

 <b>CALIFORNIA ISO</b> <small>California Independent System Operator</small>	<b>ISO OPERATING</b> <b>PROCEDURE</b>	Procedure No.	E-504
		Version No.	2.5
Alert, Warning, Emergency Notices		Effective Date	6/10/00

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## INTRODUCTION

### Purpose

This Procedure describes the notification process implemented by the ISO when an Operating Reserve shortage is imminent or exists. Notifications are made to keep Market Participants, and other interested parties informed regarding the status of the ISO Operating Reserve and to stimulate the market, thereby avoiding progression to more severe actions, including the Electrical Emergency Plan (refer to ISO Operating Procedure E-508).

### Affected Parties

- California ISO
  - Grid Operations
  - Market Operations
  - Communications
  - Client Relations
  - Scheduling Coordinators
- Participating Transmission Owners (PTO)

### References

- ISO Tariff
- ISO Protocol Dispatch Protocol (DP)
- ISO Protocol Ancillary Services Requirements Protocol (ASRP)
- ISO Operating Procedure E-507 Emergency Response Team Procedure
- ISO Operating Procedure E-508 Electrical Emergency Plan
- ISO Operating Procedure N-703 Event Reporting and Notifications
- ISO Operating Procedure E-511 Demand Relief Program
- ISO Operating Procedure G-201 Operating Reserve
- UDC Electrical Emergency Plans
- WSCC Minimum Operating Reliability Criteria

### Policy

The **ISO Minimum Operating Reserve** will be maintained as described in the Western Systems Coordinating Council (WSCC) Minimum Operating Reliability Criteria (MORC). Forecast deficiencies of Operating Reserve warrant the issuance by the ISO of a System Alert or a System Warning. Such notices are made in an effort to avoid more severe actions such as the implementation of Electrical Emergency Plans. In extreme cases where Demand curtailment and/or market intervention is anticipated, it will be necessary for the ISO to issue a notice of an Emergency Notice. An Emergency Notice issued by the ISO will be notice to the Market Participants that the ISO Electrical Emergency Plan is being implemented per ISO Operating Procedure E-508.

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## Definitions

Unless the context otherwise indicates, any word or expression defined in the Master Definitions Supplement to the ISO 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:

**Alert Notice** A notice issued by the ISO when, in the Day-Ahead Market, the Operating Reserve is forecast to be less than the MORC Minimum.

The notice is issued to Market Participants in order to stimulate the market to provide additional resources, thereby avoiding progression to a Warning Notice.

**Warning Notice** A notice issued by the ISO when, in the Hour-Ahead Market (i.e., after 2200 each day for the next day), Operating Reserve is forecast to be marginal or less than the MORC Minimum.

Similar to an Alert Notice, the Warning Notice is issued to the Market Participants in order to stimulate the market to provide additional resources, thereby avoiding progression to an Emergency Notice.

A Warning Notice enables the ISO to secure resources outside of the competitive market.

**Emergency Notice** A notice issued by the ISO in real-time when an Operating Reserve shortfall is unavoidable, or when in real-time operations, the Operating Reserve is forecast to be less than the ISO minimum.

Refer to ISO Operating Procedure E-508 – Electrical Emergency Plan.

**ISO Electrical Emergency Plan** Details the action to be taken to preclude successive decline in system conditions.

Refer to ISO Operating Procedure E-508.

## Responsibilities

**ISO** The ISO Shift Manager will coordinate implementation of this Procedure for Alerts and Warnings.

Upon issuing a Notice of an Alert, Warning, or Emergency, at the direction of the Shift Manager, the ISO will notify:

- Operations and Communications

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- PTO Control Centers (who will notify UDCs within their respective areas )
- All Market Participants

If it is determined by the ISO Shift Manager that an Emergency Notice is warranted, the ISO will implement ISO Operating Procedure E-508 (i.e., the ISO Electrical Emergency Plan) and will assure that notifications are made as described in that Procedure.

<b>PTO</b>	Completes notifications, including UDC, in accordance with their procedures. When PTO Control Center is assured that all notifications have been completed, they will report to the ISO.
<b>UDC</b>	Will complete notification in accordance with their procedures.

## PROCEDURE

The Procedure is divided into three (3) Phases (i.e., Alert, Warning, and Emergency). Should it become necessary in the implementation of this Procedure to bypass the Alert or Warning phases to immediately proceed to issuing an Emergency Notice, the action items under the bypassed phases will be implemented as appropriate.

