	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025


# SOP-OUTSCH.0030.0020

## Perform Short Term Outage Coordination


### Contents

<b>1. Objective .....</b>	<b>3</b>
<b>2. Background .....</b>	<b>3</b>
<b>3. Responsibilities.....</b>	<b>4</b>
<b>4. Controls.....</b>	<b>9</b>
<b>5. Instructions.....</b>	<b>11</b>
5.1 Processing Short Term Transmission Outage Requests .....	11
5.1.1 Perform Transmission & Generation Coordinator Tasks .....	12
5.1.2 Perform Economic Outage Coordinator Tasks .....	16
5.1.3 Perform D3 Outage Coordinator Tasks .....	17
5.1.4 Perform D2 Outage Coordinator Tasks .....	19
5.1.5 Perform D1 Outage Coordinator Tasks .....	22
5.2 Short Term Outage Coordination Group BCC Activities .....	27
5.3 Short Term Outage Coordination Software Testing .....	28
<b>6. Performance Measures .....</b>	<b>29</b>
<b>7. References .....</b>	<b>30</b>
<b>8. Revision History .....</b>	<b>32</b>
<b>9. Attachments.....</b>	<b>34</b>
Attachment A - Day-Ahead Pre-Check-Out Template (Confidential).....	36
Attachment B - Next Day Operating Plan Daily Check Out (Confidential).....	37
Attachment C - Outage Coordination Process Overview .....	38
Attachment D - Best Practices for Studying and Completing Short Term Transmission Outage Requests (Confidential) .....	39
Attachment E - Determining GRT Limits (Confidential) .....	40

*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.*

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

Attachment F - Determining and Posting External Transfer Limits .....	41
(Confidential) .....	41
Attachment G - Savecase Directory Listing (Example) .....	42
Attachment H - GRT Limit Time Table for the Day-Ahead Market.....	43
Attachment I - GRT Limit Variations Over Time .....	44
Attachment J - Season Priority Configurations .....	45
Attachment K - Energy Management System (EMS) Model Release .....	47
Attachment L - Short Term Outage Coordination Process .....	48
Attachment M - BCC or Remote Activities .....	49
Attachment N - Short Term Outage Coordination Software Testing .....	52
Attachment O - Requirements for Requesting RTS Guidance for Overlapping Outages with Guides .....	55

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

## 1. Objective

The objective of this procedure is to document the responsibilities of ISO New England (ISO) staff with regard to transmission equipment/facility outage coordination. These responsibilities include the following processes:

- Receiving and processing each transmission outage request submitted to ISO
- Performing outage analysis with respect to system reliability and market efficiency
- Approving and/or disapproving (“Denied”, “Cancelled” or “Recalled”) each outage request
- Closing outage requests as required

This procedure describes the following process:

- Forecasting daily estimates of External Transfer Limits for interfaces between ISO and each neighboring Reliability Coordinator Area/Balancing Authority Area (RCA/BAA).
- Calculating estimates for Day-Ahead interface limits, Double Contingency Import Limits and Reserve Zone requirements based on transmission topology, system demand and generation using the Generation Requirements for Transmission (GRT) spreadsheet.

This procedure does **not** in any way change the intent of ISO New England Operating Procedure No. 3 - Transmission Outage Scheduling (OP-3) but rather is intended to clarify responsibilities delegated to ISO staff by OP-3.


Compliance with this procedure is necessary to support the reliable and cost-effective operation of the power system.

## 2. Background

OP-3 establishes the procedure by which each Transmission Owner (TO), Market Participant (MP), Local Control Center (LCC), and ISO interact to develop transmission equipment outage plans, for both Long-Term Outages ( $\geq$  21 days in advance of the Operating Day) and Short Term Outages ( $<$  21 days in advance of the Operating Day).

As the date of a proposed outage is confirmed, the applicable LCC along with the applicable neighboring RC/BA coordinate and review each proposed transmission outage request in the applicable region prior to ISO evaluating and providing final approval of the proposed outage. Each transmission outage request is submitted primarily by using the ISO Outage Scheduling software, or as a backup method by email [refer to Master/Local Control Center Procedure

**Hard Copy Is Uncontrolled**

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

No. 7 - Processing Outage Applications (M/LCC 7)]. The ISO Outage Scheduling software uses internet-based communications to schedule, monitor and track each transmission outage. ISO evaluates the proposed outage given the forecasted conditions at the time of the evaluation and in accordance with the criteria contained in ISO New England Operating Procedure No. 19 - Transmission Operations (OP-19). ISO then re-evaluates the outage request as system conditions change over time. In conducting its analysis, ISO uses advanced tools to model the Bulk Electric System (BES) and apply contingencies to evaluate the potential impact of an outage that serves as the basis for the approval/disapproval of an outage request. Such tools include, but are **not** limited to: Power System Simulation for Engineering (PSS/E), Powerworld, Powerflow, Contingency Analysis (CA) and an Interface Limits Calculator (ILC). ISO communicates the transmission outage request evaluation results to each applicable LCC and neighboring RC/BA and also posts approved transmission outages to the ISO public website to comply with Federal Energy Regulatory Commission (FERC) requirements.

External Transfer limits are also created to establish the maximum amount of power that can be reliably transferred over the New England tie-lines per the FERC, the North American Electric Reliability Corporation (NERC), and ISO operating criteria for anticipated system conditions.

Transmission studies have identified that subsets of the BES in certain geographical areas are constrained by transmission capabilities. When operating issues are observed or anticipated by ISO, an LCC, or an individual TO, the Real-Time Studies group (RTS) performs transmission studies, as needed, to identify appropriate thermal, voltage and stability limits for the constraint.


NERC Reliability Standard TOP-003 - Operational Reliability Data requires each Transmission Operator (TOP) and BA to be notified of the status or degradation of a RAS/ACS that impacts reliability. The ISO Outage Scheduling software will track the status of a RAS/ACS if it is Out-of-Service (OOS). The status of a RAS/ACS is understood to be In-Service if there is **no** outage request in the ISO Outage Scheduling software.

### 3. Responsibilities

#### NOTE

Any NERC Certified System Operator, certified at the RC level, has the authority to take action(s) required to comply with NERC Reliability Standards.

1. The Director, Operations Support Services is responsible for monitoring that this procedure is adhered to for system risk mitigation.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

2. The Supervisor, Short Term Outage Coordination is responsible for:


- Responding to relevant Corrective Action Preventive Action (CAPA) issues and performing corrective actions to resolve issues
- Verifying the accuracy of the GRT DOUBLC load percentages and coordinating changes with Forecaster
- Verifying the ISO Outage Scheduling software is updated with Designated Blackstart Resources (DBR) in accordance with Master/Local Control Center Procedure No. 18 - System Restoration Plan Attachment O - Designated Blackstart Resources Confidential (M/LCC 18O).

3. The Economic Outage Coordinator is responsible for:

- Performing economic studies in accordance with OP-3 and as requested by an LCC or other ISO business unit
- Supporting the Transmission & Generation Coordinator when working with a TO and/or LCC to review opportunities to reposition an outage request that has been identified as having significant congestion impact
- Performing the Network Model Maintenance process in the ISO Outage Scheduling software and/or Total Transfer Capability (TTC) Calculator, to support new network model releases
- Update Master/Local Control Center Procedure No.7, Attachment C – Outage Coordination Verification and Revision Process for BES Category A and Category B Facilities (M/LCC 7C) to reflect the network model releases
- Supporting the development and refinement of new and existing economic analysis tools and methods
- Supporting the D3 Outage Coordinator in performing their duties and performing Resource Outage Coordination, as needed

4. The Transmission Coordinator is responsible for:

- Supporting the D3 Outage Coordinator in performing their duties and performing Resource outage coordination, as needed
- Supporting the Generation and Economic Outage Coordinator, as needed
- Verifying that transmission outage information received from an LCC or neighboring RC/BA is disseminated to the appropriate parties so that each transmission outage request is studied within the required timeframe and Powerflows are updated properly

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

- Evaluate forecasted system conditions and determine if a transmission outage needs to be postponed or potentially recalled
- Reporting each Remedial Action Scheme (RAS) or Automatic Control Scheme (ACS) outage to the Operations Shift Supervisor via the ISO Outage Scheduling software to make them aware of the correct status of RAS/ACSs
- Verifying that each submitted Short Term transmission outage request is approved by the applicable LCC prior to ISO review in accordance with OP-3
- Verifying that each incorrectly submitted request is denied and that the appropriate party is notified to resubmit or reapply
- Performing a daily initial review of each transmission outage request in the ISO Outage Scheduling software to determine if a complex study or advanced analysis should be performed, and contacting RTS, as necessary, to request that such studies be conducted
- Performing the Network Model Maintenance process in the ISO Outage Scheduling software and/or Total Transfer Capability (TTC) Calculator, to support new network model releases
- In accordance with the directions in ISO New England Operating Procedure No. 2 - Maintenance of Communications, Computers, Metering, and Computer Support Equipment (OP-2), generating, reviewing and publishing the OP-2, Appendix D – OP-2 Approved Scheduled Maintenance Report (OP-2D) (Confidential).


