
 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b> 4420
		<b>Version No.</b> 12.0
		<b>Effective Date</b> 6/11/2019
<b>System Emergency</b>		<b>Distribution Restriction:</b> <b>None</b>

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## Purpose

This procedure outlines the steps that may be taken to prevent a System Emergency and to stabilize the system should a System Emergency occur.

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## 1. Responsibilities

<b>ISO Shift Manager Desk</b>	Directs timely and appropriate Real-Time actions necessary to ensure reliable operation of the ISO Controlled Grid and Balancing Authority Area.
<b>ISO System Operator</b>	Ensures reliable operation of the ISO Controlled Grid and Balancing Authority Area.
<b>Participating Transmission Owner (PTO)</b>	Maintain a single point of contact with the ISO through their Power Grid Operations Centers and are subject to Operating Instructions issued by the ISO.
<b>Utility Distribution Company (UDC)</b>	Comply with all directions from the ISO concerning the management of System Emergencies, as per the CAISO Tariff.
<b>Scheduling Coordinator (SC) Participating Generator (PG)</b>	Follow all operating instructions and is subject to operating instructions issued by the ISO during a System Emergency and any circumstances in which the ISO considers that a System Emergency is imminent, anticipated or threatened, as per the CAISO Tariff.

## 2. Scope/Applicability


### 2.1. Background

Power system disturbances typically occur due to the loss of generating equipment, transmission facilities, or unexpected load changes. These disturbances may affect the reliable operation of the ISO Controlled Grid and the WECC interconnected Bulk Electric System. Severe system disturbances generally result in critically loaded transmission facilities, significant frequency deviations, high or low voltage conditions, or stability problems.

### 2.2. Scope/ Applicability

This procedure outlines the steps that may be taken to prevent a System Emergency and to stabilize the system should a System Emergency occur. A System Emergency can consist of a Transmission Emergency or a Staged Emergency, and may be sudden or progressive in nature. To prevent a System Emergency, and to maintain system reliability, the ISO may issue a restricted maintenance operations, alert, or warning notice.

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### 3. Procedure Detail

#### 3.1. Order of Steps

The order of the actions taken may vary due to system conditions or other operational issues. It may be necessary to skip actions due to the severity of the situation. To the extent possible, and when prudent, actions that were skipped may be implemented at a later time or date.

#### 3.2. Flex Alert

Flex Alerts are part of a consumer educational and alert program for voluntary conservation of electricity during heat waves and other challenging grid conditions.

For more information visit <http://www.flexalert.org>.

A Flex Alert is most effective when issued a day or more in advance of when conservation is needed so consumers can adjust their electricity usage ahead of time (i.e., adjusting thermostats before leaving for work).


However, grid emergencies can happen suddenly, so if conservation is needed, the ISO can issue a Flex Alert with little or no advance notification. When possible, Flex Alerts are targeted to the regional or local areas where the system is stressed.

<b>System Operations ISO Communications and Public Relations</b>
<ol style="list-style-type: none"> <li>1. System Operations management and Communications, <b>determine</b> if a Flex Alert would be a useful mechanism given the planned or current operating conditions.</li> <li>2. If needed, <b>issue</b> a “Flex Alert” notice using available communications channels (AWE Notification System, social media, website, email, etc.).</li> <li>3. <b>Notify</b> the Emergency Response Coordinator, Joint Information Center Lead and others as needed.</li> </ol>

#### 3.3. Restricted Maintenance Operations

Restricted maintenance operations apply to all pre-scheduled Outages and/or any planned maintenance.


Restricted maintenance operations apply to PTO Control Centers, Scheduling Coordinators and Participating Generators, for the hours identified in the notice. Restricted maintenance operations are applied for the shortest duration necessary to meet the reliability concern.

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The ISO maintains the authority to cancel or postpone any/or all work to preserve overall System Reliability, both prior to Real-Time and during Real-Time operations. The ISO will declare restricted maintenance operations when deemed necessary.

