

ISO-NE Public Communications During Operating Procedure No. 4: Action During a Capacity Deficiency (OP 4)



Operating Reserves Are Essential to a Reliable Power System

ISO New England must carry a reserve of electricity supply that can be called on to produce electricity should a contingency occur on the power system, such as:

- ▶ Unexpected high demand due to extreme weather
- ▶ A generator goes out of service for mechanical problems
- ▶ A transmission line or circuit breaker trips due to lightning strike or other issue or becomes overloaded
- ▶ A neighboring grid requests assistance
- ▶ A serious threat is made to the power system

The ISO maintains two categories of reserves: resources that can provide energy within **10 minutes** and resources that can provide energy within **30 minutes**. Typically, the ISO maintains an operating reserve of between 1,560 MW and 2,250 MW in 10-minute reserve, plus an additional 625 MW or so in 30-minute reserve.

The ISO implements OP 4 when available resources are insufficient to meet anticipated electricity demand plus required operating reserves—called a “capacity deficiency”—so that we can ensure a continuous, reliable flow of electricity.

The Scope and Sequence of OP 4's 11 Actions

- ▶ The ISO can implement OP 4 actions New England-wide, by local control center area, by state, or targeted to a specific area
- ▶ Actions can be implemented in any order; some actions can be implemented in advance of an anticipated capacity deficiency
- ▶ The ISO can skip OP 4 actions and move immediately to emergency actions such as controlled power outages (under OP 7), if necessary

Four Types of Public Notifications During OP 4



OP 4 Action 1:
No public appeal for conservation



OP 4 Action 4:
Public appeal for voluntary conservation issued only if conditions warrant*



OP 4 Action 10:*
Urgent public appeal for voluntary conservation



OP 4 Action 11:*
Governors' appeal

*If ISO New England issues a public appeal for voluntary conservation, the External Affairs and Corporate Communications teams will activate bridgelines to update OP 4 contacts on power system conditions. We will send dial-in info by email for each event.

**These alerts do not trigger any additional communications with OP 4 contacts.

The ISO Uses OP 4 Actions to Increase Supply or Reduce Demand to Maintain Operating Reserves

1. Implement **Power Caution** and begin to allow depletion of 30-minute reserves
2. Declare Energy Emergency Alert (EEA) Level 1**
3. Request voluntary load curtailment of market participants' facilities
4. Implement **Power Watch**, a notification that additional OP 4 Actions may be taken; if conditions warrant, issue a public appeal for voluntary conservation
5. Schedule Emergency Energy Transactions and arrange to purchase energy and capacity from other control areas
6. Implement voltage reductions of 5% of normal operating voltage requiring more than 10 minutes
Declare Energy Emergency Alert (EEA) Level 2**
7. Request resources without a capacity supply obligation to provide energy for reliability purposes
8. Implement a voltage reduction of 5% of normal operating voltage requiring 10 minutes or less
9. Request activation of transmission customer generation not contractually available to market participants during a capacity deficiency, and request voluntary load curtailment by large industrial and commercial customers
10. Implement **Power Warning** and issue urgent public appeal for voluntary conservation
11. Request state governors' support for ISO appeals for conservation

Ways to Monitor Power System Conditions

- ▶ Data portal: www.iso-ne.com/isoexpress
- ▶ Mobile app: iso-ne.com/isotogo
- ▶ Twitter: [@isonewengland](https://twitter.com/isonewengland)

Stay Connected with Us

Let us know if your responsibilities or contact information change, so we can reach the right person in an emergency.

- ▶ **Government Officials:** contact Gae Warman-Gold by phone: 413.535.4138 or email: gwarman-gold@iso-ne.com
- ▶ **NEPOOL Corp. Communications:** contact Rebecca Johnson by phone: 413.535.4309 or email: rjohnson@iso-ne.com