Purpose

This procedure defines the actions performed by the ISO and other entities to prepare for and report natural disasters, major outages, damage or destruction of BES (Bulk Electric System) equipment, and other Significant Events that affect the reliability of the grid.
## 1. Responsibilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling Coordinator (SC) Metered Sub System (MSS) Participating Generator (PG) Participating Transmission Owner (PTO) Small Utility Distribution Company (SUDC) Utility Distribution Company (UDC)</td>
<td>Provide complete and timely notifications of Significant Events to the ISO in accordance with ISO procedures and DOE, NERC and WECC requirements. Refer to ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements to determine responsibilities for submitting required DOE and/or NERC reports.</td>
</tr>
<tr>
<td>ISO System Operator</td>
<td>Provide complete and timely notifications of Significant Events to all applicable internal and external parties in accordance with ISO procedures and DOE, NERC and WECC requirements.</td>
</tr>
<tr>
<td>ISO Shift Manager Desk</td>
<td>Direct ISO System Operator actions to manage Significant Events in accordance with ISO Emergency Procedures and as otherwise necessary and appropriate for the prevailing conditions. Provide complete and timely notifications of Significant Events to all applicable internal and external parties in accordance with ISO, DOE, NERC and WECC requirements.</td>
</tr>
<tr>
<td>ISO Emergency Response Coordinator (ERC)</td>
<td>Serve as the information conduit between the ISO Shift Manager, the System Operations Department Operations Center (DOC), ISO Officers, and External Affairs JIC Lead. Additionally, the ERC or their designee is responsible for notifying the Corporate Incident Commander directly if there is a System Operations incident that meets the criteria for being tracked or managed at the enterprise level. Initiates notification processes to internal and external stakeholders. Refer to ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements to determine DOE, NERC, and WECC reporting requirements.</td>
</tr>
</tbody>
</table>
2. Scope/Applicability

2.1. Background

The CAISO Tariff requires entities within the ISO Balancing Authority Area to promptly notify the ISO of Significant Events that pose a threat to the reliability of the grid. In addition, NERC and the DOE have established requirements for reporting such events to NERC, DOE, WECC and other federal and state agencies. Generally, responsibility for the reporting events is detailed in ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements. The ISO is responsible for satisfying the reporting and notification requirements stated in this procedure.
2.2. Scope/ Applicability

The ISO makes an assessment and prepares for potential adverse operating conditions such as wildfires, earthquakes, flooding, tsunamis, GMD (Geomagnetic Disturbance), etc., that may potentially threaten elements of the BES. The ISO reports Significant Events that occur within the ISO Balancing Authority Area that may be of interest and/or require action by state agencies.

PTOs, UDCs, SUDCs, SCs on behalf of PGs, and MSSs report Significant Events that threaten grid reliability, which may cause interest and/or action by the ISO, or may result in peril to life, property, or grid resources within the ISO Balancing Authority area.

Additionally, the ISO has a corporate incident management and response process in place utilizing the ICS to manage incidents with a greater corporate impact or for those incidents that may impact the ISO’s reputation. Business units with a departmental emergency response process (like System Operations), are responsible for detailing how they connect to and notify corporate incident command.

3. Procedure Detail

3.1. Preparing for an Event

Take the following actions whenever a potential adverse operating condition exists:

<table>
<thead>
<tr>
<th>ISO System Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Notify the ISO Shift Manager of potential event.</td>
</tr>
</tbody>
</table>
ISO Shift Manager

1. In collaboration with System Operators and appropriate personnel,
   - **Assess** the potential risk to the ISO Controlled Grid and the BES based on the information available.
   - During the assessment,
     - **Consider** the following:
       - Lines or equipment that may be threatened
       - Location impacted
       - Estimated time the event will occur
       - Ability to sustain the loss / recover

2. **Communicate** notifications as needed, as outlined in Section 3.2.
   
   *Note*: All notifications of a Significant Event must also be reported to the Reliability Coordinator and affected parties.

3. **Prepare** for credible BES failures identified in the risk evaluation or in response to a request or Operating Instruction by the Reliability Coordinator.
4. **Monitor** available information regarding the status of the event and
5. **Continue** to evaluate the risk and
6. **Take** appropriate actions as needed.
7. **Direct** System Operators to take mitigation actions as needed.
8. **Refer** to ISO Operating Procedure 4420B Alert/Warning/Emergency (AWE) Guide, and other area specific procedures as needed.