5. The Generation Coordinator is responsible for:

- Studying and approving/disapproving each Short Term Generation Outage Request
- Supporting the Transmission and Economic Outage Coordinator as needed
- Coordination of nuclear work within 14 days prior to the Operating Day

6. The D3 Outage Coordinator is responsible for:

- Studying and approving/disapproving each Short Term transmission outage request, that is at least three, but less than 21 days prior to the Operating Day
- Creating and updating the DAY\_MM\_DD\_XXXXXMW\_OSD3 Powerflow case and beyond



	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

- Reviewing each transmission outage request that affects a Resource and verifying that an outage request has been created in the ISO Outage Scheduling software
- Verifying Market Sensitive and Major Transmission Element (MTE) flags are set appropriately in each transmission outage request that is being reviewed


7. The D2 Outage Coordinator is responsible for:

- Verifying accuracy, updating and renaming the Powerflow received from the D3 Outage Coordinator to the DAY\_MM\_DD\_XXXXXMW\_OSD2 Powerflow
- Supporting the duties of the D3 Outage Coordinator and performing Resource outage coordination as needed
- Analyzing and approving/disapproving each Short Term transmission outage request that is at least two, but less than 21 days prior to the Operating Day
- Analyzing and approving/disapproving each Short Term transmission outage Request that has a Outage Priority of “Forced or Emergency” (**not** in the current day) until the next day OSD1 case is turned over to the CR

**NOTE**


When a Forced or Emergency outage occurs in Real-Time and will extend past the current operating day, the applicable LCC will submit the transmission outage request and the CR will log the information in OPRALOG, which will inform the Outage Coordinators via email. The Outage Coordinators will add comments into the Short Term ISO Study Summary field and update the application with the appropriate information for the D1, DAM and Forecaster.

- Calculating and posting the External Transfer limits on the Open Access Same-Time Information System (OASIS) and ISO public website by 0830
- Posting of External Transfer limits impacting the Day Ahead Market after 0830 must be coordinated with the Supervisor, Short Term Outage Coordination and communicated to Day Ahead Market Administrator and Forecaster via face-to-face or email
- Prior to 0845 meeting, reviewing new and previous day GRT limits for accuracy
- Performing a daily turnover at approximately 1200 with the D1 Outage Coordinator using the appropriate Powerflows so that:

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

- The D2 Outage Coordinator can assume the responsibilities of updating and communicating the DAY\_MM\_DD\_XXXXXMW\_OSD1 Powerflow
  - The D1 Outage Coordinator can assume the responsibilities of updating the DAY\_MM\_DD\_XXXXXMW\_OSD2 Powerflow and preparing the Powerflow cases for the next day GRT limits
  - Assisting as needed when the Transmission & Generation Coordinator is unavailable or during heavy workloads
  - Turning over an upcoming transmission outage request and providing the updated D1 Powerflow to the Forecaster and on-shift Operations Shift Supervisor
  - Reviewing each transmission outage that affects a Generator and verifying an outage request has been created in the ISO Outage Scheduling software
  - Verifying Market Sensitive and MTE flags are set appropriately in each transmission outage request that is being reviewed
8. The D1 Outage Coordinator is responsible for:
- Verifying accuracy, updating and renaming the Powerflow received the previous day from the D2 Outage Coordinator to the DAY\_MM\_DD\_XXXXXMW\_OSD1 Powerflow
  - The daily calculation of GRT limits using the DAY\_MM\_DD\_XXXXXMW\_OSD1 Powerflow and providing the Forecaster, Market Administrators and System Operators with the GRT limits on a Day-Ahead basis
  - Incorporating the External Transfer Limits received from the D2 Outage Coordinator into the GRT spreadsheet
  - Attending the Day-Ahead Pre-Check Out meeting with the Transmission & Generation Coordinator, Forecaster and Market Administrators for validating each transmission outage request in the ISO Outage Scheduling software and providing the Market Administrators with GRT limits
  - Notifying the Forecaster and Market Administrators of subsequent changes to the GRT limits
  - Verifying that the “ISO-NE Next Day Study Report” was sent to each adjacent RC
  - Performing a daily turnover, at approximately 1200, with the D2 Outage Coordinator using the appropriate Powerflows so that:



	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>


- The D2 Outage Coordinator can assume the responsibilities of updating and communicating the DAY\_MM\_DD\_XXXXXMW\_OSD1 Powerflow
  - The D1 Outage Coordinator can assume the responsibilities of updating the DAY\_MM\_DD\_XXXXXMW\_OSD2 Powerflow and preparing the Powerflow cases for the next day GRT limits
  - Emailing the on-shift Operations Shift Supervisor when the preliminary GRT is completed
  - Turning over the Powerflow cases used to develop the GRT limits to the on-shift Security Operator
  - Reviewing each transmission outage that affects a Resource and verifying that an outage request has been created in the ISO Outage Scheduling software
  - Verifying Market Sensitive and MTE flags are set appropriately in each transmission outage request that is being reviewed
9. When requested by an Outage Coordinator or other ISO personnel, RTS is responsible for performing a complex study or advanced analysis of an outage request, including determining the adequacy of existing transmission limits and developing new limits based upon any complex study.

## 4. Controls


- ISO performance regarding timeliness of approving/disapproving Planned transmission outages is measured against the OP-3 requirement to approve/disapprove requests at least 24 hours prior to 0001 on the day the work is to begin and the Outage Coordination group goal to approve/disapprove requests at least 48 hours prior to 0001 on the day the work is to begin (this is more restrictive than the corporate metric).
- The Supervisor, Short Term Outage Coordination convenes monthly meetings as needed to respond to any relevant EtQ CAPA or ISSUE and/or other issue and identifies corrective actions.
- Voice recorded phones are in place for the Control Room (Operations Shift Supervisor, System Operator, and Forecaster) and Outage Coordination group personnel.

### NOTE

External Transfer limits posted on OASIS are required by FERC and NERC and are subject to audit.

	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

- External Transfer limit postings are available on OASIS.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

## 5. Instructions

### 5.1 Processing Short Term Transmission Outage Requests

#### NOTE

The process for handling each Short Term transmission outage request is depicted in Attachment L - Short Term Outage Coordination Process.

Rules built into the ISO Outage Scheduling software require certain data fields to be populated to allow a request to be sent to ISO. Each transmission outage request is submitted through the ISO Outage Scheduling software or, as a backup method if the ISO Outage Scheduling software is inaccessible, via email/fax. Guidance on how to complete a Short Term Transmission Outage Request is contained in Attachment D - Best Practices for Studying and Completing Short Term Transmission Outage Requests (Confidential), OP-3 and M/LCC 7.

If an outage is overrun, select the "Overrun" button and change the Planned End Date Time.

The applicable LCC forwards each Short Term transmission outage request to ISO for approval unless the facility is listed as a Category B Facility and does **not** affect any Generator or Dispatchable Asset Related Demand (DARD) per OP-3 and M/LCC 7.


The applicable LCC notifies the Transmission & Generation Coordinator first and, if unavailable, a D3/D2/D1 Outage Coordinator or Control Room Security Operator, as applicable, when a transmission outage request is being emailed. This is to verify that each emailed outage request is entered into the ISO Outage Scheduling software in the correct sequence so that the proper order of request numbers are assigned by the ISO Outage Scheduling software.

#### NOTE

Whenever Master/Local Control Center No 2 - Abnormal Conditions Alert (M/LCC 2) is declared, the outage approval/denial process includes the maintenance, construction and test activities criteria contained in M/LCC 2.

Occasionally, a TO or Generator Owner (GO) will request an equipment and/or protective relaying outage that will directly and/or indirectly impact the reliability of a nuclear power generating facility and/or neighboring RCA/BAA. Any outage request that directly or indirectly impacts Nuclear Plant Interface Requirements (NPIRs) is

This NOTE is continued on the next page.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025


This NOTE is continued from the previous page.

communicated to the nuclear power plant affected in accordance with M/LCC 7 and Master/Local Control Center Procedure No. 1 - Nuclear Plant Transmission Operations (M/LCC 1).


The communication to the nuclear power plant should include information that is necessary for safe and reliable operation. It is an expectation that any outage request that directly or indirectly impacts the reliability of a neighboring RCA/BAA is communicated in accordance with M/LCC 7 and OP-3. The communication to the neighboring RC/BA should include information that is necessary for safe and reliable operation.

#### 5.1.1 Perform Transmission & Generation Coordinator Tasks

1. The Transmission & Generation Coordinator (or, if unavailable, the D2 Outage Coordinator) verifies the following:
  - Any emailed outage request is received with the required information and within the time frames required in OP-3 prior to entering it into the ISO Outage Scheduling software. If the “Priority” of the request is **not** within required timeframes, the request will be denied and the applicable party will be requested to reapply
  - Any emailed outage application is verified to have the following completed or resolved and if resolution **cannot** be performed, the applicable party will be requested to reapply:
    - Outage request provides sufficient information describing the proposed transmission outage
    - Appropriate LCC approvals have been obtained and applicable notifications to neighboring RCs/BAs have been made
  - The emailed outage requests are entered into the ISO Outage Scheduling software in the order in which they were received
  - The email outage template is located in M/LCC 7, Attachment A- ISO Transmission Facility Outage Request Form (M/LCC 7A)
2. On a daily basis, the Transmission & Generation Coordinator shall perform the following:
  - A. Review the topology of each “Submitted” outage request in the ISO Outage Scheduling software scheduled to start 21 days for transmission and 14 days for Resource outages or less in the future including but **not** limited to the following:

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

- Verify that the topology/devices are correctly entered in the ISO Outage Scheduling software data fields
  - Verify that the Start and End times are still valid
  - Verify that the Market Sensitive flag is set to “Yes” or “**No**”
  - Verify that the MTE flag is in the correct status based on the outage type
  - Verify that the supporting materials required by OP-3 are submitted
  - For an outage request submitted with the Status of “Emergency” or “Forced”, verify an explanation is included as to why it has been submitted with less than the required notice as described in OP-3
    - If **no** explanation is included, contact the applicable LCC and request the LCC to provide an explanation
  - Determine if overlapping outages impact both a Primary Path and Alternate Path in the New England Reliability Coordinator System Restoration Plan using M/LCC 7 – Attachment H – Temporary Restoration Path and contact LCC Outage Coordination. If the criteria cannot be met or overlap exists and cannot be resolved, contact the ISO-NE Chair of the System Restoration Working Group (SRWG) or designee.
  - Determine if ISO and LCC network model differences require any changes
  - Determine if an OOS element or commissioning of new equipment on a Resource requires a TOG. If a TOG is applicable during the outage, coordinate efforts with the LCC to ensure a transmission request is also submitted.
- B. Communicate each RAS/ACS outage or status change received from an LCC to the Operations Shift Supervisor, who shall verify the correct RAS/ACS status in the Control Room and in the ISO Outage Scheduling software.
3. When the Outage Coordination group is made aware of an accurate schedule for a new transmission or Resource facility to go commercial, (based on communications between the LCC and the Outage Coordination group), the Transmission & Generation Coordinator shall notify the following:
- Manager, Power System Model Management

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025


- Operations Shift Supervisor
- Forecasters
- Market Administrators
- RTS
- Defined external entities in accordance with SOP-OUTSCH.0025.0010 – Update Outages Impacted by System Changes

#### NOTE


Monday through Friday, NYISO informs the Transmission & Generation Coordinator of anticipated system conditions that could cause the NY Central-East interface to become restrictive on New England single source contingencies above the Single Source Contingency Limit (SSCL). Currently, the lowest SSCL value is limited to 1,320 MW. Primarily this will allow ISO to inform any affected Resource in advance that the Generator "may" be asked to reduce to the SSCL during the times that NYISO identifies. This advance notification will allow any affected Resource to review any work the Resource is anticipating that could hinder their ability to quickly back down to the SSCL when directed to do so by the ISO Control Room System Operators. The Procedure To Protect for Loss of Single Source Contingency Guide may provide additional guidance. (This is found with the other Transmission Operating Guides in ODMS).

