	CROP.32002 Generation Outages	
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Rev # 21	Procedure Owner: Manager, Control Room Operations	Valid Through: 01/02/2026

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References

1. OP 5 - Resource Maintenance and Outage Scheduling
2. M/LCC 1 - Nuclear Plant Transmission Operations
3. M/LCC 7 – Attachment C – Outage Coordination Verification Revision Process for BES Category A and Category B Facilities.
4. M/LCC 8 - Coordination of Generator Voltage Regulator and Power System Stabilizer Outages
5. M/LCC 10 - Generator Governor Control and Operation
6. OUTSCH.0030.0040 Perform Long Term Resource Outage Coordination

Procedure Background


Guide is an all-inclusive term for: TOG Stability, TOG Text, TOG RAS/ACS, and TOG temporary.

From OP-5 approval for an outage **NOT** to be withheld unless the consequences of granting the approval would result in:

- A risk of the OP-4 Action where a Power Watch is declared or higher; or
- OP-7; or
- Other serious reliability risk

Definitions from OP-5 that are used within this procedure:

Planned Outage (PO): Means an outage that is scheduled in advance and has a predetermined duration, typically for the purpose of performing annual maintenance. POs should be scheduled well in advance and must be requested with a minimum of 15 calendar days advance notice. These outages are initially coordinated in the First Future Year - Annual Maintenance Schedule and subsequently in the Current Year - Annual Maintenance Schedule.

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Maintenance Outage (MO): Means an outage that can be deferred beyond the end of the weekend, but requires that the generator, DRR, DARD, or ATRR be removed from service within 14 calendar days of the outage start date. During any particular week, if an MP requests an outage that cannot be deferred beyond the weekend, that outage shall be classified as a Forced Outage. ISO shall attempt to, in accordance with the request, accommodate an MO as soon as possible depending on system conditions, significant increases in Locational Marginal Price (LMP), and Congestion Costs. This outage is coordinated in the MO request processes. Characteristically, an MO can occur any time during the year, has a flexible start date, may or may not have a predetermined duration, and is usually much shorter than a PO,

Forced Outage (FO): Means an outage or inability, in whole or in part, of a Resource to provide its claimed capability or NCL, or any DRR outage that has not been approved by ISO in the form of a PO or MO. An FO incident preceding a PO or MO shall not eliminate the requirement of the MP to report an FO for the entire actual/estimated period to repair the component(s) associated with the FO. Among other things, an FO may occur by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of Section III of the Tariff and ISO New England Manuals.

A generator is considered “OOS due to transmission” if the generator is fully unavailable as a direct result of an outage of transmission equipment between the high side of the GSU and the point of interconnection. TCD outage applications are not required in the LTOC process if the transmission outage recall time is less than 4 hours per OUTSCH.0030.0040. Refer to MLCC 7 Attachment C to view the non-TOA Transmission and BES Facilities list to determine whether the resource is treated as a Category A or B facility.

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.

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Procedure

Condition(s) to perform this section:

- DE requests to start a Planned Outage (PO); Or
- A transmission outage has a corresponding Transmission Constraint Down (TCD) outage or reduction.

Section 1 : Scheduled Outage

Notes

Outage requests by the DE and outages due to transmission may overlap. If one is implemented before the other, ensure only the applicable applications are implemented and the resource limits are properly reflected based on the outage(s) that is in effect.

Step 1.1 Primary Responsibility: Generation Operator

Determine if there are any guides associated with the generator/DARD pump.

Step 1.2 Primary Responsibility: Generation Operator

Notify the Senior System Operator and Security Operator of the outage that is being requested.

Step 1.3 Primary Responsibility: Security Operator

Condition(s) to perform this step:

- Notified that an online generator/DARD pump is requesting to start an outage.

Perform a security assessment.

Step 1.3.1 Primary Responsibility: Security Operator

Condition(s) to perform this step:

- OP-19 normal criteria cannot be maintained.

Notify the Operations Shift Supervisor of the security assessment results.

Step 1.4 Primary Responsibility: Operations Shift Supervisor

Condition(s) to perform this step:

- Notified by the Security Operator that the outage would NOT allow OP-19 normal criteria to be maintained;
Or
- The outage would result in a risk of the OP-4 action where a Power Watch is declared (Action 4) or higher or OP-7 actions.

Determine if the outage should be approved or denied.