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> a Restricted Maintenance Operations or a Generation Restricted Maintenance Operations Notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone.</li> <li>3. <b>Notify</b> PTO's and other affected Entities as needed.</li> <li>4. <b>Notify</b> the WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system.</b></li> <li>5. <b>Notify ISO Emergency Response Coordinator (ERC)</b> regarding system conditions.</li> <li>6. <b>Consider</b> postponing outages or returning equipment to service early.</li> <li>7. <b>Cancel</b> outages as needed to maintain system reliability.</li> <li>8. <b>Only approve</b> outages that will have no negative or potential negative effect on system reliability.</li> <li>9. <b>Utilize</b> Exceptional Dispatch to mitigate as necessary.</li> <li>10. <b>Utilize</b> Manual Dispatch on the Interties to mitigate as necessary.</li> <li>11. <b>Continue</b> to monitor the system.</li> <li>12. If conditions deteriorate, <b>consider</b> issuing an Alert, Warning, Transmission Emergency, or Staged Emergency notice.</li> <li>13. When conditions allow, <ul style="list-style-type: none"> <li>• <b>Back out</b> of each step performed,</li> <li>• <b>Notify</b> the RC by phone <u>and</u></li> <li>• <b>Terminate</b> the Restricted Maintenance.</li> </ul> </li> <li>14. <b>Refer</b> to other ISO Operating Procedure 4420 System Emergency attachments as needed.</li> </ol>

Scheduling Coordinator (SC), Participating Generator (PG), Participating Transmission Owner (PTO) Control Centers
<ol style="list-style-type: none"> <li>1. <b>Obtain</b> permission from the ISO to proceed with pre-scheduled or planned work, regardless of whether prior approvals were obtained from the ISO.</li> </ol> <p><b>Note:</b> Outages postponed due to the issuance of a restricted maintenance operations notice may be considered for re-scheduling outside of the previously pre-scheduled Outage hours and/or outside of the hours of restricted maintenance operations.</p>

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### 3.4. Transmission Emergency


The ISO may declare a Transmission Emergency for any event that threatens, harms, or limits the capabilities of any element of the transmission grid and overall grid reliability. Declaration of a Transmission Emergency may be caused by events including but not limited to:

- Transmission line/path overloads or loss (including exceeding Interconnection Reliability Operating Limits (IROL) and System Operating Limits (SOL))
- Transformer overloads or loss
- Instability
- Frequency deviations or decay
- Voltage that exceeds or falls below predetermined limits
- Fires, earthquake, severe weather, sabotage, civil unrest, terrorism

The ISO System Operator may take, but is not limited to, the following actions **in any order** needed, and to the extent necessary, to prevent, mitigate or otherwise manage a System Emergency:

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> a Transmission Emergency notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone; include current and projected conditions.</li> <li>3. <b>Notify</b> PTO's and other affected entities as needed.</li> <li>4. <b>Notify</b> the WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system.</b></li> <li>5. <b>Consider</b> postponing outages or returning equipment to service early.</li> <li>6. <b>Cancel</b> outages as needed to maintain system reliability.</li> <li>7. <b>Only approve</b> outages that will have no negative or potential negative effect on system reliability.</li> <li>8. <b>Exhaust</b> available resources (except for Spin/Non-Spin) through the market.</li> <li>9. <b>Utilize</b> Exceptional Dispatch to mitigate as necessary.</li> <li>10. <b>Utilize</b> Manual Dispatch on the Interties to mitigate as necessary.</li> <li>11. <b>Enable</b> RDRRs in the market, globally or by region as needed, to make them available for dispatch through the market.</li> <li>12. <b>Notify</b> the PTO Transmission Control Centers that RDRR resources have been enabled and available for dispatch through the market.</li> <li>13. If 100 MW or more of emergency Demand Response is dispatched, <ul style="list-style-type: none"> <li>• <b>Notify</b> ISO's <b>ERC</b> to file DOE OE-417.</li> </ul> </li> </ol> <p><b>Note:</b> <i>If the ERC is unavailable, ISO Shift Manager or designee has to file the OE-417. Refer to ISO Operating Procedure <a href="#">4110A DOE, NERC and WECC Significant Event Reporting Requirements</a>.</i></p>