**Note:** There are no “**Stages**” for Alerts or Warnings. “**Stages**” are used *only* in conjunction with Emergency Notices (i.e. **Stage 1** Emergency, **Stage 2** Emergency or **Stage 3** Emergency). The term “**Stage**” *must not* be used in conjunction with the terms “**Alert**” or “**Warning**”. Improper usage can result in miscommunications and inappropriate response.

### 1. ALERT PHASE – DAY- AHEAD

An Alert Notice will be issued by the ISO, as directed by the Shift Manager when, in the Day-Ahead Market, Operating Reserve, including all Ancillary Services and RMR availability, is forecast to be less than minimum.

#### 1.1. ISO Internal Notification

The ISO, as directed by the Shift Manager will notify the following:

- Director of Grid Operations
- Managing Director of Operations
- Chief Operations Officer
- Director of Communications
- Chief Executive Officer

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## 1.2. Market Participant and PTO Notification

The ISO will give simultaneous notification of the Alert to all Market Participants through the WeNet system and/or by E-mail to the “Market Status” distribution list, and to all PTO Control Centers, who, in turn, will notify UDCs within their operational areas.

## 1.3. Resource Procurement

The ISO will secure resources, as appropriate, made available in the Hour-Ahead Market as prompted by the Alert Notice.

## 2. WARNING PHASE – Hour-Ahead

A Warning Notice will be issued by the ISO, as directed by the Shift Manager, when, in the Hour-Ahead Market, Operating Reserve is forecast by the ISO to be less than the minimum requirement.

### 2.1. ISO Internal Notification

The ISO will notify the following:

- Director of Grid Operations
- Managing Director of Operations
- Director of Communications

### 2.2. Market Participant and PTO Notification

The ISO GRC, under the direction of the Shift Manager, will give simultaneous notification of the Warning to all Market Participants. Transmission Dispatcher will also simultaneously issue a Notification of Warning to all PTO Control Centers, who in turn will notify UDCs within their operational areas.

### 2.3. Resource Procurement

The ISO will secure resources, as appropriate, made available in the Market as prompted by the Alert and Warning Notices. Additionally, the ISO will attempt to acquire, by any means (including by non-competitive process) additional resources in amounts sufficient to maintain minimum Operating Reserve requirement in real-time operations.

## 3. EMERGENCY PHASE

An Emergency Notice will be issued by the ISO in real-time when it is clear that an Operating Reserve shortfall (i.e., less than **MORC**) is unavoidable or exists in real-time and, in the judgment of the ISO Shift Manager, it is apparent that, left to market forces, the market will not make available sufficient additional resources to maintain minimum Operating Reserve. Refer to ISO Operating Procedures:

- E-507 – Emergency Response Team Procedure

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- E-508 – Electrical Emergency Plan.

#### 4. MESSAGES

##### 4.1. Initiating Messages to PTO Control Centers, Market Participants and Appropriate Regulatory Agencies

##### 4.1.1. Alert Notification

**SYSTEM ALERT NOTIFICATION**

The ISO is predicting deficiencies in Operating Reserve on {date} due to:

Effective {time}, {date}: The ISO is issuing an "Alert" notice and is requesting additional Supplemental Energy bids for Hour Ending {HE start} through Hour Ending {HE end}.

This message is from Market Operations at the California ISO.

##### 4.1.2. Warning Notification

**SYSTEM WARNING NOTIFICATION**

Today, {date}, the ISO is predicting deficiencies in Operating Reserve due to:

Effective {time}, {date}: The ISO is issuing a "Warning" notice and is requesting additional Supplemental Energy bids, up to {mw}MW, for Hour Ending {HE start} through Hour Ending {HE end}.

Those who have additional Energy or capacity to provide are highly encouraged to submit bids into the Supplemental Energy market.

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**4.2. Termination Messages to PTO Control Centers, Market Participants and Appropriate State Agencies**

**4.2.1. Alert Cancellation**

**SYSTEM ALERT CANCELLATION**

Effective {date} at {time} the California Independent System Operator has terminated the "Alert" of the Electrical Emergency Plan.

The "Alert" has been in effect since {date and time}.

This message is from Market Operations at the California ISO.

**4.2.2. Warning Cancellation**

**SYSTEM WARNING CANCELLATION**

Effective {date} at {time} the California Independent System Operator has terminated the "Warning" of the Electrical Emergency Plan.

The "Warning" has been in effect since {date and time}.

This message is from Market Operations at the California ISO.