Instructions

- ☐ For approved outages go to Step 1.5
- ☐ For denied outages go to Step 1.6

Step 1.5 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The outage application was approved in real time.

Perform the following for the approved outage application.

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Step 1.5.1 Primary Responsibility: Generation Operator
Notify the DE the outage application was approved.

Step 1.5.2 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The generator/DARD pump outage has been approved in real time.

Ensure the generator/DARD pump limits match the limits specified in the outage application or per the applicable transmission outage.

Step 1.5.3 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- UCM is required to be changed for the outage.

Update the UCM.

Step 1.5.4 Primary Responsibility: Generation Operator

Implement the outage application.

Step 1.5.5 Primary Responsibility: Generation Operator

Notify the applicable LCC of the outage.

Step 1.5.6 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The outage has an impact on capacity.

Notify the Forecaster of the early/late implementation of the outage.

Step 1.6 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The outage application was denied in real time.

Perform the following for the denied outage application.

Step 1.6.1 Primary Responsibility: Generation Operator

Notify the DE the outage application was denied.

Step 1.6.2 Primary Responsibility: Generation Operator

Update the outage application for the denial due to real time reliability.

Instructions

For an application that has been “Approved” but has **NOT** been implemented, toggle the “Cancel” status. Enter appropriate comments in the comments field of the Outage Scheduling Software.

Step 1.6.3 Primary Responsibility: Generation Operator

Log the denial of the outage and include a reason for the denial.

Instructions

Use log entry: > OUTAGES > Denied

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Step 1.6.4 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The outage was taken even after being denied due to reliability.

Notify the Operations Shift Supervisor that the outage was still taken.

Step 1.6.4.1 Primary Responsibility: Operations Shift Supervisor

Notify ISO Control Room Management via e-mail using the "Control Room Mgmnt" distribution list that an outage was taken after being denied in real time with the outage details, the audio clips and the reliability reason for the outage denial.

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Condition(s) to perform this section:

- Outage without a corresponding application; Or
- A new emergency or forced transmission outage requires a corresponding Transmission Constraint Down (TCD) outage or reduction application.

Section 2 : Forced Outage

Notes

- Outage requests by the DE and outages due to transmission may overlap. Ensure only the applicable application is implemented and the resource limits are properly reflected based on the outage that is in effect.
- Refer to MLCC 7 Attachment C to view the non-TOA Transmission and BES Facilities list to determine if the resource should be treated as a Category A or B facility.

Step 2.1 Primary Responsibility: Generation Operator

Redeclare the generator/DARD pump limits to match the limits specified.

Step 2.2 Primary Responsibility: Generation Operator

Determine if there are any guides associated with the generator/DARD pump.

Step 2.3 Primary Responsibility: Generation Operator

Notify the Operations Shift Supervisor, Senior System Operator, Forecaster and Security Operator of the forced outage.

Notes

The Forecaster will create any new outage applications.

Step 2.3.1 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The outage or reduction was the result of an ongoing transmission event.

Notify the Forecaster that the outage should be created as a TCD.

Instructions

Provide the following details:

- ☐ Expected Start and End Times;
- ☐ Transmission Equipment causing the outage/reduction;
- ☐ CROW ID for the associated Transmission Application.

Step 2.4 Primary Responsibility: Security Operator

Perform a security assessment using Powerflow, ILC Powerflow, STCA and Double C.

Step 2.5 Primary Responsibility: Senior System Operator

Determine the effect the outage has on reserves and capacity.

Step 2.6 Primary Responsibility: Security Operator

Determine if the outage impacts a Primary or Alternate Restoration Path identified in M/LCC 18.

Notes

Refer to M/LCC 7 for information regarding overlaps of **BOTH** Primary and Alternate Restoration Paths to Nuclear Power Stations.

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Step 2.6.1 Primary Responsibility: Security Operator

Condition(s) to perform this step:

- The outage is a resource that affects the Primary or Alternate Restoration Path to a Nuclear Power Station.

Notify the impacted LCC Operator of the outage.

Step 2.7 Primary Responsibility: Generation Operator

Log the new application.