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ISO System Operator
<p>14. <b>Contact</b> the PTOs Transmission Control Center (PG&amp;E, SCE, SDG&amp;E and VEA) to <b>quantify</b> available Demand Response and UDC Interruptible Load (Non-Firm) programs, <b>and notify</b> the PTOs of possible implementation.</p> <p>15. <b>Call on</b> out-of-market Demand Response programs and UDC Interruptible Load (Non-Firm) programs (amount varies). This requires up to a 60-minute notification.</p> <ul style="list-style-type: none"> <li>• <b>Refer</b> to ISO Operating Procedure <a href="#">4510 Load Management Programs and Underfrequency Load Shedding</a> and its attachments.</li> </ul> <p>16. <b>Reduce</b> participating pump load as available.</p> <p>17. <b>Utilize</b> Spinning and Non-Spinning Reserve resources.</p> <p>18. <b>Dispatch</b> effective Condition 2 RMR Units and <b>notify</b> market participants accordingly.</p> <p><b>If RMR units are assigned AS, send the following message:</b></p> <p><i>“The ISO is currently utilizing Condition 2 RMR units to provide additional Ancillary Services.”</i></p> <p>19. <b>Request</b> effective available Energy from MSS resources, if necessary.</p> <p>20. <b>Utilize</b> Firm Load interruption, if necessary.</p> <p>21. <b>Issue</b> a Transmission Emergency – Firm Load Interruptions notice using the AWE Notification System.</p> <p>22. <b>Advise</b> PTOs that they can take local control of Generating Resources to prevent islanding or to stabilize islands. This may require PTOs to <b>suspend</b> the FERC standard of conduct.</p> <p>23. When conditions stabilize,</p> <ul style="list-style-type: none"> <li>• <b>Back out</b> of each step performed,</li> <li>• <b>Notify</b> the RC by phone, the WECC ALL RELIABILITY distribution list via <b>Reliability messaging system</b>, <b>and</b></li> <li>• <b>Terminate</b> the Transmission Emergency – Firm Load Interruptions and the Transmission Emergency.</li> </ul>

### 3.5. Operating Reserve Deficiency


The ISO maintains and, in case of deployment, restores operating reserves to the levels specified in WECC Standard BAL-002-WECC-2a.

#### 3.5.1. Alert Notice

The ISO issues an Alert notice by 1500 hours the day before anticipated operating reserve deficiencies, along with appropriate notifications.

**Note:** *The 24 Hour Forecast notice has been combined with the Alert Notice.*

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The ISO System Operator may take, but is not limited to, the following actions **in any order** needed:

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> an Alert notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone.</li> <li>3. <b>Notify</b> WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system</b>.</li> <li>4. <b>Notify</b> ERC regarding system conditions.</li> <li>5. <b>Notify</b> PTOs by phone.</li> <li>6. <b>Request</b> through a MNS market message that SCs bid in any additional available capacity to the ISO.</li> <li>7. <b>Request</b> that ISO Communications <b>issue</b> a “Flex Alert” notice using the AWE Notification System, if needed.</li> <li>8. <b>Evaluate</b> need for restricted maintenance operations.</li> </ol>


### 3.5.2. Warning Notice

The ISO issues a Warning notice when the Real-Time Market run results indicate that Contingency Reserves are anticipated to be less than Contingency Reserve requirements and further actions are necessary to maintain the Contingency Reserve requirements.