### 3.1.1. Additional Preparation for Natural Disasters

In addition, perform the following actions in preparation for or in response to fire, flood, earthquake, tsunami or any other potential natural disaster:

#### 3.1.1.1. Fires

<table>
<thead>
<tr>
<th>ISO System Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the event of a fire that is a potential threat to the BES:</td>
</tr>
</tbody>
</table>
1. **Gather** the following information, if possible:
   - Name of fire
   - Location (include city or county, nearest streets, roads or highways, USGS coordinates, as possible)
   - Estimated size (in acres) of fire
   - Direction fire is burning
   - Approximate wind conditions
   - Fuel source (grass, brush, timber, etc.) |
ISO System Operator

- Agencies responding or already on scene
- Facilities involved or threatened
- Distance fire is from facilities
- Estimated containment time
- First report or an update

2. When communicating with Cal Fire, PTOs, and any other entity providing information regarding major facilities (500 kV, 230 kV, or radial fed generating stations or substations),
   - Provide all known information, and
   - Communicate any additional information, in a timely manner.

3. If a fire is burning in the vicinity of lines or facilities, but is not an immediate threat to an element of the BES:
   - Continue to monitor, assess conditions, and plan accordingly.
   - Provide updates as needed until the fire is considered contained or is no longer burning in the vicinity of the lines or facilities.

4. If a fire is burning in the vicinity of lines or facilities, and it is an immediate threat to an element of the BES,
   - Consider floating the lines to prepare for losses and/or path derates.

5. If a fire is burning in the vicinity of lines or facilities from one of our Adjacent Balancing Authorities or PTO’s,
   - Ensure Cal Fire is aware of the fire and is in contact with the appropriate entity or the lead regional/state/federal agency.

3.1.1.2. Flooding

ISO Shift Manager Desk

In case of potential flooding:

1. Calculate the total generation capacity and estimate the amount of load that may be impacted by the flood in the watch/warning area.
2. Consider committing additional generation resources (outside the flood area) in the event generation in flood area is forced off line.
3. Gather the following information, if possible:
   - Area affected by the flooding
   - Expected duration of flooding
   - Expected long term damage caused by the flooding
   - Plan of action to mitigate damage
   - Assisting outside agencies
3.1.1.3. Earthquake

**Note:** Although earthquakes are for the most part unpredictable, the ISO System Operator should prepare for aftershocks. It is highly likely that following an earthquake of a magnitude greater than 5.0 in or near a population center, some areas may be experiencing various levels of Emergency Operation.

**ISO Shift Manager Desk**

**In case of earthquake:**

1. **Gather** the following information, if possible:
   - Condition of the BES
   - Damage to the BES caused by the earthquake
   - Units available for dispatch ETR (Estimated Time to Return) for generation tripped or forced offline Stations being manned
   - Preparation for aftershocks

3.1.1.4. Tsunami

**Note:** The ISO relies on facility owners to perform tsunami risk analysis of their assets and communicate their plan of action back to the ISO.

**ISO Shift Manager Desk**

**In case of Tsunami warning:**

1. **Gather** the following information, if possible:
   - Expected time the tsunami will arrive
   - Facilities being removed from service or de-rated
   - Efforts to mitigate damage
   - Expected long term damage
3.1.2. Events that Require Notification from PTO, UDC, MSS, SUDC

Take the following actions for events that require notification to the ISO:

<table>
<thead>
<tr>
<th>Metered Sub System (MSS), Participating Transmission Owner (PTO), Small Utility Distribution Company (SUDC), Utility Distribution Company (UDC)</th>
<th>Time Frame for Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Notify</strong> the ISO Transmission Dispatcher by telephone of:</td>
<td></td>
</tr>
</tbody>
</table>
| • Any event which requires an OE-417 or EOP-004 report to be filed.\(^1\) Refer to ISO Operating Procedure attachment [4110A DOE, NERC and WECC Significant Event Reporting Requirements](https://www.oe.netl.doe.gov/oe417.aspx).
| As soon as practicable - within no longer than one (1) hour |

3.1.3. Events that Require Notification from Participating Generators

Take the following actions to notify the ISO of events:

<table>
<thead>
<tr>
<th>Scheduling Coordinator (SC), Participating Generator (PG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Notify</strong> the ISO Generation Desk by telephone of:</td>
</tr>
<tr>
<td>• Any event that results in damage or destruction to a generation Facility or adversely impacts the health and safety of personnel.</td>
</tr>
<tr>
<td>• Fuel supply emergencies.</td>
</tr>
<tr>
<td>• Physical threats to a BES Control Center.</td>
</tr>
<tr>
<td>• Communications cannot be established with the respective SC.</td>
</tr>
<tr>
<td>• The system frequency decays to 59.5 Hz, with no immediate recovery, as indicated by charts, frequency alarms, or Automatic Generation Control.</td>
</tr>
<tr>
<td>• Changes to the status of AVRs or PSSs.</td>
</tr>
<tr>
<td>• A change in Schedules and/or services will be required.</td>
</tr>
</tbody>
</table>

**Fuel Supply Emergencies:**

2. If an existing, immediate or anticipated fuel supply emergency threatens a plant’s ability to run at full capacity,
   • **Notify** the ISO Generation Desk by telephone.
4. **Include** as appropriate:
   • Fuel inventories.

---

\(^1\) Refer to the DOE website [https://www.oe.netl.doe.gov/oe417.aspx](https://www.oe.netl.doe.gov/oe417.aspx) and NERC requirements for EOP-004-3.
Scheduling Coordinator (SC), Participating Generator (PG)

- Hydro project water storage levels that are less than expected and that may limit the output of the plant.
- Emergency Generation that requires abnormal use of fuel with the potential to reduce supply or stocks to a level that may threaten the reliability or adequacy of electric service.
- Expected duration of fuel supply emergency, if known.
- Cause of the fuel supply emergency, if known.
- Units affected by the fuel supply emergency.

Other Conditions Requiring Reports/Notifications:

5. If conditions exist or Significant Events occur that threaten grid reliability or may cause interest and/or action by the ISO,
   - Notify the ISO Generation Dispatcher by telephone.

3.2. Events that Require Notification to the ERC

The ISO Shift Manager shall notify the Operations Emergency Response Coordinator (ERC) regarding any potential or actual occurrences of the events listed below:

Events that Require ERC Notification:

1. System Emergency declaration or anticipated declaration.
2. Any event that require filing a DOE OE-417 or NERC Event Report. Refer to ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements, for a listing of events that require a report and identification of the entities responsible for submitting each type of report.
3. Loss of firm Load: A major Outage or the possibility of a major Outage within a system served by ISO Controlled Grid facilities.
4. External EOC activation: An IOU or an adjacent BA or TOP activates their EOC.
5. Emergency or Significant Event at a California Nuclear Generating Station.
6. Emergency proclaimed by the Governor and/or coordinated by California State Warning Center (Cal OES) or the CEC.
7. Natural events or disasters that may threaten the operation of the ISO Controlled Grid or may cause a major Outage to ISO controlled grid facilities or adjacent BA’s.
8. Application failures that threaten or cause a disruption to grid reliability, control room performance or markets.
9. Any condition that threatens or causes harm to life, property or resources within the ISO BAA or causes interest and/or remedial action by the state agencies, public safety agencies, or other select organizations.

10. Any event which although it does not meet the criteria 1-9, may attract news media coverage.

11. Any other events as determined by the ISO Shift Manager.

12. Flex Alerts.


14. Warnings.

15. Stages 1, 2, and 3.


**Note**: Major Outage: Consistent with Public Utilities Code Section 349, a Major Outage occurs when at least ten (10) percent of the serviceable customers of the entity providing the local distribution service (i.e., Utility distribution Company (UDC) experience a simultaneous, non-momentary interruption of service. For UDCs with fewer than 150,000 customers within California, a Major Outage occurs when fifty (50) percent of the UDC’s serviceable customers within California experience a simultaneous, non-momentary interruption of service.

### ISO Shift Manager Desk

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Notify the on-duty ERC of the event.</td>
</tr>
<tr>
<td>2.</td>
<td>If attempts to contact the on-duty ERC are unsuccessful using all available contact information, or the ERC has not acknowledged receipt of the notification within 15-minutes, contact the back-up ERC.</td>
</tr>
<tr>
<td>3.</td>
<td>If you are unable to reach an ERC, contact the Director of Real-Time Operations.</td>
</tr>
<tr>
<td>4.</td>
<td>Maintain close communication with the ERC and Director.</td>
</tr>
<tr>
<td>5.</td>
<td>Report all notifications of a Significant Event to the Reliability Coordinator.</td>
</tr>
</tbody>
</table>

### 3.2.1. ERC Communications

When an ERC is called, the event that was reported could trigger the ERC requirement to contact one or more internal and external contacts. ISO Operating Procedure [4110C](#) Emergency Response Coordinator Checklist contains information regarding who to call and the reporting requirements.

