time, there is no need to perform Section 2.
- This step will Reset SE Parameters and also Reset Manual Loads. This action will remove all manual MW and MVAr flags.

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Determine which loads in RTNET had manual flags applied prior to the load shed event and the associated MW and MVAr values.

#### **Notes**

The following items can be used to determine what loads had manual flags set in RTNET prior to the load shed event:

- A snapshot of RTNET taken prior to the load shed event; or
- An RTNET save case from prior to the load shed event

Primary Responsibility: Security Operator **Step 1.17.2** 

Set the manual MW and MVAr flags on the applicable loads in RTNET and enter the identified value.

Primary Responsibility: Operations Shift Supervisor **Step 1.18** 

## Condition(s) to perform this step:

EEA Level 3 declaration is still in effect and the system conditions from the initial posting have changed.

## Repost the EEA Level 3 identifying the system condition change.

## **Instructions**

Select ONLY the following in the "Send to" field:

- Regions
- ☐ Reliability Coordinators
- Add clarifying information as to what system conditions have changed, ie: Load Forecast, Resource availability, neighboring RC/BA deficiency etc.

Primary Responsibility: Operations Shift Supervisor Step 1.18.1

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

An update to the EEA Level 3 posting was made due to a change in system conditions.

## Log the EEA Level 3 update posting.

Use log entry: > EMERGENCY PROCEDURE EVENTS > EEA Update for System Condition Change

Enter the following:

- ☐ Select the EEA Level posting being updated
- ☐ Identify the reason for the updated posting.

Primary Responsibility: Control Room Manager

Notify External Affairs and Corporate Communications for State Agency Reporting.

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## **Condition(s) to perform this section:**

• Load has been shed and system conditions allow for load to be restored.

#### **Section 2: Restoration of Load**

Step 2.1 Primary Responsibility: Security Operator

## Determine the amount and locations of load to be restored.

## **Instructions**

## For System Wide Restoration:

ISO shall issue an operating instruction with the quantity of load to be restored system wide by specifying a percentage of area load.

Percent = Total MW Load to be Restored X 100
Instantaneous New England Load

Instantaneous New England Load as found in RTGEN.

## For System Wide Load Restoration with the exclusion of an area:

ISO shall issue an operating instruction with the quantity of load to be restored system wide by specifying a percentage of area load.

Percent = Total MW Load to be Restored X 100
(Instantaneous New England Load - Instantaneous Area Load)

For the Instantaneous Area Load value for an excluded area: Use "Actual MW" value for the load area as found on the "Load Area" display in RTNET.

## For Affected Area or IROL Restoration:

ISO shall issue an operating instruction with the quantity of load to be restored in an area by specifying a (MW) amount. The affected LCC Operator shall convert the MW amount into a percent value.

M/LCC 4 Emergency Load Reduction Plans for Mitigating IROL Violations provides direction for determining where to restore load following load shed for an IROL.

#### **Notes**

Circumstances may require load rotations during extended periods of load shed.

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Step 2.2 Primary Responsibility: Security Operator

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

If load was shed System Wide.

# Contact the applicable LCC Operator(s) and issue the System Wide load restoration operating instruction.

Standard(s) for completion:

Three part communication is required to be used.

#### **Instructions**

ISO shall issue a concise verbal operating instruction and shall await LCC repeat back, which should be received from each LCC in alphabetical order (CONVEX, Maine, NGrid, NH, NSTAR, RIE and VELCO). ISO shall acknowledge each LCC repeat back of operating instruction as correct or reissue the operating instruction.

## Operating instruction by ISO:

☐ ISO to all LCCs: "Implement OP 7, manually restore X percent of area load."

## Acknowledgment by Affected LCC:

☐ Each LCC to ISO: "Implement OP 7, manually restore X percent of area load."

## Acknowledgment by ISO:

☐ ISO to each LCC: "That is correct."

(If a misunderstanding occurs, ISO shall reissue the operating instruction)

Step 2.3 Primary Responsibility: Security Operator

## Condition(s) to perform this step:

• If load was shed in an Affected Area.

## Contact the applicable LCC Operator(s) and issue the Affected Area load restoration operating instruction.

Standard(s) for completion:

• Three part communication is required to be used.

## Instructions

ISO shall issue a concise verbal operating instruction to each affected LCC and receive an accurate acknowledgment or reissue the operating instruction.

#### Operating instruction by ISO:

☐ ISO to the affected LCC: "Implement OP 7, manually restore (XXX) MW of load."

## Acknowledgment by Affected LCC:

☐ Affected LCC to ISO: "Implement OP 7, manually restore (XXX) MW of load."