4. The Transmission & Generation Coordinator shall inform any applicable Resource when NYISO anticipates system conditions that could cause the NY Central-East interface to become restrictive on New England single source contingencies above the SSCL.
  - A. When informing an applicable Generator, the Transmission & Generation Coordinator shall include a brief description of the transmission outage(s) occurring in New York and that the outage(s) may reduce the maximum allowable ISO Source Contingency to as low as the SSCL, due to New York system reliability requirements.
  - B. During unavailability of the Generation Coordinator, the Transmission & Generation Coordinator shall enter the Generator notices in the ISO Outage Scheduling software Notifications section.



	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

5. The Transmission & Generation Coordinator shall attempt to resolve any noted discrepancy with the applicable LCC and/or neighboring RC/BA.
  - If the discrepancy is resolved, the Outage Coordinator shall annotate in the “Short Term ISO Study Summary” data field that the submitted application has been reviewed and include the date of review.
  - If a discrepancy **cannot** be resolved, the Outage Coordinator shall deny the request and request the applicable parties to reapply.
6. The Transmission & Generation Coordinator shall perform an ISO Outage Scheduling software update with each applicable LCC and/or neighboring RC/BA at 0745, Monday through Friday, including a discussion of any current and pending transmission or Resource outage.
  - A. If any changes occurred to a “Submitted” Long Term Outage, the Outage Coordination group shall provide the information to the members of their group that process the Long Term Outages.
7. During the course of the shift, if a transmission outage request requires a special study, the Transmission & Generation Coordinator shall notify RTS via email about the pending request in the ISO Outage Scheduling software.
  - A. The Transmission Coordinator shall place a note in the “Short Term ISO Study Summary” data field stating that a complex study has been requested.
  - B. RTS shall perform the applicable actions of SOP-OUTSCH.0050.0020 - Perform Complex Studies and return the study results to the Transmission & Generation Coordinator.
  - C. The Transmission & Generation Coordinator shall provide the complex study results to the D1/D2/D3 Outage Coordinators and update the ISO Outage Scheduling software.
8. The Transmission & Generation Coordinator shall study each Short Term Transmission Outage Request as requested by the Supervisor, Short Term Outage Coordination using, but **not** limited to, Attachment D.
9. Provide support for new Network Model releases by performing the following:
  - Perform any required Administrator Network Model Maintenance activity(s) in the ISO Outage Scheduling software.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>


- Coordinate with Day-Ahead Market Administrator(s) to identify any topology outage request to be created for new equipment not yet in service.

10. The Transmission & Generation Coordinator shall support the performance of the duties of the D3 Outage Coordinator and the Generator outage process as needed.

#### 5.1.2 Perform Economic Outage Coordinator Tasks

1. The Economic Outage Coordinator shall perform the following tasks:

- A. When indicated by significant Generator Must Run requirements or heavy market congestion, perform economic studies in accordance with SOP-OUTSCH.0030.0065 - Short Term Outage Economic Analysis.
- B. Coordinate with the applicable LCC, Line owner, GO and ISO Management to evaluate, and when necessary, to reposition or deny any transmission outage request with a congestion cost greater than \$200,000 per week in accordance with OP3 - Transmission Outage Scheduling.
- C. Notify Monthly Markets group (in Market Analysis & Settlements; MonthlyMarketsGroup@iso-ne.com) of the results of economic studies that predict a shortfall in the congestion fund revenues to pay Financial Transmission Rights (FTR) obligations for an Operating Day.
- D. Provide information and support to Day-Ahead Market Administrators in resolving issues related to outage requests, network model topology, interface limits and binding constraints.
- E. As necessary, perform daily market simulations and analysis to identify outages causing heavy congestion.
- F. As necessary, perform capacity analyses to support Resource and transmission outage coordination
- G. As necessary, perform N-1-1, Outage Reliability Analyzer (ORA), Transfer Limit and other studies to facilitate planning and coordination of transmission and Generator outage requests.
- H. Coordinate with Real-Time Market Support group to update contingency lists in Total Transfer Capability (TTC) Calculator as a result of new equipment in commercial service, network model

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

releases and Real-Time issues as discovered by the ISO Operations staff.

- I. Provide support for new Network Model releases by performing the following:
  - Perform any required Administrator Network Model Maintenance activity(s) in the ISO Outage Scheduling software.
  - Coordinate with Day-Ahead Market Administrator(s) to identify any topology outage request to be created for new equipment not yet in service.
- J. When necessary, perform the duties of the D3 Outage Coordinator or Outage Coordinator.

### 5.1.3 Perform D3 Outage Coordinator Tasks


1. The D3 Outage Coordinator shall perform the following:

- A. From an all lines in Basecase, create a Powerflow labeled as Day\_MM\_DD\_XXXXMW\_OSD3 or greater.

#### NOTE

Attachment G - Savecase Directory Listing provides an example of the OUTSCH Savecase Directory.

- B. Keep the seven active OSD3 Powerflow cases and delete the other OSD3 cases to provide sufficient storage space in the OUTSCH Savecase Directory.
2. The D3 Outage Coordinator shall prepare and update Powerflow faceplate to expedite turnover and to assist in noting changes and assumptions made for when the Powerflow is turned over to the D2 Outage Coordinator.
3. The D3 Outage Coordinator shall populate the OSD3 Powerflow or greater with all Short Term transmission outage requests that are contained in the ISO Outage Scheduling software for the day being reviewed.
  - A. Evaluate each non-concurrent outage and verify that the most limiting outage is considered for inclusion in the Powerflow case.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

- B. Include expected load forecasts and Resource outages in the OSD3 Powerflow.

**NOTE**

Outage requests, that are to be included in the Day\_MM\_DD\_XXXXXMW\_OSD3 Powerflow or greater, include Interim Approved, Submitted, Study, Negotiated, Approved and Implemented Outages that occur on the day represented by the Powerflow.


Each Interim Approved Outage that is entering the Short Term Outage Coordination process is to be reviewed and evaluated as a Short Term Transmission Outage Request.

4. The D3 Outage Coordinator shall study each Short Term transmission outage request using, but **not** limited to, Attachment D.
5. If a transmission outage requires a special study the D3 Outage Coordinator shall notify RTS via email.
  - A. RTS shall perform SOP-OUTSCH.0050.0020 - Perform Complex Studies and provide the study results back to the D3 Outage Coordinator.
  - B. The D3 Outage Coordinator shall use the study results information to approve/deny the transmission outage.
6. If a Resource is required to be Must Run or restricted, the D3 Outage Coordinator shall notify the Generation Coordinator to update the ISO Outage Scheduling software.

**NOTE**

Details for notifying the Transmission & Generation Coordinator or D3/D2 /D1 Outage Coordinator about any Must Run or constrained Resource resulting from a transmission outage request are found in Attachment D.

7. The D3 Outage Coordinator shall change the status of the “Submitted” request to “Study” for each outage request being studied.
8. Prior to 1630, the D3 Outage Coordinator shall assign the appropriate status “Approved”, “Denied”, or “Cancelled” to an outage that is three days or more in the future.
9. The D3 Outage Coordinator shall report any discrepancy issue through the EtQ CAPA/ISSUE process.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

10. If the D3 Outage Coordinator determines that an outage that is three days in the future **cannot** be completed by the end of their shift, the D3 Outage Coordinator shall notify the Supervisor, Short Term Outage Coordination of the need to perform contingency planning.
11. When the D3 Outage Coordinator determines that a Resource may be significantly affected by reduced interface limits or local constraints, the D3 Outage Coordinator shall notify the Transmission & Generator Coordinator.

#### 5.1.4 Perform D2 Outage Coordinator Tasks

##### NOTE

The D2 Outage Coordinator assists the Transmission & Generator Coordinator as needed.

1. At approximately 0630 the D2 Outage Coordinator shall perform the following:
  - A. Review Attachment B - Next Day Operating Plan Daily Check Out
  - B. Verify that the changes are made in the DAY\_MM\_DD\_XXXXXMW\_OSD1 Powerflow.
2. The D2 Outage Coordinator shall perform the following:
  - A. Verify accuracy, update and rename the previously created Powerflow DAY\_MM\_DD\_XXXXXMW\_OSD3 to the new designation of DAY\_MM\_DD\_XXXXXMW\_OSD2.

##### NOTE


Attachment G provides an example of the OUTSCH Savecase Directory.

- B. To provide sufficient storage space in the OUTSCH Savecase Directory, keep seven active OSD2 Powerflow cases and delete the other OSD2 cases.

##### NOTE

An outage summary sheet is used to expedite turnover and to assist in noting changes and assumptions made when the Powerflow is turned over to the D1 Outage Coordinator.