### 3.2.2. Event Reporting to NERC, DOE and Other External Parties

The ISO has established a corporate incident management response process to manage operating events that require reporting to agencies such as NERC, DOE, WECC, law
enforcement, and other state and federal agencies. A team of support personnel for Real-Time Operations that includes the ERC, PIO, Government Affairs, ISO Officers and Incident commander have been designated to help manage reporting and communications with external agencies.

### ISO Shift Manager Desk

1. **Discuss** with ERC to determine whether the event requires a DOE or a NERC Event Report and, if so, which entity(ies) are responsible for filing.  
   
   **Note:** Refer to ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements.

2. **Request** the ERC to coordinate the completion and submittal of a DOE OE-417 report or a NERC Event Report within the required timeframe.

   **Note:** If an ERC is unavailable, place a phone call to the DOE to verbally report the event using the appropriate telephone number provided in ISO Operating Procedure 4110D ERC External Emergency Contacts; or if time permits, submit the required form, following the steps below.

### ISO Emergency Response Coordinator (ERC)

**For DOE OE-417 Reports:**

1. **Complete** preliminary DOE Form OE-417 within the required timeframe.
2. **Consider** requesting the ISO Shift Manager, ERC or a System Operations Director to review the form before submission.
3. **Submit** preliminary DOE OE-417 Form within the required timeframe via email using the distribution list called “DOE NERC Event Reporting”.
4. **Refer** to ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements.
5. **Call** the appropriate contacts (see ISO Operating Procedures 4110C Emergency Response Coordinator Checklist and 4110D ERC External Emergency Contacts), and **provide** a description of the circumstances surrounding the event and a summary of the current efforts.

**For Events that Require only a NERC Event Report:**

1. **Verify** that the event does not require a DOE OE-417 report but requires a NERC Event Report.
   - **Refer** to ISO Operating Procedure 4110A DOE, NERC and WECC Significant Event Reporting Requirements.
2. If only a NERC Event Report is needed,
   - **Complete** and
   - **Submit** NERC Event Report form via email using the distribution list called “DOE NERC Event Reporting”.
3.2.3. ERC, JIC Lead, PIO, Government Affairs, ISO Officers Notifications and ISO Incident Commander

Take the following actions upon notification of an event:

ISO Emergency Response Coordinator (ERC)

1. **Determine** required notifications.
2. **Refer** to ISO Operating Procedure 4110C Emergency Response Coordinator Checklist.
3. **Contact and update:**
   - Director, Real-Time Operations
   - "On-Call" External Affairs JIC Lead listed in the ERC site [https://teams.oa.caiso.com/ERC/default.aspx](https://teams.oa.caiso.com/ERC/default.aspx)
   - “Real-Time Events” email distribution list –Send email with information regarding the event (Includes ISO Officers, Communications Director, Government Affairs Director, Incident Commander and other internal contacts).
   - In addition, send a text message to External Affairs JIC Lead, Incident Commander and others as needed for a heads up to ‘see email’ for more details.
4. **Determine** whether the DOC needs to be setup (Refer to ISO Operating Procedures 4110F System Operations Department Operations Center Handbook and 4110G System Operations Department Operations Center Checklist).
5. **Make** required notifications as directed by the ERC and ISO Operating Procedures 4110C Emergency Response Coordinator Checklist and 4110D ERC External Emergency Contacts.
6. **Request** additional assistance from ERCs, as required.
ISO External Affairs Joint Information Center (JIC) Lead

1. **Maintains** close communication with the ERC for the duration of the event.
2. **Coordinate** with PIO, Government Affairs and ERC to gather information and develop talking points and other communications.

**Note:** If the corporate incident command management and response process has been activated, the approval of all communications should be obtained through the Incident Commander and not the ERC/JIC.

**Note:** If the JIC Lead determines SC's and Market Participants need to be notified the client representatives will notify via email or coordinate an MNS message with the floor.

ISO Public Information Officer (PIO)

1. **Coordinate** with JIC Lead and Government Affairs to approve and release public communications regarding the system event, including press statements.
2. **Coordinate** with the PIO's at the Utilities, Media and relevant agencies.