The ISO System Operator may take, but is not limited to, the following actions **in any order** needed, and to the extent necessary, to prevent, mitigate or otherwise manage a System Emergency:

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> a Warning notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone <b>and request</b> they declare an Energy Emergency Alert 1 (EEA-1) for the ISO BA area.</li> <li>3. <b>Notify</b> WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system</b>.</li> <li>4. <b>Notify</b> PTOs by phone.</li> <li>5. <b>Notify</b> ERC of system conditions, Flex Alert notices, and any need to file DOE OE-417 or NERC Event Reporting Form.</li> </ol> <p><b>Note:</b> <i>If the ERC is unavailable, ISO Shift Manager or designee has to file the OE-417. Refer to ISO Operating Procedure <a href="#">4110A DOE, NERC and WECC Significant Event Reporting Requirements</a>.</i></p> <ol style="list-style-type: none"> <li>6. <b>Issue</b> a Flex Alert notice using the AWE Notification System, as needed.</li> <li>7. <b>Enable</b> RDRRs in the market, globally or by region as needed, to make them available for dispatch through the market.</li> </ol>

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ISO System Operator
<p>8. <b>Notify</b> the PTO Transmission control centers that RDRR resources have been enabled and available for dispatch through the market.</p> <p>9. If 100 MW or more of emergency Demand Response is dispatched,</p> <ul style="list-style-type: none"> <li>• <b>Notify</b> ISO's <b>ERC</b> to file DOE OE-417.</li> </ul> <p><i>Note: If ERC is unavailable, ISO Shift Manager or designee has to file the OE-417. Refer to ISO Operating Procedure <a href="#">4110A DOE NERC, and WECC Significant Event Reporting Requirements</a>.</i></p> <p>10. <b>Exhaust</b> available resources (except for Spin/Non-Spin) through the market.</p> <p>11. <b>Use</b> Exceptional Dispatch, as needed.</p> <p>12. <b>Reduce</b> participating pump load as available.</p> <p>13. <b>Dispatch</b>, as necessary, available unloaded generation Capacity without RT Energy Bids. This can include Exceptional Dispatch on a resource subject to CPM designation.</p> <p>14. <b>Call</b> IOUs to dispatch available generation to full Load.</p> <p>15. <b>Dispatch</b> Non-Spinning and Spinning Reserve resources, including contingent only, to the extent possible while maintaining required Contingency Reserves.</p> <p>16. <b>Dispatch</b> Condition 2 RMR Units <u>and</u></p> <p>17. <b>Notify</b> market participants of the use of Condition 2 RMR for system needs.</p> <p><b>If RMR units are assigned AS send the following message:</b></p> <p><i>“The ISO is currently utilizing Condition 2 RMR units to provide additional Ancillary Services”.</i></p> <p>18. <b>Request</b> the RC to issue an Energy Emergency Alert 2 (EEA-2) for the ISO BA area.</p> <p>19. <b>Contact</b> the PTOs Transmission Control Center (PGAE, SCE, SDG&amp;E and VEA) to quantify available Demand Response and UDC Interruptible Load (Non-Firm) programs, and notify the PTOs of possible implementation.</p> <p>20. <b>Call</b> on out-of-market Demand Response programs and UDC Interruptible Load (Non-Firm) programs (amount varies). This requires up to a 60-minute notification.</p> <p>21. <b>Refer</b> to ISO Operating Procedure <a href="#">4510 Load Management Programs and Underfrequency Load Shedding</a> and its attachments.</p> <p>22. <b>Canvas</b> other entities and Balancing Authorities for available Manual Dispatch Energy/Capacity on interties.</p>

**Warning Notice Actions with Emergency Stage 1 Imminent**

ISO System Operator
<p>1. <b>Request</b> any available interruptible programs not supplying AS.</p>

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### 3.5.3. Emergency Stage 1

The ISO issues an Emergency Stage 1 when Contingency Reserve shortfalls exist, or when forecasted to occur, and available market and non-market resources are insufficient to maintain Contingency Reserve requirements. The actions identified below will be taken, as needed, to restore or maintain required Contingency Reserves.