3. The D2 Outage Coordinator shall revise the OSD2 Powerflow with updated information as follows:
  - Beginning at 0630 revise the Powerflow with expected outages


	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

- Throughout the shift, until turnover with the D1 Outage Coordinator occurs, update for the following:
    - “Denied” Outage requests
    - “Cancelled” Outage requests or cancelled Profile Outages requests
    - Emergency and/or Forced Outages and any revised times
    - Revised Resource outages
    - Revised load forecasts
    - Revised wind data
    - Deny, cancel, or reposition any Short Term transmission outage request that was previously “Approved” if it is determined that reliability **cannot** be maintained and update the OSD2 Powerflow by 1200.
  - Report any software problem to the IT Help Desk and Supervisor, Short Term Outage Coordination
4. The D2 Outage Coordinator shall study each Short Term transmission outage request that has a Outage Priority of “Forced” (**not** in the current day) using, but **not** limited to, Attachment D.
  5. If a transmission outage requires a special study, the D2 Outage Coordinator shall notify RTS about the pending application in the ISO Outage Scheduling software.
    - A. RTS shall perform SOP-OUTSCH.0050.0020 - Perform Complex Studies and return the results back to the Outage Coordinator.
    - B. The D2 Outage Coordinator shall use study results and select either “Approved” or “Denied” for the transmission outage.
  6. If a Resource is required to be Must Run or be restricted, the D2 Outage Coordinator shall notify the Generation Coordinator that an update to the ISO Outage Scheduling software is required.


#### **NOTE**

Details of notifying the Transmission & Generation Coordinator or D1/D2/D3 Outage Coordinator about Must Run or constrained Resources resulting from a transmission outage request are found in Attachment D.



	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025


7. The D2 Outage Coordinator shall select either “Approved” or “Denied” Outage Priority of “Forced” (**not** the current day) prior to the turnover at 1200 with the D1 Outage Coordinator.
8. If the D2 Outage Coordinator determines that an outage with Outage Priority of “Forced” (**not** the current day), **cannot** be completed by the end of their shift, the D2 Outage Coordinator shall notify the Supervisor, Short Term Outage Coordination of the need to perform contingency planning.
9. If it is determined by the end of the shift that the D2 Outage Coordinator **cannot** choose either “Approved” or “Denied” for an outage request 24 hours prior to the start date, the D2 Outage Coordinator shall notify the Supervisor, Short Term Outage Coordination of the need to perform contingency planning.
10. The D2 Outage Coordinator shall perform Attachment F - Determining and Posting External Transfer Limits.
11. By 0830, the D2 Outage Coordinator shall post the forecasted External Transfer Limits to OASIS and the ISO public website in accordance with Attachment F.
12. The D2 Outage Coordinator shall provide the External Transfer Limits for the GRT spreadsheet to the D1 Outage Coordinator.
13. The D2 Outage Coordinator (or designee) shall attend the 0845 meeting and review the new and previous day GRT limits for accuracy.
14. Daily at approximately 1200 the D2 Outage Coordinator shall perform a turnover with the D1 Outage Coordinator using the appropriate Powerflows so that:
  - The D2 Outage Coordinator can assume the responsibilities of updating and communicating the DAY\_MM\_DD\_XXXXMW\_OSD1 Powerflow
  - The D1 Outage Coordinator can assume the responsibilities of updating the DAY\_MM\_DD\_XXXXMW\_OSD2 Powerflow and preparing the Powerflow cases for the next day GRT limits.
15. Through the remainder of the shift the D2 Outage Coordinator shall perform the following:
  - A. Update the Powerflow case designated DAY\_MM\_DD\_XXXXMW\_OSD1 with approved Short Term Transmission Outage Requests that are one day in the future

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

- B. Deny outage requests as necessary
  - C. Update the Powerflow with expected load forecasts and generation
  - D. Verify all outage request attachments are current based on applicable dates
16. In preparation for hand off to the Security Operator and using the Powerflow case designated DAY\_MM\_DD\_XXXXMW\_OSD1, the D2 Outage Coordinator shall perform a CA and resolve any issues.
  17. Daily by 1300, the D2 Outage Coordinator shall meet with the Forecasters and provide a printed summary from the ISO Outage Scheduling software and shall perform the following:
    - A. Communicate any constrained or Must Run Resource, specific outages and associated studies where problems were found
    - B. Review mutually exclusive outage requests.
  18. During the 1300 meeting, the D2 Outage Coordinator shall provide the Transmission & Generation Coordinator with any changes to the CA for the upcoming day to assist in determining Reliability Must Run (RMR) Resource in accordance with SOP-RTMKTS.0050.0005 - Determine Reliability Commitment for Real-Time.
  19. Daily by 1330, the D2 Outage Coordinator shall complete Attachment B - Next Day Operating Plan Daily Check Out and verify the following has been performed :
    - A. Communication of the CA for the upcoming day
    - B. Certification of the accuracy and understanding of approved transmission outage requests.
    - C. Turnover the Category B Facilities found in Attachment B of M/LCC 7 for the upcoming day
    - D. Verify signed form is placed in the proper folder
  20. The D2 Outage Coordinator shall report any discrepancy issue through the EtQ CAPA/ISSUE process.

#### 5.1.5 Perform D1 Outage Coordinator Tasks

1. Contact the on-shift Operations Shift Supervisor to determine changes to any transmission outage that occurred overnight, or if there were any issues with the OSD1 case or the GRT.
2. By 0700 the D1 Outage Coordinator shall verify the accuracy, updates and renames for the previously created Powerflow

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

DAY\_MM\_DD\_XXXXXMW\_OSD2 to the new designation of DAY\_MM\_DD\_XXXXXMW\_OSD1.

#### NOTE

Attachment G provides an example of the OUTSCH Savecase Directory.

- A. To provide sufficient storage space in the OUTSCH Savecase Directory, the D1 Outage Coordinator shall retain seven active OSD1 Powerflow cases and delete the other OSD1 cases


#### NOTE

An outage summary sheet is used to expedite turnover and to assist in noting changes and assumptions made when the Powerflow is turned over to the D2 Outage Coordinator.


- B. The D1 Outage Coordinator shall prepare and update an outage summary sheet.
2. If a transmission outage requires a special study, the D1 Outage Coordinator shall notify RTS about the pending request in the ISO Outage Scheduling software.
  - A. RTS shall perform SOP-OUTSCH.0050.0020 - Perform Complex Studies and return the study results back to the Outage Coordinator.
  - B. The Outage Coordinator shall use the study results to select “Approved” or “Denied” for the transmission outage.
3. By 0800, the D1 Outage Coordinator shall retrieve the revised next day forecasted loads from the Forecaster.
4. Using the Powerflow case designated DAY\_MM\_DD\_XXXXXMW\_OSD1, the D1 Outage Coordinator shall update and revise the necessary Powerflow case to develop the next day 2<sup>nd</sup> Contingency limits and any additional cases for the calculation of interface limits.
5. To prepare the base cases for 2<sup>nd</sup> CA and additional base cases, the D1 Outage Coordinator shall verify the accuracy of and update and rename the previously created Powerflow DAY\_MM\_DD\_XXXXXMW\_OSD1 to the new designations of AA\_DAY\_MM\_DD\_INITIALS (D1 persons).

#### NOTE

Attachment G provides an example of the OUTSCH Savecase Directory.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	
	<b>Procedure Owner: Maya Ault</b>	
	<b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>

6. To provide sufficient storage space in the OUTSCH Savecase Directory, the D1 Outage Coordinator shall retain the last seven days of Powerflow cases used to develop 2<sup>nd</sup> contingency limits and delete the other cases
7. The D1 Outage Coordinator shall perform the following:
  - A. Update the Powerflow case designated DAY\_MM\_DD\_XXXXXMW\_OSD1 with approved Short Term transmission outage requests that are one day in the future,
  - B. Deny outage requests as necessary
  - C. Update the Powerflow with expected load forecasts and generation.
8. The D1 Outage Coordinator shall perform Attachment E - Determining GRT Limits and create the GRT Limits for the next day.
9. When the External Transfer Limits are received from the D2 Outage Coordinator, the D1 Outage Coordinator shall enter the limits into the GRT.
10. The D1 Outage Coordinator shall review and verify the External Transfer Limits correspond with the limits of the GRT.
11. Prior to the Day-Ahead Pre-Check Out meeting with Market Administrators, the D1 Outage Coordinator shall review the outage requests for the next day.
12. Prior to the Day-Ahead Pre-Check Out meeting with Market Administrators, the D1 Outage Coordinator shall perform the following:
  - A. Post preliminary GRT Limits to the Real-Time Samba (RTSMB) Server
  - B. Provide a copy of the GRT to the D2 Outage Coordinator for review
13. Following the review of transmission outages for the next day, the D1 Outage Coordinator shall report any errors found that pertain to the transmission request or the ISO Outage Scheduling software through the EtQ CAPA/ISSUE process.
14. During the 0845 Day-Ahead Pre-Check Out meeting with Market Administrators the D1 Outage Coordinator shall perform a formal review with the Market Administrator using Attachment A - Day-

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025


Ahead Pre-Check Out Template to certify the accuracy and understanding of approved transmission outage requests.

15. If necessary, the D1 Outage Coordinator shall post revised GRT limits to the RTSMB Server in accordance with Attachment H - GRT Limit Time Table for the Day-Ahead Market.

#### **NOTE**

Attachment I - GRT Limit Variations Over Time, provides information on the basis for which GRT limits are derived and why they may change from when initially determined.

