2023 Energy Emergency Alert Overview

ERCOT keeps additional supply, called operating reserves, available to respond in a short time frame when needed. When reserves on the system get low, ERCOT begins emergency operations using three levels of Energy Emergency Alerts (EEAs).

Entering emergency operations does not mean that ERCOT will call for controlled power outages. Entering emergency operations allows ERCOT to start using additional tools and power reserves only available during emergency conditions to protect the reliability of the grid.

EEA levels and actions

LEVEL ONE
If operating reserves drop below 2,300* MW and are not expected to recover within 30 minutes:

Bring all available generation online and release any undeployed reserves

Increase other generation supplies and use demand response to lower electric demand, including and additional, available:

Imports from neighboring electric grids: up to 1,220 MW

Switchable generation that can serve multiple electric grids: up to 542 MW

LEVEL TWO
If operating reserves drop below 1,750 MW and are not expected to recover within 30 minutes:

Request energy conservation from public (if not already in effect):
MW vary

Reduce power by deploying remaining demand response programs, including:

Deploy operating reserves carried by Load Resources (some large industrial customers who are paid to reduce their power): up to 1591 MW

Load management programs from transmission companies: 307 MW

Voltage reduction by transmission companies: 100-200 MW

LEVEL THREE
If operating reserves drop below 1,430 MW, ERCOT moves into level 3. If operating reserves drop below 1,000 MW and are not expected to recover within 30 minutes and/or the grid’s frequency level cannot be maintained at 60 Hz:

As a last resort, instruct transmission companies to reduce demand on the electric system; typically in the form of controlled outages

* One megawatt (MW) of power generation is enough to power about 200 Texas homes during peak demand.

Note: Some steps may occur simultaneously and do not include additional voluntary demand response programs, where electric service from other ERCOT business and residential customers is interrupted during emergencies.
**Controlled outages**

Controlled outages are electric service interruptions, in a magnitude ordered by ERCOT but implemented by local distribution companies, to quickly reduce electric demand and prevent an uncontrolled system-wide outage. They are used as a last resort to bring operating reserves back to a safe level and maintain system frequency. Each utility is responsible for deciding how to decrease demand in their area and are required to reduce demand based on their percentage of historic peak demand.

ERCOT has initiated controlled outages four times since the grid operator was established:

- December 22, 1989: 500 MW
- April 17, 2006: 1,000 MW
- February 2, 2011: 4,000 MW
- February 15-18, 2021: 20,000 MW

**Seasonal factors that may result in tight grid conditions during summer months**

Sustained high temperatures across major metropolitan areas and cities along with a combination of high generation outages and low wind or solar generation may result in tight operating conditions.