Instructions

- ☐ For a unit that becomes OOS, Use log entry: > GENERATION > OUTAGES > New Forced Outage [E]
- ☐ For a unit that has a reduction, Use log entry: > GENERATION > OUTAGES > New Forced Reduction [E]
- ☐ For a unit that has become OOS due to transmission, Use log entry: > GENERATION > OOS > Due to Transmission [E].
- ☐ For a unit that is reduced due to transmission, Use log entry: > GENERATION > Reduction Due to Transmission [E]

Enter the following information:

- ☐ CROW ID
- ☐ A description of the outage that includes the generator name

Notes

Generators with Forward Reserve Market (FRM) obligations are exempt from Failure-to-Reserve-penalties resulting from the outage of transmission equipment between the high side of the GSU and the point of interconnection. Proper log entry selection ensures the appropriate settlement.

Step 2.8 Primary Responsibility: Generation Operator

Notify the applicable LCC of the forced outage or restriction due to transmission.

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Condition(s) to perform this section:

- DE reports that an implemented outage is now complete; Or
- A transmission outage with a corresponding Transmission Constraint Down (TCD) outage or reduction is complete.

Section 3 : Completed Outage

Notes

Outage requests by the DE and outages due to transmission may overlap. If one is completed before the other, ensure only the applicable application is completed and the resource limits are properly reflected based on the outage that remains in effect.

Step 3.1 Primary Responsibility: Generation Operator

Enter the completion time in the applicable outage application.

Step 3.2 Primary Responsibility: Generation Operator

Ensure the generator/DARD pump limits reflect the completion of the outage.

Step 3.2.1 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Generation outage was a TCD application.

Notify the DE that the transmission outage is complete and the generator/DARD can return to bid or limits provided by the DE.

Step 3.3 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- UCM change is required.

Update the UCM.

Step 3.4 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Outage has an impact on capacity for the current or next operating day.

Notify the Forecaster of the early/late completion of the outage.

Step 3.5 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- The outage completed early or late.

Notify the applicable LCC of the early/late completion of the outage.

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Step 3.6 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Outage was completed more than 1 day early.

Log the early completion

Instructions

Use log entry: > OUTAGES > Completed Early [E]

Enter the following information:

- ☐ CROW ID
- ☐ A description of the outage that includes the generator name

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Condition(s) to perform this section:

- DE reports that an implemented outage will NOT be completed by the end time specified in the outage application;
Or
- A transmission outage with a corresponding Transmission Constraint Down (TCD) outage or reduction has been extended.

Section 4 : Delay in Outage Completion

Notes

Outage requests by the DE and outages due to transmission may overlap. If one is delayed, ensure the resource limits are properly reflected based on the overlapping outages.

Step 4.1 Primary Responsibility: Generation Operator

Redeclare the generator/DARD pump limits to values agreed upon for the specified time frame with the DE or that corresponds with the applicable transmission outage.

Step 4.1.1 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Generation outage is TCD due to a delayed transmission outage.

Notify the DE that the resource will remain restricted due to the transmission outage delay and estimated return time.

Step 4.2 Primary Responsibility: Generation Operator

Notify the Senior System Operator, Operations Shift Supervisor and Forecaster of the outage that will be delayed.

Notes

The Forecaster will create a Forced Outage, if required, to reflect the delay in completion.

Step 4.3 Primary Responsibility: Security Operator

Condition(s) to perform this step:

- Generator/DARD pump is online or a Fast Start; Or
- Generator/DARD pump is in an area that is currently constrained; Or
- Generator/DARD pump is in an area that is forecasted to be constrained; Or
- Currently in a capacity or reserve deficiency; Or
- Capacity or reserve deficiency is forecasted.

Perform a security assessment.

Step 4.4 Primary Responsibility: Senior System Operator

Condition(s) to perform this step:

- Generator/DARD pump is online or a Fast Start; Or
- Generator/DARD pump is in an area that is currently constrained; Or
- Generator/DARD pump is in an area that is forecasted to be constrained; Or
- Currently in a capacity or reserve deficiency; Or
- Capacity or reserve deficiency is forecasted.

Determine the effect the outage has on reserves and capacity.

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Step 4.5 Primary Responsibility: Security Operator

Determine if the outage impacts a Primary or Alternate Restoration Path identified in M/LCC 18.

Notes

Refer to M/LCC 7 for information regarding overlaps of **BOTH** Primary and Alternate Restoration Paths to Nuclear Power Stations.

Step 4.5.1 Primary Responsibility: Security Operator

Condition(s) to perform this step:

- The outage is a resource that affects the Primary or Alternate Restoration Path to a Nuclear Power Station.