16. Daily, at approximately 1200, the D1 Outage Coordinator shall perform a turnover with the D2 Outage Coordinator using the appropriate Powerflows and verify that:
  - The D2 Outage Coordinator is prepared to assume the responsibilities of updating and communicating the DAY\_MM\_DD\_XXXXMW\_OSD1 Powerflow
  - The D1 Outage Coordinator is prepared to assume the responsibilities of updating the DAY\_MM\_DD\_XXXXMW\_OSD2 Powerflow and preparing the Powerflow cases for the next day GRT limits
17. The D1 Outage Coordinator shall update the GRT on the RTSMB Server until the 1300 meeting with the on-shift Operations Shift Supervisor.
18. The D1 Outage Coordinator shall revise the OSD2 Powerflow with updated information throughout the remainder of the shift including the following:
  - “Denied” Outage requests
  - “Cancelled” Outage requests or cancelled Profile Outage requests
  - Emergency and/or Forced Outages
  - Outages that are Overrun
  - Revised Generator or DARD outages
  - Revised transmission outage times
  - Revised load forecasts


	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

#### **NOTE**

The expected GRT limits are used to assist in determining a Reliability Must Run (RMR) Generator, in accordance with SOP-RTMKTS.0050.0005 - Determine Reliability Commitment for Real-Time.


19. At 1300, the D1 Outage Coordinator shall provide the on-shift Operations Shift Supervisor with the expected GRT limits and appropriate Powerflow base cases used for determining 2<sup>nd</sup> contingency limits for the upcoming day.
20. The D1 Outage Coordinator shall email the GRT spreadsheet (containing the latest revisions) to interested parties using the Outlook group email listing "GRT" and place the GRT spreadsheet on the RTSMB Server.
21. Daily, at 1300, the D1 Outage Coordinator shall complete Attachment B - Next Day Operating Plan Daily Check Out, with the Outage Coordinator and on-shift Operations Shift Supervisor and perform the following:
  - A. Communicate any constrained or Must Run Resources, specific outages and associated studies where problems were found
  - B. Review mutually exclusive outage requests



	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>


## 5.2 Short Term Outage Coordination Group BCC Activities

1. When required to staff the Backup Control Center (BCC) due to either an evacuation of the Main Control Center (MCC) or for testing of the BCC, each Outage Coordinator shall refer to Attachment M - BCC Activities.
2. If any issues are identified, each Outage Coordinator shall fill out and return Attachment M - BCC Issues List to the Supervisor, Short Term Outage Coordination.
3. When operation at the BCC is **no** longer required, the Outage Coordinator shall refer to Attachment M - BCC Activities and follow further guidance from the Supervisor, Short Term Outage Coordination

	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

### 5.3 Short Term Outage Coordination Software Testing


1. When notified of changes to, or new versions of, GRT sheet, PROBE or TARA, or TTC Calculator, the Outage Coordinator shall perform business product testing using Attachment N - Short Term Outage Coordination Software Testing.
2. When migrated to Production servers, the Outage Coordinator shall update the “STOG Software Testing” database with latest revision of software.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

## 6. Performance Measures

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

- Goal for Corporate performance in “NERC Operations Compliance”: Control Performance Standard (CPS1) and Disturbance Control Standards (DCS) compliance is met
- The following are being tracked as leading indicators and responded to:
  - Topology / device errors which are incorrectly entered in the ISO Outage Scheduling software
  - Emergency and Forced Outage requests without explanation for being submitted less than 120 hours
  - Emergency and Forced Outage requests entered as Planned Outages
  - The number of outage requests **not** studied and approved 48 hours prior to 0001 of the day of the outage and the reason why
  - The number of outage requests **not** studied and approved 24 hours prior to 0001 of the day of the outage and the reason why
  - Changes were required resulting from ISO and LCC network model differences
  - Deadlines were missed as depicted in Attachment C - Outage Coordination Process Overview, and reasons why

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	
	<b>Procedure Owner: Maya Ault</b>	
	<b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>

## 7. References

NERC Reliability Standard TOP-003 - Operational Reliability Data

ISO New England - ISO New England Inc. Transmission, Markets and Services  
Tariff Section III, ISO New England Market Rule 1 - Standard Market Design  
(Market Rule 1)

ISO New England Operating Procedure No. 2 - Maintenance of  
Communications, Computers, Metering, and Computer Support Equipment (OP-  
2)

ISO New England Operating Procedure No. 2 - Maintenance of  
Communications, Computers, Metering and Computer Support Equipment  
Appendix D - OP-2 Approved Scheduled Maintenance Report (OP-2D)

ISO New England Operating Procedure No. 3 - Transmission Outage  
Scheduling (OP-3)

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

ISO New England Operating Procedure No. 5 - Resource Maintenance and  
Outage Scheduling (OP-5)

ISO New England Operating Procedure No. 7 - Action in an Emergency (OP-7)

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

Master/Local Control Center No. 1 - Nuclear Plant Transmission Operations  
(M/LCC 1)

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

Master/Local Control Center No. 4 – Emergency Load Reduction Plans for  
Mitigating IROL Violations (M/LCC 4)

Master/Local Control Center No. 7 - Processing Outage Applications (M/LCC 7)

Master/Local Control Center No. 15 – System Operating Limits Methodology  
(M/LCC 15)


Master/Local Control Center No. 18 - System Restoration Plan Attachment O -  
Designated Blackstart Resources Confidential (M/LCC 18 O)

TOG - Procedure to Protect for Loss of Single Source Contingency Guide

Area TOGs

SOP-OUTSCH.0025.0010 - Update Outages Impacted by System Changes

SOP-OUTSCH.0030.0010 - Evaluate Resource Outage Requests

	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

SOP-OUTSCH.0030.0065 - Short Term Outage Economic Analysis

SOP- OUTSCH.0040.0010 - Create Demand Forecast

SOP-OUTSCH.0040.0020 - Create Seven-Day Capacity Margin Forecast

SOP-OUTSCH.0050.0010 - Determine Study Requirements


SOP-OUTSCH.0050.0020 - Perform Complex Studies

SOP-RTMKTS.0050.0005 - Determine Reliability Commitment for Real-Time

SOP-RTMKTS.0050.0010 - Perform Reserve Adequacy Assessment

Powerflow Users Guide


Contingency Analysis Users Guide

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	
	<b>Procedure Owner: Maya Ault</b>	
	<b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>


## 8. Revision History

Rev. No.	Date	Reason	Contact
- -	04/13/17	For previous revision history, refer to Rev 10 available through Ask ISO;	Norm Sproehnle
21	07/01/11	Updated the Header copyright date and replaced the Footer page numbers with Page X of Y format; Globally: replaced “Outage Specialist/Engineer” with “Outage Coordinator/Engineer”; replaced “Economic Analyst/Engineer” with “Economic Outage Coordinator/Engineer”; replaced “SAM” with “ISO Outage Scheduling software” Minor editing in Section 5, updated references in Section 7 Attachment A nomenclature updated to current usage; Attachment B sign-off increased to include MA Peer Review; Attachment D corrected nomenclature Attachment E major re-write to reflect current practices and management expectations. Attachment F deleted text in Step 2 that no longer applies	John Simonelli
22	06/01/12	Biennial review by procedure owner; Header, Updated copyright date and Procedure Owner; 1 <sup>st</sup> page Footer, Deleted disclaimer 2 <sup>nd</sup> paragraph; Footers, added “Confidential - Do Not Distribute” to all pages; Section 2, 2 <sup>nd</sup> paragraph, Added “..., or as a backup method, by email...” and deleted “...as a backup method...”; Section new last paragraph, New last paragraph adding wording for NERC alert Derates; Global, Minor editorial changes (clarification, grammar, punctuation, etc.). Removed Engineer designated D3, D3,D1 and specifically stated when actions are to performed by which one; Section 5.1 NOTE last paragraph, Added wording for NERC alert Derates; Section 5.1.2, Updated Economic Outage Coordinator Tasks; Section 5.1.3, Updated D3 Outage Coordinator Tasks; Section 5.1.4, Updated D2 Outage Coordinator Tasks; Step 5.1.4.16.D, Verify all Outage attachments are current based on applicable dates.; Section 5.1.5, Deleted RTMKTS.0125.0040; Attachment B, Removed Control Room applicable portions of check list; Attachment E, Added wording for New England East-West Interface Double Line and West-East Interface, Line/Gen and Gen/Gen studies	Norm Sproehnle
23	07/17/12	Section 3.9:deleted Security operator tasks, renumbered remain section; Add new sub-step 5.1.6.1.B and delete former steps 5.1.6.8, 9, & 10 and re-numbered remaining steps; Attachment E; Modified Calculation of RI Doublic limits, deleted Security Operator Tasks	Norm Sproehnle



	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>  <b>Revision Number: 30.1</b>  <b>Effective Date: June 6, 2023</b>  <b>Valid Through: April 25, 2025</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	

Rev. No.	Date	Reason	Contact
24	10/25/13	Biennial review by procedure owner; Global, updated for new turnover time for DAM movement Section 5.1.2, updated Economic Outage Coordinator Tasks ; Section 5.2, new section added for BCC Activities; Section 7 deleted "ISO Information Policy, OP-14 and SOP-RTMKTS.0110.0010, added OP-16; Attachment D, deleted 3 <sup>rd</sup> bullet (Security Operator task); Attachment E, Connecticut Import Section, in Calculating the Double Line Contingency Limit, deleted the bullets (concerning Western Mass ties) and in Calculating the Line & Gen Contingency Limit deleted the bullets concerning the Western Mass Ties; Attachment M - BBC Activities, added new attachment to provide details for Outage Coordination	Norm Sproehnle
25	08/11/14	Completed biennial review by procedure owner; Globally removed the use of the terms "shall" and "ensure" per a directive from ROC and made the required editorial and grammar changes; Globally, as applicable, replaced "Outage Coordinator" with "Transmission Coordinator"; Globally updated and made editorial changes required to be consistent with current practices and management expectations; Added language for OP-2 Report generation and distribution; Added language for Next Day Report generation and distribution;	Norm Sproehnle
26	10/09/15	Update Attachment "E" to change 690 Line nomenclature; Updated for SSC limit	Norm Sproehnle
26.1	06/13/16	Completed biennial review by procedure owner, requiring no changes:	Norm Sproehnle
26.2	04/13/17	Per SOP-RTMKTS.0210.0010 Section 5.12.12, Minor Revision made to corrected an existing typo in Appendix F, item 9, replaced "0830" with "1030" (this change was missed when the change was made elsewhere during Rev 24 and was missed during the review and publishing and also in the subsequent reviews); Made required administrative changes required to publish this Minor Revision, including additional typo corrections, added required corporate document identity to all page footers, and truncated the Revision History per SOP-RTMKTS.0210.0010 Section 5.6;	Norm Sproehnle
27	03/20/18	Completed biennial review by procedure owner; Globally updated and made editorial changes required to be consistent with current conditions, practices and management expectations; NOTE prior to step 5.1.1.4, added current SSCL lower limit of 1,320 MW; Added a new section 5.3 (Short Term Outage Coordination Software Testing); Added a new Attachment N - Short Term Outage Coordination Software Testing;	Norm Sproehnle