The ISO System Operator may take, but is not limited to, the following actions **in any order** needed, and to the extent necessary, to prevent, mitigate or otherwise manage a System Emergency:

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> an Emergency Stage 1 notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone.</li> <li>3. <b>Maintain</b> hourly updates to the RC until Alert 2 is terminated.</li> <li>4. <b>Notify</b> the WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system</b>.</li> <li>5. <b>Notify</b> ERC of system conditions, Flex Alert notices, and any need to file DOE OE-417 or NERC Event Reporting Form.</li> </ol> <p style="margin-left: 20px;"><i><b>Note:</b> If the ERC is unavailable, ISO Shift Manager or designee has to file the OE-417. Refer to ISO Operating Procedure <a href="#">4110A DOE, NERC and WECC Significant Event Reporting Requirements</a>.</i></p> <ol style="list-style-type: none"> <li>6. <b>Establish</b> conference call with PTOs.</li> <li>7. <b>Request</b> that ISO Communications <b>Issue</b> a Flex Alert notice using the AWE tool, as needed.</li> <li>8. <b>Request</b> the RC to issue a notice that Emergency Assistance may be required by the ISO.</li> <li>9. <b>Request</b> that other Balancing Authorities determine the amount of assistance they are able to provide.</li> <li>10. <b>Evaluate</b> the impacts of any in-progress Time Error Correction <u>and</u></li> <li>11. <b>Request</b> the RC terminate Time Error Correction if it is contributing to resource deficiency.</li> <li>12. <b>Request</b> all available Energy from MSS (Load Following) Resources.</li> </ol>

### 3.5.4. Emergency Stage 2


The ISO will issue an Emergency Stage 2 when it has taken all actions listed above and cannot maintain its Non-Spinning Reserve requirement as indicated by the EMS system. The actions identified below will be taken in an effort to restore the required Contingency Reserves.

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The ISO System Operator may take, but is not limited to, the following actions **in any order** needed, to the extent necessary, to prevent, to mitigate, or otherwise manage a System Emergency:

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> an Emergency Stage 2 notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone.</li> <li>3. <b>Maintain</b> hourly updates to the RC until Alert 2 is terminated.</li> <li>4. <b>Notify</b> the WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system.</b></li> <li>5. <b>Establish</b> conference call with PTOs.</li> <li>6. <b>Notify</b> ERC of system conditions, Flex Alert notices, and any need to file DOE OE-417 or NERC Event Reporting Form.</li> </ol> <p style="margin-left: 40px;"><i><b>Note:</b> If the ERC is unavailable, ISO Shift Manager or designee has to file the OE-417. Refer to ISO Operating Procedure <a href="#">4110A DOE, NERC and WECC Significant Event Reporting Requirements</a>.</i></p> <ol style="list-style-type: none"> <li>7. <b>Evaluate</b> the impacts of any in-progress Time Error Correction <u>and</u></li> <li>8. <b>Request</b> the RC to terminate Time Error Correction if it is contributing to resource deficiency.</li> <li>9. <b>Issue</b> a 1-Hour Probability notice using the AWE Notification System to notify utilities of anticipated Stage 3 event that may occur if anticipated in the next 90-minutes.</li> <li>10. <b>Procure</b> RMR and any other available Out-of-Market Spinning and Non-Spinning reserves as available.</li> </ol> <p><b>If RMR condition 2 units are assigned AS send the following message:</b></p> <p style="margin-left: 40px;"><i>“The ISO is currently utilizing Condition 2 RMR units to provide additional Ancillary Services.”</i></p>

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### Emergency Stage 2 Actions with Stage 3 Imminent

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Procure</b> Emergency Assistance per ISO Operating Procedure <a href="#">4410 Emergency Assistance</a>.</li> <li>2. If manual load shedding may be needed, <ul style="list-style-type: none"> <li>• <b>Request</b> that the RC issue an Energy Emergency Alert 3 (EEA-3) for the ISO BA area.</li> </ul> </li> <li>3. <b>Maintain</b> hourly updates to the RC until Alert 3 is terminated.</li> <li>4. <b>Pre-arrange</b> (whenever possible) firm load dropping with UDC/MSS in order to minimize any time-lag in dropping load, at the direction of the ISO Shift Manager.</li> </ol> <p><i><u>Example:</u> On a peak-load day where it is anticipated that Stage 3 Emergency Firm load reductions are needed, there will be an early morning reliability conference call to advise the PTOs to attend stations and/or standby at facilities, as required, to support immediate load dropping at the direction of the ISO Shift Manager.</i></p>


### 3.5.5. Emergency Stage 3

The ISO issues an Emergency Stage 3 when the Spinning Reserve portion of the Contingency Reserve depletes, or is anticipated to deplete below the Contingency Reserve requirement and cannot be restored. The Contingency Reserve requirement states that Spinning Reserve shall be **no less** than 50% of the total Contingency Reserve requirements.