Notify the impacted LCC Operator of the outage delay.

Step 4.6 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Current outage is NOT a Transmission Constraint Down (TCD) outage or a Forced Outage (FO); And
- The new expected end time is beyond 2359 of the current operating day.

Complete the original outage application and start the new forced outage created by the Forecaster.

Step 4.7 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Current outage is a Forced Outage (FO) and will NOT be completed by the end date specified; Or
- Is a Transmission Constraint Down (TCD) outage that is being extended due to the delay of the transmission outage.

Extend the outage application to a date and time agreed to with the DE or that corresponds with the applicable transmission outage.

Step 4.8 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- A current Forced Outage (FO) has been extended or a new Forced Outage (FO) has been created.

Log the outage.

Instructions

- ☐ For a unit that is OOS, Use log entry: > GENERATION > OUTAGES > New Forced Outage [E]
- ☐ For a unit that has a reduction, Use log entry: > GENERATION > OUTAGES > New Forced Reduction [E]

Enter the following information:

- ☐ CROW ID
- ☐ A description of the outage that includes the generator name

Step 4.9 Primary Responsibility: Generation Operator

Notify the applicable LCC of the outage delay.

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Condition(s) to perform this section:

- DE reports that a generator/DARD pump outage is cancelled; Or
- A transmission outage with a corresponding Transmission Constraint Down (TCD) outage or reduction has been cancelled.

Section 5 : Cancelled Outage

Notes

Outage requests by the DE and outages due to transmission may overlap. If only one is cancelled, ensure only the applicable application is cancelled and the resource limits are properly reflected based on the outage that remains in effect.

Step 5.1 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Generation outage is TCD due to a cancelled transmission outage.

Notify the DE that the resource is no longer restricted due to transmission.

Step 5.2 Primary Responsibility: Generation Operator

Redeclare the generator/DARD pump limits to values agreed upon with the DE.

Step 5.3 Primary Responsibility: Generation Operator

Cancel the outage.

Step 5.4 Primary Responsibility: Generation Operator

Notify the Senior System Operator, Operations Shift Supervisor and Forecaster of the outage being cancelled.

Step 5.5 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Generation outage is NOT due to a corresponding transmission outage.

Log the cancellation.

Instructions

Use log entry: > OUTAGES > Cancelled [E]

Step 5.6 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Generation outage is NOT due to a corresponding transmission outage.

Notify the applicable LCC of the cancelled outage.

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Condition(s) to perform this section:

- DE requests to start an outage of an AVR, PSS, or Reactive Control System (RCS); Or
- DE requests to start an outage of a governor that restricts generator performance capabilities.

Section 6 : AVR, PSS, RCS, or Governor - Scheduled Outage

Step 6.1 Primary Responsibility: Generation Operator

Determine if there are any required actions prior to authorizing the outage.

Instructions

Check the following for guidance:

- ☐ TOGs;
- ☐ MLCC 8
- ☐ MLCC 10
- ☐ RTS Group guidance in the CROW application

Step 6.2 Primary Responsibility: Generation Operator

Inform the Security Operator, Senior System Operator and Operations Shift Supervisor of the outage.

Step 6.3 Primary Responsibility: Generation Operator

Notify the applicable LCC Operator of the outage.

Instructions

Inform the LCC of the following:

- ☐ Actions taken per any applicable TOGs or procedures;
- ☐ Guidance provided by the RTS Group if applicable.

Step 6.4 Primary Responsibility: Security Operator

Perform a security assessment for the AVR outage.

Step 6.5 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- An AVR, PSS, or RCS is going out-of-service.

Log the AVR, PSS, or RCS device going out-of-service.

Instructions

Use log entry: > GENERATION > AVR/PSS Status

Step 6.6 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- A governor is going out-of-service.

Log the governor going out-of-service.

Instructions

Use log entry: > GENERATION > Governor Status

Step 6.7 Primary Responsibility: Generation Operator

Implement the outage application.

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Condition(s) to perform this section:

- Notified of an unplanned governor outage that restricts generator performance capabilities.

Section 7 : Governor - Emergency or Forced outage

Step 7.1 Primary Responsibility: Generation Operator
Inform the Security Operator, Senior System Operator and Operations Shift Supervisor of the outage.