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	
	<b>Procedure Owner: Maya Ault</b>	
	<b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>

Rev. No.	Date	Reason	Contact
28	05/02/19	Completed biennial review by procedure owner; Globally made editorial change required to correct typos and be consistent with current conditions, practices and management expectations; Globally, replaced “Outage Coordinator, Forecaster and Shift Supervisor” in the title of Attachment B with “Next Day Operating Plan Daily Check Out” to align with NERC Standard Requirement in IRO-008-2;	Norm Sproehnle
29	04/30/21	Completed biennial review by procedure owner; updated all reference to Manager, Outage Coordination to Supervisor, Short-Term Outage Coordination; Changed DNR to NRA to reflect language in Outage Software; Attachment J changed from Retired and added Season Priority Configurations; Attachment K changed from Retired and added EMS Model Release; Server updated from RDSBCPOUTC1 to RSDPTSTOC1; Updated M/LCC7 from Processing Transmission Outage Applications to Processing Outage Application; Included time entry for Preliminary GRT export in Attachment A; Included step for final GRT export in Attachment B; Minor administrative change throughout; Deleted step G of Attachment D; Included M/LCC 15 reference into Attachment D	Maya Ault
30	04/25/23	Procedure updated to reflect the current “Resource” terminology; Minor administrative change throughout; Updated procedure to reflect current process; Incorporated GRT caps coordinated with CR; Created Attachment O	Maya Ault
30.1		Minor Rev. Fixed Date in Headers. Corrected spelling of forecaster on page 38	

## 9. Attachments

Attachment A - Day-Ahead Pre-Check-Out Template (Confidential)

Attachment B - Next Day Operating Plan Daily Check-Out (Confidential)

Attachment C - Outage Coordination Process Overview


Attachment D - Best Practices for Studying and Completing Short Term Transmission Outage Requests (Confidential)

Attachment E - Determining GRT Limits (Confidential)

Attachment F - Determining and Posting External Transfer Limits (Confidential)

Attachment G - Savecase Directory Listing (Example)

Attachment H - GRT Limit Time Table for the Day-Ahead Market

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

Attachment I - GRT Limit Variations Over Time

Attachment J – Seasonal Priority Configuration


Attachment K – Energy Management System (EMS) Model Release

Attachment L - Short Term Outage Coordination Process


Attachment M - BCC Activities

Attachment N - Short Term Outage Coordination Software Testing


Attachment O - Requirements for Requesting RTS Guidance for Overlapping Outages with Guides

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

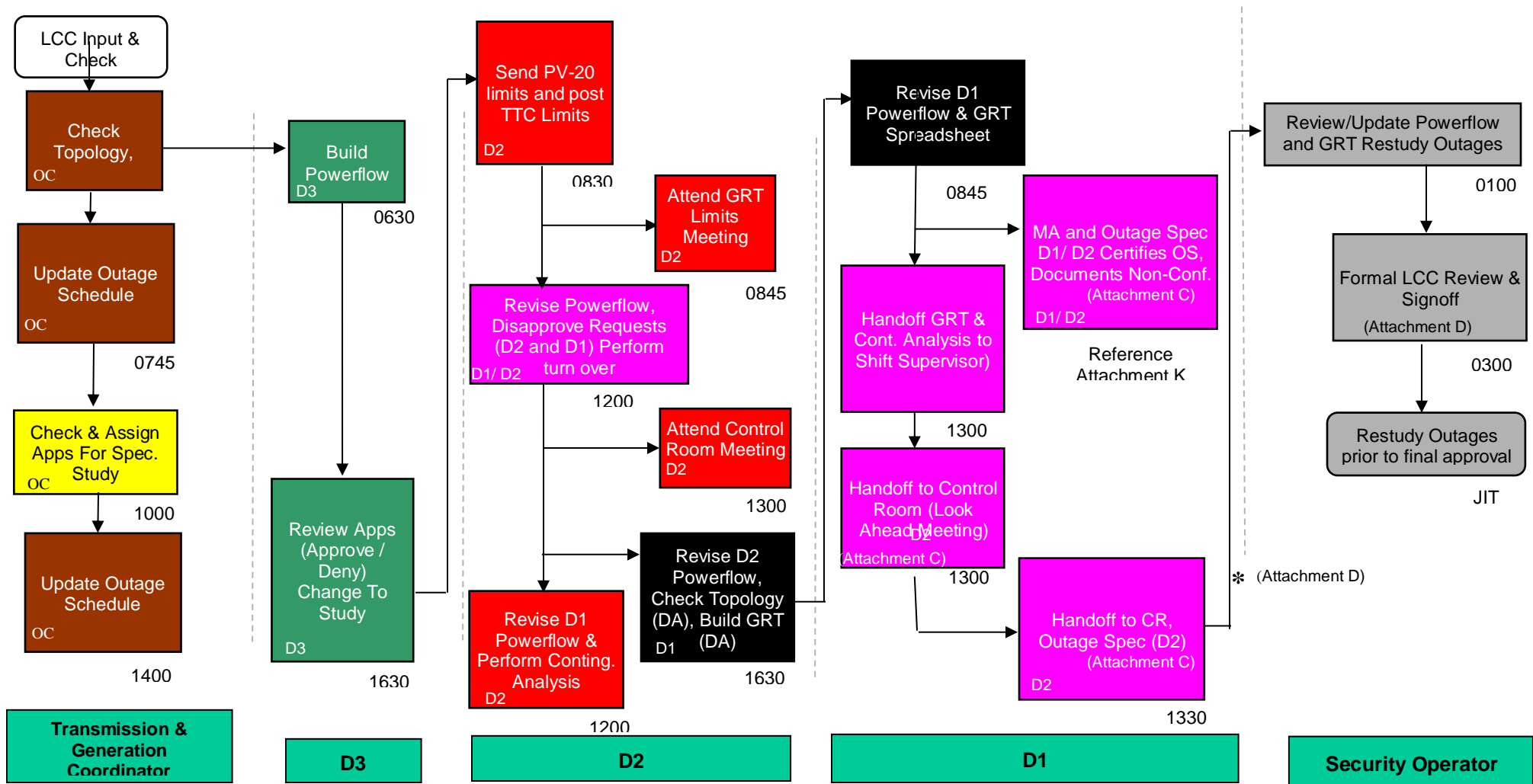
## Attachment A - Day-Ahead Pre-Check-Out Template (Confidential)


	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

## Attachment B - Next Day Operating Plan Daily Check Out (Confidential)

	© ISO New England Inc. 2023	Procedure: Perform Short Term Outage Coordination
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	Revision Number: 30.1
	Procedure Owner: Maya Ault	Effective Date: June 6, 2023
	Approved By: Director, OSS	Valid Through: April 30, 2025


### Attachment C - Outage Coordination Process Overview




	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

## Attachment D - Best Practices for Studying and Completing Short Term Transmission Outage Requests (Confidential)




	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

## Attachment E - Determining GRT Limits (Confidential)

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>


## Attachment F - Determining and Posting External Transfer Limits

(Confidential)

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

### Attachment G - Savecase Directory Listing (Example)

AA\_FRI\_03\_16\_XXX  
 AA\_MON\_03\_19\_XXX  
 AA\_SAT\_03\_17\_XXX  
 AA\_SUN\_03\_18\_XXX  
 AA\_THU\_03\_15\_XXX  
 AA\_TUE\_03\_13\_XXX  
 AA\_WED\_03\_14\_XXX  
 FRI\_03\_16\_12700MW\_OSD3  
 FRI\_03\_16\_13700MW\_OSD1  
 FRI\_03\_16\_13700MW\_OSD2  
 MON\_03\_19\_12000MW\_OSD3  
 MON\_03\_19\_12200MW\_OSD2  
 MON\_03\_19\_13200MW\_OSD1  
 SAT\_03\_17\_14600MW\_OSD3  
 SAT\_03\_17\_14800MW\_OSD1  
 SAT\_03\_17\_14800MW\_OSD2  
 SUN\_03\_18\_13000MW\_OSD2  
 SUN\_03\_18\_13500MW\_OSD1  
 SUN\_03\_18\_13500MW\_OSD3  
 THU\_03\_15\_16700MW\_OSD1  
 THU\_03\_15\_16700MW\_OSD2  
 THU\_03\_15\_16780MW\_OSD3  
 TUE\_03\_13\_12500MW\_OSD1  
 TUE\_03\_13\_12500MW\_OSD3  
 TUE\_03\_13\_12500MW\_OSD3  
 WED\_03\_14\_14000MW\_OSD1  
 WED\_03\_14\_14000MW\_OSD2  
 WED\_03\_14\_14000MW\_OSD3

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

## Attachment H - GRT Limit Time Table for the Day-Ahead Market

### Time Table during Normal Operations

**Prior to 0845** - Post a preliminary GRT sheet to RTSMB Server


**0845** - Daily Meeting between Market Administration, Forecast, and Outage Coordination groups. Review and discuss expected outages and limits. If one of the three departments involved **cannot** meet at this time, they must provide notification including a verbal explanation.

**1000** - Hard Deadline - End consideration of transmission topology changes for the purpose of the Day-Ahead Market (DAM), upload outages from the ISO Outage Scheduling software. If **no** further changes are required due to changes in outage assumptions or discrepancies found, the GRT may be considered final.