The ISO System Operator may take, but is not limited to, the following actions **in any order** needed, and to the extent necessary, to prevent, mitigate or otherwise manage a System Emergency:

ISO System Operator
<ol style="list-style-type: none"> <li>1. <b>Issue</b> an Emergency Stage 3 notice using the AWE Notification System.</li> <li>2. <b>Notify</b> the RC by phone.</li> <li>3. <b>Notify</b> the WECC ALL RELIABILITY distribution list via <b>the Reliability messaging system</b>.</li> <li>4. <b>Establish</b> conference call with PTOs, UDCs and MSSs as needed.</li> <li>5. <b>Request</b> the RC to declare ISO Energy Emergency Alert 3 (EEA-3).</li> <li>6. <b>Maintain</b> hourly updates to the RC until Alert 3 is terminated.</li> <li>7. <b>Initiate</b> Firm Load Interruptions.</li> <li>8. <b>Provide</b> the megawatt quantity to be interrupted to each UDC/MSS.</li> </ol> <p><b>Note:</b> Interruptions should be coordinated with the ISO and may occur in rotating blocks under the direction of the PTO's Transmission Control Center and are dependent on Operating Reserve requirements and/or ACE and frequency.</p>

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ISO System Operator
9. <b>Refer</b> to ISO Operating Procedure <a href="#">4510A Load Shed Calculation Guideline</a> . 10. <b>Issue</b> a Stage 3 System Emergency – Firm Load Interruptions notice using the AWE Notification System. 11. Using MNS, <b>notify</b> Market Participants of the total amount of load interruptions requested, in MW, for the ISO BA.

### 3.6. Emergency Downgrade

The ISO will make notifications and downgrade (step down) to necessary level of emergency as conditions improve, or cancel the System Emergency and return to normal operations.

ISO System Operator
1. Whenever possible, <b>restore</b> firm load before interruptible load and /or Schedules. 2. <b>Terminate</b> the Stage 3 System Emergency - Load Interruptions notice using the AWE Notification System. 3. <b>Downgrade</b> the emergency stage when possible by backing out of each step that was performed for that stage. 4. <b>Issue</b> a cancellation notice for the current emergency stage  <i><b>Note:</b> there is no need to reissue an implementation notice for downgraded emergency stage if still in effect. (i.e., when cancelling a Stage 2 no reissue needed if Stage 1 was issued previously and is still in effect).</i> 5. If no lower stage emergency is still in effect, <b>issue</b> a new notice with the lower current stage. 6. If Non-Market resources are still required to maintain Contingency Reserve requirements, <b>issue</b> a Warning notice.

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## 4. Supporting Information

### Operationally Affected Parties

Shared with Public and the RC.

### 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:


<a href="#">CAISO Tariff</a>	7.7.1, 7.7.2.1, 7.7.2.2, 7.7.2.3, 7.7.3.1, 7.7.3.2, 7.7.11
ISO Operating Procedure	<a href="#">4410 Emergency Assistance</a> <a href="#">4420E Allowable Transmission Maintenance Activities During Restricted Maintenance Operations</a> <a href="#">4510 Load Management Programs and Underfrequency Load Shedding</a>
NERC Requirements	EOP-011-1 R2 EOP-011-1 R2.2.2 EOP-011-1 R2.2.8
WECC Criterion	BAL-002-WECC-2a R1, R2, R3, R4 EOP-011-1, R1, R2, R2.2.1, R2.2.4
Other References	