Step 7.2 Primary Responsibility: Generation Operator
Redeclare the generator/DARD pump limits to values agreed upon for the specified time frame with the DE.

Step 7.3 Primary Responsibility: Generation Operator
Notify the applicable LCC Operator of the outage.

Step 7.4 Primary Responsibility: Operations Shift Supervisor

Condition(s) to perform this step:

- A governor is out-of-service for a resource that is not exempt as listed in M/LCC 10 Attachment A.

Notify the Real Time Studies On-Call Engineer that a governor is out-of-service.

Step 7.5 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- A governor is out-of-service.

Log the governor out-of-service.

Instructions

Use log entry: > GENERATION > Governor Status

Step 7.6 Primary Responsibility: Generation Operator
Notify the Forecaster to create an Informational outage.

Step 7.6.1 Primary Responsibility: Generation Operator
Implement the created informational outage application.

Step 7.6.2 Primary Responsibility: Generation Operator
Add any clarifying information in the outage application.

Instructions

- ☐ In the "ISO Comments" box, enter:
 - ☐ The equipment **NOT** operating normally (i.e., AVR, PSS, RCS, or governor)
 - ☐ The reason for the malfunction
 - ☐ Any operating restrictions caused by the outage

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Condition(s) to perform this section:

- DE reports an AVR, PSS, Reactive Control System (RCS), or governor outage is completed.

Section 8 : AVR, PSS, RCS, or Governor Outage Completion

Step 8.1 Primary Responsibility: Generation Operator

Enter the completion time in the outage application.

Step 8.2 Primary Responsibility: Generation Operator

Inform the Security Operator, Senior System Operator and Operations Shift Supervisor of the outage completion.

Step 8.3 Primary Responsibility: Generation Operator

Notify the applicable LCC Operator of the outage completion.

Instructions

Inform them if there was any TOG or RTS operational guidance that is no longer required.

Step 8.4 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- An AVR, PSS, or RCS has returned to service.

Log the AVR, PSS, or RCS device returned to service.

Instructions

Use log entry: > GENERATION > AVR/PSS Status

Step 8.5 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- A governor has returned to service.

Log the governor returned to service.

Instructions

Use log entry: > GENERATION > Governor Status

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Condition(s) to perform this section:

- A nuclear power station is requesting to perform Risk-Sensitive Maintenance Activity.

Section 9 : Risk-Sensitive Maintenance Activity

Notes

From M/LCC 1: A nuclear plant maintenance activity on certain equipment (e.g., emergency diesels, emergency core cooling systems, start up or shut down transformers, etc.) which requires a heightened awareness of the status and availability of off-site power sources and that could limit transmission maintenance activities.

Step 9.1 Primary Responsibility: Generation Operator

Access the applicable M/LCC 1 Attachment for the nuclear power station and determine if system conditions allow for Risk-Sensitive Maintenance Activity.

Step 9.2 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- System conditions do NOT warrant Risk-Sensitive Maintenance Activity.

Notify the requesting nuclear power station's DE that the Risk-Sensitive Maintenance Activity has to be rescheduled.

Step 9.3 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Risk-Sensitive Maintenance Activity will be allowed.

Notify the Operations Shift Supervisor, Senior System Operator, Security Operator and applicable LCC of the nuclear generator that will be performing Risk-Sensitive Maintenance Activity.

Step 9.3.1 Primary Responsibility: Generation Operator

Contact the requesting nuclear power station's DE and give approval to perform Risk-Sensitive Maintenance Activity.

Step 9.3.2 Primary Responsibility: Generation Operator

Implement the outage application for the Risk-Sensitive Maintenance Activity.

Step 9.4 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- Notification from the DE that Risk-Sensitive Maintenance Activity is complete.

Notify the Operations Shift Supervisor, Senior System Operator, Security Operator and applicable LCC that the nuclear generator has completed Risk-Sensitive Maintenance Activity.

Step 9.4.1 Primary Responsibility: Generation Operator

Enter the completion time of the outage.

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Condition(s) to perform this section:

- The DE for a nuclear generating station requested to perform a trip risk activity.

Section 10 : Trip Risk Activity

Notes

From M/LCC 1: Any activity that could directly result in a plant trip and would be stopped and/or postponed during an Abnormal Conditions Alert, in accordance with Master/Local Control Center Procedure No. 2 - Abnormal Conditions Alert (M/LCC 2).