## Acknowledgment by ISO:

☐ ISO to the affected LCC: "That is correct."

(If a misunderstanding occurs, ISO shall reissue the operating instruction)

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Step 2	Primary Responsibility: Security Operator	
	ition(s) to perform this step:	
•	If load was shed for an IROL.	
Conta instru	act the applicable LCC Operator(s) and issue the	ROL load restoration operating
	ard(s) for completion:  Three part communication is required to be used.	
	•	
	<u>ructions</u> rpical message for restoring loads following IROL contingence	ries:
<u>O</u>	<ul><li>Detaiting instruction by ISO:</li><li>ISO to the affected LCC: "The (XXX) IROL continge</li></ul>	ncy has been resolved and loads may be restored.
	Restore loads on (XXX) Buses of M/LCC 4 Table 'X	2,"
Λ.	dragged amount by Affordad I CC.	
AC	knowledgment by Affected LCC:  Affected LCC to ISO: "Restoring loads on (XXX) Bu	ses of M/LCC 4 Table 'X'."
Ac	knowledgment by ISO:  ISO to the affected LCC: "That is correct."	
	That is correct.	
(If	a misunderstanding occurs, ISO shall reissue the operating	ng instruction)
Step 2	2.5 Primary Responsibility: Security Operator	
	ate the RTNET Restoration solution mode.	
~ .	ition(s) to perform this step:	
Condi	If a Load Shed Solution Mode is not currently active.	
•	<u>ructions</u>	
Inst	rform the following to activate the RTNET Load Shed solutio	
• Inst	rform the following to activate the RTNET Load Shed solutio  Click "LDSH" button in RTNET to access the Load Shed	
Inst Per	rform the following to activate the RTNET Load Shed solutio  Click "LDSH" button in RTNET to access the Load Shed  Click "Start Restoration ACTIVATION" button.	
Inst Per	rform the following to activate the RTNET Load Shed solutio  Click "LDSH" button in RTNET to access the Load Shed  Click "Start Restoration ACTIVATION" button.	/ Restoration Dashboard;
• Inst Per  [ ]  Note Thi	rform the following to activate the RTNET Load Shed solutio  Click "LDSH" button in RTNET to access the Load Shed  Click "Start Restoration ACTIVATION" button.	/ Restoration Dashboard;

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

• If necessary.

## Verify and update the manual loads.

## **Instructions**

- When the LCC Operator specifies the stations that load was restored, verify the load at the station(s) matches the value specified by the LCC Operator.
- ☐ If the value is **NOT** correct, perform the following:
  - $\hfill \Box$  Set the manual MW and MVAr flag, if NOT already set.
  - ☐ Enter the MW value specified by the LCC Operator.

## **Notes**

It is expected that the load with a SCADA measurement will be consistent with system conditions. It is verified to ensure the security tools/applications will have proper solutions.

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Step 2	Primary Responsibility:	Security Operator		
Condi	tion(s) to perform this step:			
	All load has been restored.			
Log tl	ne load restoration event.			
Log ti	le load restoration event.			
	ructions			
Us	e log entry: > EMERGENCY PR	OCEDURE EVENTS > OP 7	> Cancelled	
	יווי מיי מיי	g : g . o .		
Step 2		, ,		
Notify	neighboring RC/BAs of t	he load restoration ever	nt.	
Inst	ructions			
	quired notifications:			
	NYISO			
	НQТЕ			
	NBP-SO			
Step 2	9 Primary Responsibility:	Operations Shift Supervisor		
Step 2	in the special control of the special control	operations shift supervisor		
	tion(s) to perform this step:			
•	EEA level declaration was mad	e and all load shed has been	restored.	
Make	an RCIS posting declaring	g lower EEA level as ap	propriate.	
Inst	ructions			
	Evaluate OP-4 actions and CRO	DP.10002 Implement Capaci	ity Remedial Actions to determine the current EEA	
	Level.			
	Select ONLY the following in t	he "Send to" field:		
	☐ Regions			
	☐ Reliability Coordinators			

 $\frac{\textbf{Notes}}{\textbf{Posting to RCIS will continue until an EEA level 0 is declared}.$ 

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Step 2.10 Primary Responsibility: Security Operator

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

• Load was shed in an individual area and NOT system wide.