ISO Government Affairs

1. **Coordinate** with JIC Lead and PIO to coordinate communications release with government or elected officials as appropriate to the event.

ISO Officers

1. **Determine** whether additional notifications are required to Board of Governors and/or external stakeholders.

ISO Incident Commander

1. **Convene** Initial Assessment Team (part of the corporate Incident Management Team) to analyze the System Operations incident details and determine whether the corporate incident management and response processes needs to be activated to manage the incident.
4. Supporting Information

Operationally Affected Parties

Shared with the Public.

References

Resources studied in the development of this procedure and that may have an effect upon some steps taken herein include but are not limited to:

<table>
<thead>
<tr>
<th>CAISO Tariff</th>
<th>Tariff Section 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO Operating Procedure</td>
<td></td>
</tr>
<tr>
<td>NERC Requirements</td>
<td>EOP-011-1 R1, R1.2.2, R2.2</td>
</tr>
<tr>
<td></td>
<td>IRO-001-4 R2</td>
</tr>
<tr>
<td></td>
<td>EOP-004-3 R1 - R3</td>
</tr>
<tr>
<td>WECC Criterion</td>
<td></td>
</tr>
<tr>
<td>Other References</td>
<td>ISO Corporate Incident Management Plan - Incident Management Plan</td>
</tr>
<tr>
<td></td>
<td>ISO ERC site - <a href="https://teams.oa.caiso.com/ERC/default.aspx">https://teams.oa.caiso.com/ERC/default.aspx</a></td>
</tr>
<tr>
<td></td>
<td>Department of Energy - OE-417, Electric Emergency Incident and Disturbance Report</td>
</tr>
</tbody>
</table>

Definitions

Unless the context otherwise indicates, any word or expression defined in the Master Definitions Supplement to the CAISO Tariff shall have that meaning when capitalized in this Operating Procedure.

The following additional terms are capitalized in this Operating Procedure when used as defined below:

<table>
<thead>
<tr>
<th>AGC</th>
<th>Automatic Generation Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVR</td>
<td>Automatic Voltage Regulator</td>
</tr>
<tr>
<td>BES</td>
<td>Bulk Electric System</td>
</tr>
<tr>
<td>ISO</td>
<td>California Independent System Operator Corporation</td>
</tr>
<tr>
<td>CalOES</td>
<td>California Governor’s Office of Emergency Services</td>
</tr>
</tbody>
</table>
## Operations Emergency Preparation Notifications and Reporting

**Distribution Restriction:** None

<table>
<thead>
<tr>
<th>DOC</th>
<th>Department Operations Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOE</td>
<td>Department of Energy</td>
</tr>
<tr>
<td>ERC</td>
<td>Emergency Response Coordinator</td>
</tr>
<tr>
<td>ETR</td>
<td>Estimated Time to Return</td>
</tr>
<tr>
<td>GMD</td>
<td>Geomagnetic Disturbance</td>
</tr>
<tr>
<td>ICS</td>
<td>Incident Command System</td>
</tr>
<tr>
<td>Major Outage</td>
<td>Loss of service affecting 50,000 or more or ten (10) percent, whichever is greater, of the customers served by the Distribution System of a UDC.</td>
</tr>
<tr>
<td>MSS</td>
<td>Metered Sub System</td>
</tr>
<tr>
<td>NERC</td>
<td>North American Electric Reliability Corporation</td>
</tr>
<tr>
<td>PG</td>
<td>Participating Generator</td>
</tr>
<tr>
<td>PIO</td>
<td>Public Information Officer</td>
</tr>
<tr>
<td>PSS</td>
<td>Power System Stabilizer</td>
</tr>
<tr>
<td>PTO</td>
<td>Participating TO or Participating Transmission Owner</td>
</tr>
<tr>
<td>Sabotage</td>
<td>Any deliberate attempt or suspected attempt to disrupt the electric delivery system and any of the components thereof, including, but not limited to protection systems, metering systems, Generation systems, buildings, and communication systems vital to the operation of ISO or an ISO supplier energy delivery system.</td>
</tr>
<tr>
<td>SC</td>
<td>Scheduling Coordinator</td>
</tr>
<tr>
<td>Significant Event</td>
<td>Any condition that threatens or causes harm to life, property or resources within the ISO Balancing Authority Area or causes interest and/or remedial action by the ISO, state agencies, public safety agencies, or other select organizations.</td>
</tr>
<tr>
<td>SUDC</td>
<td>Small Utility Distribution Company - annual peak is less than 25 MW and is not in a local reliability area</td>
</tr>
<tr>
<td>TOP</td>
<td>Transmission Operator</td>
</tr>
<tr>
<td>UDC</td>
<td>Utility Distribution Company</td>
</tr>
<tr>
<td>WECC</td>
<td>Western Electric Coordinating Council</td>
</tr>
</tbody>
</table>

### Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Change</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>Major rewrite of most sections to meet the requirements of NERC EOP-004-2 effective January 1, 2014. Refer to yellow highlights. Section 3.4 on Sabotage Recognition and Reporting was removed. 4110A: Complete rewrite of the Section &quot;Events that Require NERC Event Report&quot;. Clarifications made to &quot;Background&quot; and &quot;Reporting Responsibility&quot; sections. 4110C:</td>
<td>1/1/2014</td>
</tr>
</tbody>
</table>

---

This document is controlled when viewed electronically. When downloaded or printed, this document becomes UNCONTROLLED.

Page 15 of 17
<table>
<thead>
<tr>
<th>Version</th>
<th>Change</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>Annual Review: Section 1: Moved 4110A procedure reference from Shift Supervisor to CAISO ERC responsibility. Section 2.2: Added GMD. Section 3.1.2: Added Steps 2-5. Section 3.1.3: Added numbers 4-8 under &quot;Notify&quot; prior to Step 1. Section 3.2: Added numbers 12-16. Added new Section 3.2.1 Definitions: Added AGC, AVR, BES, CAISO, ROC, ERC, ETR, GMD, ICS, MEC, NERC, PG, PIO, PSS, PTO, SC, SOC and WECC.</td>
<td>7/9/2015</td>
</tr>
<tr>
<td>6.1</td>
<td>Combined SOC and ERC duties; removed references to SOC throughout document; changed 4110E SOC checklist references to 4110C Emergency Response Coordinator Checklist; Retire 4110E System Operations Coordinator Notification Checklist.</td>
<td>1/4/2016</td>
</tr>
<tr>
<td></td>
<td><strong>Errata Change</strong> – corrected date (Year) in header.</td>
<td></td>
</tr>
<tr>
<td>7.0</td>
<td>Annual Review- Added new JIC Lead Responsibilities Section. Removed Section 3.2.1. Updated Roles &amp; Actions in Section 3.4. Updated Definitions Section. Replaced Shift Supervisor with Shift Manager throughout.</td>
<td>8/8/2016</td>
</tr>
<tr>
<td>8.0</td>
<td>Section 3.1, Step 4: Removed reference to “directive” to Operating Instruction per IROL-001-4 R2 effective 4/1/2017. Updated formatting in Section 3.1. Replaced CAISO with ISO except when referencing the Tariff. Updated spelling and grammar. Changed DL email to DOE NERC Event Reporting.</td>
<td>4/1/2017</td>
</tr>
<tr>
<td>9.0</td>
<td>Periodic Review: Updated Section 3.1.2 to reflect DOE OE-417 form changes. Minor clean up and clarifications throughout document.</td>
<td>7/12/2018</td>
</tr>
<tr>
<td>9.1</td>
<td>Section 3.1.2: Removed all but first bullet for clarity and consistency and added detail to time frame for reporting. Section 3.1.3, Step 1: Removed 7th bullet (Prior to taking a unit off line or placing a unit on line), as it is no longer applies.</td>
<td>1/31/2019</td>
</tr>
<tr>
<td>9.2</td>
<td>Section 3.2, ISO Shift Manager Desk Task 3: Removed &quot;or Director of System Operations.&quot; Section 3.2.3, Task 3: Removed 2nd bullet for &quot;Executive Direct, System Operations.&quot; Minor format and grammar updates for consistency.</td>
<td>4/30/2020</td>
</tr>
</tbody>
</table>
5. Periodic Review Procedure

Review Criteria & Incorporation of Changes

There are no specific criteria for reviewing or changing this document, follow instructions in ISO Operating Procedure 5510.

Frequency

Every 3 Years.

Appendix

4110A DOE, NERC and WECC Significant Event Reporting Requirements
4110C Emergency Response Coordinator Checklist
4110D ERC External Emergency Contacts
4110F System Operations Department Operations Center Handbook
4110G System Operations Department Operations Center Checklist