**1000** - Final GRT is expected at this time. If GRT is **not** yet final, reason must be documented on the GRT Spreadsheet & Meeting Tracking Form. The critical timeframe that will impact this delivery are influencing changes in transmission assumptions between 0700 and 1000 or software/hardware issues between 0600 and 1000. Supervision will review and track these occurrences, as appropriate EtQ CAPA/ISSUES may be submitted.

**1030** - If GRT is **not** yet final, late matrix will be triggered and reported through the COO NEPOOL Participants Committee Report. Reason must be documented on the GRT Spreadsheet & Meeting Tracking Form. Supervision will review and track these occurrences, as appropriate EtQ CAPA/ISSUES may be submitted. Final GRT must be delivered ASAP.

**1330** - Deadline for posting DAM Results.


	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

### Attachment I - GRT Limit Variations Over Time

Due 0845 Day-Ahead	Due 1330 Day-Ahead	Due 0000 Operating Day	Current Operating Day
<p>GRT Limits based on:</p> <ul style="list-style-type: none"> <li>Simulation based on: <ul style="list-style-type: none"> <li>Planned transmission topology as of 0845 Day-Ahead</li> <li>Planned Generation Outages as of 0845 Day-Ahead</li> <li>Assumed online generation as of 0845 Day-Ahead</li> <li>Forecasted load as of 0845 Day-Ahead</li> <li>Forecasted area load percentages</li> </ul> </li> </ul>	<p>Day-Ahead Schedule and LMPs are based on:</p> <ul style="list-style-type: none"> <li>Day-Ahead GRT Limits</li> <li>Day-Ahead Bid in Load</li> <li>Virtual Increment Offers</li> <li>Virtual Decrement Load</li> <li>Internal Transactions</li> <li>External Transactions</li> </ul>	<p>Forecast Current Operating Plan based on:</p> <ul style="list-style-type: none"> <li>Day-Ahead Schedule and LMPs</li> <li>Gen Re-Offers</li> <li>Forecasted Load</li> <li>Resource Redclarations</li> </ul>	<p>Real-Time Operations based on:</p> <ul style="list-style-type: none"> <li>RT load</li> <li>RT Net</li> <li>RT Topology</li> <li>RT Gen Availability and Commitment</li> <li>Double C RT Limits</li> <li>RT area load percentages</li> </ul>
GRT Limits are imported into Day-Ahead Case	Day-Ahead Schedule and LMPs are the start of the Current Operating Plan	Current Operating Plan is basis of the RT Resource Commitment	RT limits may have little correlation to GRT limits

Major Contributors to Difference in Limits from GRT to Real-Time:

- 15 hours of time lag between GRT limits handoff and Current Operating Day.
- Day-Ahead Increment Offers and Decrement Loads, which do **not** exist in GRT limits or RT limits.
- Day-Ahead using Bid-In load vs. the use of Forecasted load by GRT, and RT load by Control Room.
- GRT limit analysis is a peak-hour, Day-Ahead analysis. RT limits are based on RT loads and RT Net State Estimator.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

### Attachment J - Season Priority Configurations

- 1) Determine the limit set that meets the condition to be studied
  - a. Month of April (New England has switched to summer limits, NY is still in winter):

Limit Set ID	Priority
WINTER	3
SUMMER	2
NYSUMMER	4
BSTN-HE-ON	5
APRIL	1

- b. Summer limits, Boston Circ pumps off (May 1 – Oct 31):


Limit Set ID	Priority
WINTER	5
SUMMER	1
NYSUMMER	2
BSTN-HE-ON	3
APRIL	4

- c. Summer limits, Boston circ pumps on (dates determined by NSTAR each summer):

Limit Set ID	Priority
WINTER	5
SUMMER	2
NYSUMMER	3
BSTN-HE-ON	1
APRIL	4

- d. Winter (November 1 – March 31):

Limit Set ID	Priority
WINTER	1
SUMMER	2
NYSUMMER	3
BSTN-HE-ON	4
APRIL	5

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025


- 1) Select LIM in the powerflow tab
- 2) Select Copy Branch Limit
- 3) Set your limit priorities to the values shown above
- 4) Select the Copy Branch Limit button
- 5) Select Yes to confirm the action

## Background

The basecase models that are created by the Power System Modeling Management group that are labeled with seasons uses the following dates to mimic the season's load profile:

Season	Dates
Spring	02 March – 01 June
Summer	02 June – 01 September
Fall	02 September – 30 November
Winter	01 December – 01 March




	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: April 25, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

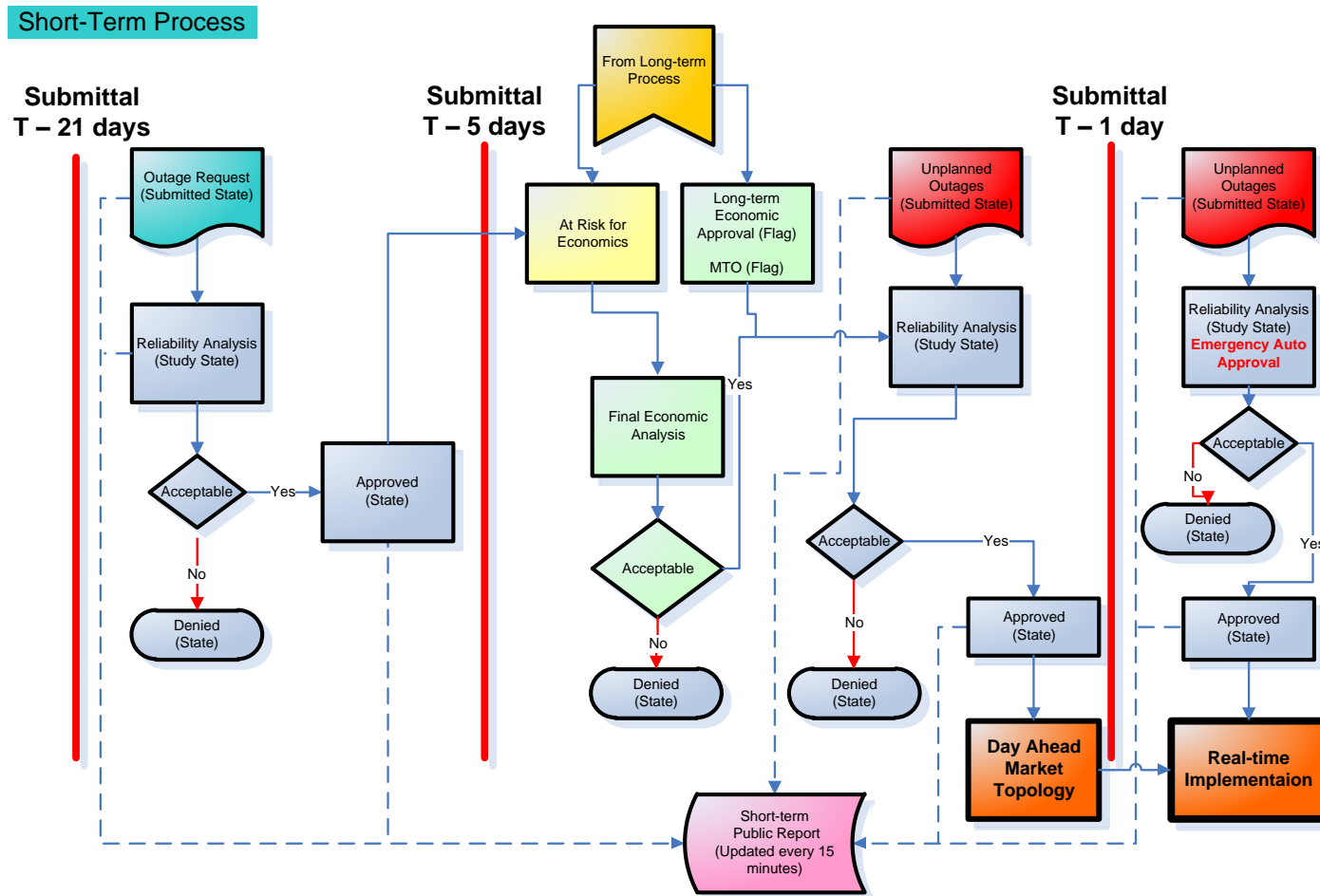
### **Attachment K - Energy Management System (EMS) Model Release**


Every time a new EMS model is released, the Powerflow application is returned to certain default settings that need to be adjusted on each individual clone to reflect the current users' practices. Each release will have a designated release number, this will be annotated as XXX. To update clone, perform the following:

- 1) Stop the process
- 2) Retrieve the following from the Case Directory:
  - a. OPTIONS: CONTROL\_ROOM\_GENREF
  - b. ILC: EMS\_VERXXX
  - c. RASMOM: EMS\_VERXXX
  - d. STCA: EMS\_VERXXX
  - e. ISORR: EMS\_VERXXX
- 3) Adjust ILC devices as necessary in the Related Devices Display
- 4) Ensure that STCA is retrieving the correct family, and validate that:
  - a. Copy Clone of Database: NETMOM
  - b. From Application: PWRFLOW
  - c. Of Family: EMS Username
  - d. "Enable MLCC15 Monitoring" is checked in MLCC15H kV Summary tab

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	
	Procedure Owner: Maya Ault	
	Approved By: Director, OSS	
		Revision Number: 30.1
		Effective Date: June 6, 2023
		Valid Through: April 25, 2025

## Attachment L - Short Term Outage Coordination Process




	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

### Attachment M - BCC or Remote Activities

#### A. Working from the Back-up Control Center (BCC) or Remotely

1. If required, upon arriving at the BCC, refer to ISO-NE Business Continuity Plan Section 3, Chapter 5 “OSS/Transmission Outage Coordination and Transmission Operations Planning Business Recovery Plan.”
2. Login to the Outage Coordination server: **RDSDPTSTOC1**.
  - a. Domain Account: iso-ne\your\_name
  - b. Domain Password: individual Active Directory password
3. Check the following tools:
  - a. CROW
  - b. STUDY EMS
    - a. Powerflow
    - b. STCA
    - c. RTNET
    - d. SCADA
    - e. ILC
    - f. GRT
  - c. Tran\$mart

	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>


- d. TTC Calculator
- e. ISO Intranet
- f. Opralog
- g. ODMS – Procedures and Transmission Operating Guides

4. Enter any discrepancies on the BCC issues List and submit to Supervisor, Short Term Outage Coordination

**NOTE**

If CROW or OP2 programs **cannot** be run, or an LCC/GO **cannot** access CROW from client software or OP-2 email, instruct the applicable LCC/GO to submit outages by fax or by phone. Manually fill out the OP-2 Appendix C for equipment outages, OP-5 Appendix B for Generator outages and OP-2 Appendix D for OP-2 communications equipment outages.