### 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:


**None.**

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### Version History


Version	Change	History
9.0	Annual Review: Changed WECC RC to RC. Removed references to 4420F SONGS Essential Component List. Section 3.2.: Page 5, Step 10, 11 & 12: Added Demand Response steps for enabling RDRR. Section 3.2.2: Page 5, Step 10, 11 & 12: Added Demand Response steps for enabling RDRR and Energy Emergency Alert 2 (EEA-2).	6/16/2015
10.0	Periodic Review- Section 3.1 – added new section 3.1 for Flex Alert and renumbered all sections Section 3.3 – clarified EEAs under Transmission Emergency conditions Section 3.3 Step 15- removed reference “if used for System or Competitive Path mitigation. Throughout procedure: Added clarity to maintain hourly updates to the peak RC until alert 1/ 2/ 3 is terminated. Replaced all references to WECCNet with new tool Reliability Messaging Tool (RMT). Removed references to “CA Hotline Aka. 137 Intertie.” Removed Flex Alert steps from each section to consolidate in new section 3.1 Definitions: added Reliability Messaging Tool (RMT).	8/26/2016
11.0	Annual Review - Page 15 & 16 Added Restricted Maintenance Operations to Definitions Section. Replaced references to CAISO with ISO except when referring to the tariff.  Replaced references to Shift Supervisor with Shift Manager. Replaced “Transmission Operator Directive” with “Transmission Operator  Operating Instruction”, pursuant to IRO-001-4. Updated all NERC and WECC references.	4/1/2017
11.1	Formatting and grammar corrections. Minor update to bold content.	6/22/2017
11.2	Section 3.4: Added new Step 3 and added “up to” in Step 15 for clarification. Section 3.5.1, Step 7: Removed step Section 3.5.2, Step 5, 6: Removed “Flex Alert Notices.” Step 7: Removed. Step 19: Added “up to” for clarification. Section 3.5.3, Step 7: Added “Request that ISO Communications.” Removed “Flex Alert Notices.”	9/18/2017

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Version	Change	History
	Sections 3.5.4 & 3.5.5: Corrected labeling of section title. Removed references to "Flex Alert Notices" References: Updated WECC Criterion. Minor grammar and formatting updates throughout.	
11.3	Added new Section 3.2 for Flex Alert. Section 3.4, Step 15: Minor update. Section 3.5.1: New Step 7 added for Flex Alert. Section 3.5.2: Updated Step 5 and added new Step 6 regarding Flex Alert notice. Minor update to Step 20 regarding notification. Section 3.5.3: Minor update to first paragraph. Updated Step 5 and added new Step 7 regarding Flex Alert notice. Section 3.5.4: Minor update to Section title and first paragraph. Updated Step 5 for Flex Alert notices. Replaced Peak RC with the RC in most instances. Replaced A/S with AS. Updated NERC standard BAL reference Minor format and grammar updates throughout. Removed version history prior to 3-years.	8/28/2018
12.0	Annual Review: Section 3.4: Removed Steps 19, 20, 22 & 23 to remove declaration of EEA2 and EEA3 per updated RC procedures. Section 3.5: Updated BAL-002 reference. Section 3.5.2: Moved Steps 15, 16, and 17 to Steps 7, 8 and 9. Sections 3.5.2, 3.5.3 & 3.5.4: Updated Step 5 note to be consistent with other notes regarding Shift Manager or designee to file OE-417 if ERC is unavailable. Replaced Reliability Messaging Tool (RMT) with Reliability messaging system throughout. Replaced Peak RC with the RC under Operationally Affected Parties. References Section: Removed BAL-004 reference from NERC Requirements. Minor format and grammar updates.	6/11/2019

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## 5. Periodic Review Procedure

### Review Criteria & Incorporation of Changes

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

### Frequency

Annual

## Appendix

- 4420B Alert/Warning/Emergency (AWE) Guide
- 4420C System Emergency Notice Templates
- 4420E Allowable Transmission Maintenance Activities During Restricted Maintenance Operations