Step 10.1 Primary Responsibility: Generation Operator

Determine if system conditions allow for Trip Risk Activity to be performed.

Notes

Rescheduling may also be required in the event that two or more nuclear power stations request to undertake Trip Risk Activity at the same time.

Step 10.2 Primary Responsibility: Generation Operator

Notify the requesting nuclear power station's DE of the determination.

Step 10.3 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- If Trip Risk Activity is approved.

Notify the applicable LCC Operator of the determination.

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Condition(s) to perform this section:

- MIL2, MIL3 or SBRK has reported an LCO condition.

Section 11 : Nuclear Plant LCO Report

Notes

An LCO is a nuclear plant requirement that requires the asset to potentially operate at a reduced output or shutdown. This is typically due to auxillary equipment at the station that is out-of-service. Usually there is a timeline associated with the reduced output or shutdown to allow the plant time to restore the equipment to service.

Step 11.1 Primary Responsibility: Generation Operator

Request information from the Nuclear Station DE.

Instructions

Record the following:

- ☐ Nuclear plant name
- ☐ Equipment causing/reason for the LCO
- ☐ Length of LCO
- ☐ Action requied when LCO expires (e.g. shutdown, reduction, etc)

Step 11.2 Primary Responsibility: Generation Operator

Log the LCO.

Instructions

Use Log Entry:

- ☐ Generation > Nuclear > LCO Notification > Start [E]
- ☐ Generation > Nuclear > LCO Notification > End [E]
- ☐ Enter information in the applicable fields.

Step 11.3 Primary Responsibility: Generation Operator

Inform the Forecaster and other Control Room Personnel.

Instructions

Request that the forecaster create an informational generation outage in CROW, documenting the start and planned end times of the LCO and the reason.

- The planned end time should be set to correspond to the time that the LCO expires.

Notes

The Shift Supervisor is responsible for ensuring this information is communicated to multiple parties outside of the control room. The LCO log entry creates an automated OPTI email after 60 minutes that is sent to Control Room Management. The Shift Supervisor should verify the log entry for accuracy and correct any discrepancies prior to the automated email being sent, if unable to do so and there is inaccurate information, a follow up email should be sent manually to Control Room Management by the Shift Supervisor with any corrections or clarifying information.

Step 11.4 Primary Responsibility: Generation Operator

Condition(s) to perform this step:

- For an LCO exit notification and a CROW application was created.

Complete the LCO outage application.

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Revision History

Rev. No.	Date (MM/DD/YY)	Reason	Contact
--	09/23/20	For previous revision history, refer to Rev 11 available through Ask ISO	Steven Gould
12	11/17/20	Added Condition to Enter to Step 4.7	Steven Gould
13	01/08/21	Added Instructions to Step 2.6 & 4.7	Steven Gould
14	04/09/21	Modified Steps 2.3 and 2.6 for Transmission Constraint Down (TCD) Outages. Updated log entry for Step 3.6 & 4.7. Updated terminology for Step 7.7. Updated conditions to enter for Sections 1, 2, 3, 4 & 5. Removed Standard of Completion provided in Common Procedure Instructions	Steven Gould
15	05/05/21	Modified Step 2.4 and corrected typographical errors	Steven Gould
16	07/20/21	Added Steps 3.2.1 and 4.1.1, Added condition to enter in Section 7, Updated Common Procedure Information, defined "RCS" in Sections 6, 7 and 8; reformat of TOC	Steven Gould
17	10/04/21	Added section 11 for actions required when a nuclear plant declares an LCO.	Steven Gould
18	11/16/22	Updated References and Procedure Background, Modified Section 7 moved information moved to CROP.10004with implementation of MLCC8 tool, Added Step 6.4; Updated Condition to enter Section 11, Step 11.2 & 11.4	Jonathan Gravelin
19	01/03/23	Added Step 2.6 & 2.6.1 as a requirement of M/LCC13; Added Instruction to Step 8.3	Jonathan Gravelin
20	05/15/23	Added Step 5.1; Modified Condition to Enter in Step 3.6; Modified Step 2.4; Added condition to enter for Step 5.5	Jonathan Gravelin
21	01/02/24	Deleted old Step 11.4 as the LCO log entry handles the email notification, created new Step 11.4 to complete CROW app; Added Notes to Step 11.3. Added Step 4.5; Added Condition to Enter in Step 1.4.	Jonathan Gravelin