5. Conduct reliability and interface limit studies and set TTCs per Attachment - E Determining GRT limits and Attachment - F Determining and Posting External Transfer Limits
6. Coordinate with Market Administration to provide GRT interface limits as needed
7. Coordinate Resource outages per OP-5 - Resource Maintenance and Outage Scheduling

	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>

## BCC Issues List

Date: \_\_\_\_\_

<input type="checkbox"/> ISSUE	<input type="checkbox"/> Person Reporting	<input type="checkbox"/> IT Contact	<input type="checkbox"/> Resolution
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	© <b>ISO New England Inc. 2023</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Process Name: Capture and Evaluate Outage Requests</b>	
	<b>Procedure Number: OUTSCH.0030.0020</b>	<b>Revision Number: 30.1</b>
	<b>Procedure Owner: Maya Ault</b>	<b>Effective Date: June 6, 2023</b>
	<b>Approved By: Director, OSS</b>	<b>Valid Through: April 25, 2025</b>


## **Attachment N - Short Term Outage Coordination Software Testing**

### **A. GRT sheet testing**

1. Open GRT sheet to be tested (called “Updating GRT”) located at:  
\\rtsmb\GRT\_rw\Testing
2. Refer to update information from emails, etc., or review update notes on “Release Notes” tab.
3. Create a new testing record in “STOG Software Testing” database.
4. Enter a test plan with enough steps to fully test all changes.
5. Test each individual line item in the latest entry in the Release Notes tab
6. Run all functions and test all buttons and check that solution makes sense
7. Indicate pass/fail on testing record in “STOG Software Testing” database.
8. If testing fails, contact the Lead Analyst, Real-Time Studies for resolution. Retest when deficiency is corrected and new version is made available.

### **B. TARA ORA / N-1-1 testing**

1. Download latest desired TARA files from [www.powerGEM.com](http://www.powerGEM.com) FTP site to the “TARAENFINT1” server.
2. Refer to the Release Notes accompanying the release.
3. Create a new testing record in “STOG Software Testing” database.
4. Enter a test plan with enough steps to fully test all changes.
5. Test each individual change.
6. Perform an overall Outage Reliability Analysis (ORA) and N-1-1 study with the same inputs as a previous version study and identify bugs that might have been introduced with the new revision.
7. If this is Business Product testing required by IT, document test results on the “IT Product Test Template” otherwise, document test results on the “Outage Coordination Software Testing Template” and attach to the testing record.
8. Indicate pass/fail on testing record in “STOG Software Testing” database.

	<b>© ISO New England Inc. 2023</b> <b>Process Name: Capture and Evaluate Outage Requests</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Procedure Number: OUTSCH.0030.0020</b> <b>Procedure Owner: Maya Ault</b> <b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>

9. If testing fails, notify Day-Ahead & Related Markets Applications Support group and the PowerGEM Corporation for resolution. Retest when new corrected version is available.
10. If necessary, update Change Management SIR (upload IT Product Test document) and press the “Pass” pushbutton and notify Day-Ahead & Related Markets Applications Support group.


#### C. PROBE testing

1. Download latest desired PROBE files from www.powerGEM.com FTP site to the “TARAENFINT1” server.
2. Refer to the Release Notes accompanying the release.
3. Create a new testing record in “STOG Software Testing” database.
4. Enter a test plan with enough steps to fully test all changes.
5. Test each individual change.
6. Perform an overall PROBE look-ahead study with the same inputs as a previous version study and identify bugs that might have been introduced with the new revision.
7. If this is Business Product testing required by IT, document test results on the “IT Product Test Template” otherwise, document test results on the “Outage Coordination Software Testing Template” and attach to the testing record.
8. Indicate pass/fail on testing record in “STOG Software Testing” database.
9. If testing fails, notify the Day-Ahead & Related Markets Applications Support Group and the PowerGEM Corporation for resolution. Retest when new corrected version is made available.
10. If necessary, update Change Management SIR (upload IT Product Test Document) and press the “Pass” pushbutton and notify Day-Ahead & Related Markets Applications Support group.


#### D. TTC Calculator testing

1. When a change is made to the TTC Calculator - Integration (e.g., DAL ratings, new or removed contingency records, etc.) create a new testing record in “STOG Software Testing” database.



	<b>© ISO New England Inc. 2023</b> <b>Process Name: Capture and Evaluate Outage Requests</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Procedure Number: OUTSCH.0030.0020</b> <b>Procedure Owner: Maya Ault</b> <b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>

2. Perform a TTC calculator - integration test run using a model file from production directory \\RTSMB\PowerWorld\Exports and check for evidence of the change (not all changes will be evident - e.g., new DAL ratings for lines that don't show up as limiting elements, etc.)
3. Check all solutions against a run using the Production version of TTC Calculator and the same model file. Determine any differences and resolve.
4. Indicate pass/fail on testing record in "STOG Software Testing" database.
5. If testing fails, contact the Principal Transmission & Generation Coordinator, Outage Coordination, for resolution. Retest when new version is made available.
6. Notify Real-Time Market Support group to migrate TTC Calculator changes to Production.

	© ISO New England Inc. 2023	<b>Procedure: Perform Short Term Outage Coordination</b>
	Process Name: Capture and Evaluate Outage Requests	
	Procedure Number: OUTSCH.0030.0020	Revision Number: 30.1
	Procedure Owner: Maya Ault	Effective Date: June 6, 2023
	Approved By: Director, OSS	Valid Through: April 25, 2025

## Attachment O - Requirements for Requesting RTS Guidance for Overlapping Outages with Guides

### **Requirements for requesting RTS guidance for overlapping outages with guides:**

For All Outages with Overlapping Guides based on the Outage Topology Documented in CROW (applies to IROL and SOL Interfaces):

- ❑ Outage Coordination will request RTS Guidance to clarify what limits should be used during the overlap

### **Requirements for requesting RTS guidance for line outages overlapping with associated terminal breakers with guides:**


- ❑ During Switching requiring less than 30 minutes:
  - For IROL Interfaces: Outage Coordination will request RTS Guidance to clarify what limits should be used during the switching configuration
  - For SOL Interfaces: Outage Coordination should use the lowest of the limits from all overlapping guides for each impacted interface.
- ❑ During Switching or overlapping outages with a duration greater than 30 minutes (applies to IROL and SOL interfaces):
  - A separate CROW application is required to document the switching topology
  - Outage Coordination will request RTS Guidance to clarify what limits should be used during the switching configuration

#### **NOTE**

Many, but not all, Line-Out Guides are written assuming that the line is isolated by disconnects with the associated terminal breakers closed. If a line is out of service and isolated by its terminal breakers, RTS guidance may be needed per the above guidelines if the line out guide was generated with the terminal breaker closed.

### **Guidance for Managing CROW Attachments related to RTS Guidance:**

When RTS Guidance is provided for overlapping outages, that guidance should **only** be attached to the outage causing the more restrictive limit (e.g. if outage A begins on 10/1, and overlapping outage B begins on 10/3 with lower limits, the guidance should only be attached to Outage B; If Outage C then begins on 10/4 and further reduces limits, then

	<b>© ISO New England Inc. 2023</b> <b>Process Name: Capture and Evaluate Outage Requests</b>	<b>Procedure: Perform Short Term Outage Coordination</b>
	<b>Procedure Number: OUTSCH.0030.0020</b> <b>Procedure Owner: Maya Ault</b> <b>Approved By: Director, OSS</b>	<b>Revision Number: 30.1</b> <b>Effective Date: June 6, 2023</b> <b>Valid Through: April 25, 2025</b>

the associated guidance for overlap of Outages A, B, and C should only be attached to Outage C).

- ❑ Ensure that only current and **relevant** documentation is attached to the CROW application, which includes ensuring that any outdated or contradictory guidance is removed
- ❑ Rename the Attachment as needed to correspond to the contents of the attachment
  - Alternatively, add a description in the "Title" field that allows the user to easily identify what is in the attachment.

#### **When Requesting Guidance from RTS:**

- ❑ When the Short Term group requests information from the Real Time group/on-call engineer, they will state the time and date the special study is needed by, vice stating "close of business" in an email
- ❑ The Real-Time group will respond to all requests from the Short-Term with an email including the requested information
- ❑ All responses from the Real-Time group will be sent to the Short-Term group by 2 pm on date needed by, to ensure that the application can be processed in a timely manner
- ❑ The on-call engineer will call the Short-Term group-when a response (be it an email, temp guide or a guidance) is sent on the weekend or holidays during business hours (7 am to 4 pm)
  - On weekends, holidays or after 4 pm on a weekday, if guidance has been requested, call the on-call engineer
- ❑ If the on-call engineer cannot be contacted, call the Manager, Real-Time Studies
- ❑ If metric is approaching the 48-hour time frame and a response to guidance has not been sent to the Short-Term group, contact the Supervisor, Short Term Outage Coordination by 3pm on date needed by
- ❑ The on-call engineer will confirm receipt of email, and will be contacted by phone by the Short Term Outage Coordinator if a response was not sent within the hour