## Notify the unaffected LCC(s) of the individual area load restoration.

## **Instructions**

Each unaffected LCC shall be notified by ISO after an affected LCC has been issued an operating instruction to implement OP 7. A typical notification and message for ISO and each unaffected LCC Operator is:

## Notification of Implementation by ISO:

☐ ISO to each unaffected LCCs: "This is a notification that OP- 7 is being implemented in (specify area). (Specify area) has been issued an operating instruction to manually restore (\_\_\_\_) MW load."

## Acknowledgment by each unaffected LCC:

☐ Each unaffected LCCs to ISO: "(Specify area) has manually restored (\_\_\_) MW of load."

## Acknowledgment by ISO:

☐ ISO to each unaffected LCCs: "That is correct."

(If a misunderstandings occurs, ISO shall reissue the notification)

Step 2.11 Primary Responsibility: Security Operator

Update the load restoration event log entry for the completion of the applicable notifications and RCIS posting if EEA Level 3 was declared for the event and has been ended.

Step 2.12 Primary Responsibility: Operations Shift Supervisor

Perform reporting using CROP.50001 Reporting Procedure.

Step 2.13 Primary Responsibility: Security Operator

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

- 30 minutes has passed since the load was restored; Or
- 10 RTNET sequence executions have occurred since the load was restored.

## Deactivate the RTNET Restoration solution mode.

## **Instructions**

Perform the following to deactivate the RTNET Load Shed solution mode:

- ☐ Click "LDSH" button in RTNET to access the Load Shed / Restoration Dashboard;
- ☐ Click "Start Restoration DEACTIVATION" button.

#### <u>Notes</u>

- Allow 30 minutes to pass prior to deactivating the RTNET Restoration solution mode following the most recent load restoration event. If the 30 minutes **cannot** be allowed to pass, 10 RTNET executions are required.
- It is **NOT** recommended to stay in the load shed or restoration solution mode longer than required because of SE Parameter change effects on the State Estimator long term.
- This step will Reset SE Parameters and also Reset Manual Loads. This action will remove all manual MW and MVAr flags.

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Step 2.14.1 Primary Responsibility: Security Operator

Determine which loads in RTNET had manual flags applied prior to the load shed event and the associated MW and MVAr values.

#### Notes

The following items can be used to determine what loads had manual flags set in RTNET prior to the load shed event:

- ☐ A snapshot of RTNET taken prior to the load shed event; or
- ☐ An RTNET save case from prior to the load shed event

Step 2.14.2 Primary Responsibility: Security Operator

Set the manual MW and MVAr flags on the applicable loads in RTNET and enter the identified value.

Step 2.15 Primary Responsibility: Security Operator

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

• Load Shed Event is complete.

Set the LCC Notification for load shedding to inactive for each applicable 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 applicable LCC
- □ Verify Status changes from **ACTIVE** to **INACTIVE** for each participating LCC

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Revision History

Rev. No.	Date	Reason	Contact
	(MM/DD/YY)		
	06/20/19	For previous revision history, refer to Rev 16 available through Ask ISO	Steven Gould
17	10/09/19	Added Step 3.6	Steven Gould
		Evaluated Notes and Instructions	
18	09/17/20	Periodic Review. Removed Section 3.	Steven Gould
		Modified Step 1.15 and added Step 2.11 directing to CROP.50001	
		Reporting Procedure, added Note to step 1.8 and 2.6.	
19	10/08/20	Moved EEA Level 3 posting instructions from CROP.50001 Reporting	Steven Gould
		Procedure	
20	09/22/21	Periodic review with no substantive changes. Updated common	Steven Gould
		procedure information	
21	12/07/21	Added Step 1.19 for CR Manager to contact External Affairs and	Steven Gould
		Corporate Communications.	
22	05/26/22	Updated References; Updated Steps 1.12 & 2.8 with correct RC	Jonathan Gravelin
		terminology used. Updated Section 1 to include Operating Emergency	
		direction from M/LCC 13.	
23	04/04/23	Updated Procedure Background; Added Steps 1.17.1 & 2.14.1 due to	Jonathan Gravelin
		updated Pseudo Load calculations, changed the Standard of completion	
		in Step 2.9 to a Note.	
24	06/13/23	Administrative updated to review periodicity to 1 year	Jonathan Gravelin
25	09/25/23	Updated Procedure Background; Updated Steps 1.7 and 2.5; Deleted	Jonathan Gravelin
		Steps 1.17.1, 2.14.1, 1.9, 1.9.1, 2.6, 2.6.1, Renumbered Step 1.9.2 to 1.9	
		and 2.6.2 to 2.6.	
26	03/21/24	Added RIE to step 1.4 and 2.2; Updated steps 1.14 and 1.18 to clarify	Jonathan Gravelin
		system conditions have changed	