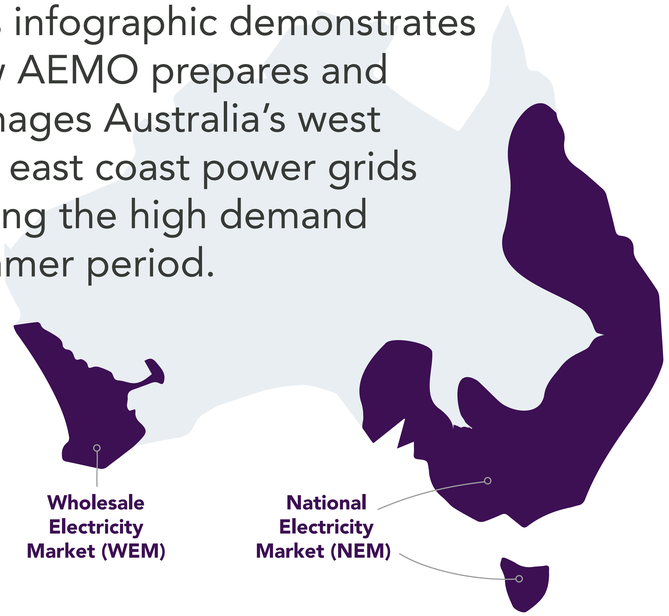
AEMO

## A SNAPSHOT OF

# AEMO summer operations

This infographic demonstrates how AEMO prepares and manages Australia's west and east coast power grids during the high demand summer period.




## Pre-summer

**JUNE**

### Commence summer planning

AEMO works with industry members and governments to align maintenance and schedules, helping maximise generation and network availability during summer.

**AUGUST**

### Publish the annual 10-year reliability outlook for the NEM and WEM

Known as the Electricity Statement of Opportunities (ESOO), these reports highlight supply gaps against regulated reliability targets, helping to inform planning and policy decisions to meet demand.

**SEPTEMBER - DECEMBER**

### Tender for electricity reserves, either through generation or demand management (reducing use), to meet supply shortfalls

In the NEM, these reserves are procured through the Reliability and Emergency Reserve Trader (RERT) and the Interim Reliability Reserves (IRR) mechanisms. While in the WEM, reserves are procured through the Supplementary Reserve Capacity (SRC) mechanism.

### AEMO conducts an industry-wide emergency exercise

## Summer

**DECEMBER**

### Issue Summer Readiness Overview

This report provides an indication of expected weather conditions and system readiness for the summer ahead, and details the plans and actions both AEMO and the industry have taken to prepare Australia's power systems.

### Monitor generation and network availability throughout summer and key risks

### Lack of Reserve (LOR) and controlled load shedding

AEMO plans extensively to secure adequate generation supply to meet demand throughout the year. However, the summer period remains the most challenging, with an increased risk of electricity shortfalls or 'LOR conditions'. Once a LOR is forecast, AEMO issues a notification to market for awareness (LOR 1) or to encourage generators to provide more electricity (LOR 2 and 3). An actual LOR is when the market response to the forecast LOR has not been adequate to clear the LOR thresholds, and the LOR becomes an operational reality. LORs are categorized over three tiers:

**LOR 1**

A notification that reserve levels are lower than the two largest supply resources in a state.

At this stage, there is no impact to power system security or reliability and AEMO continues to monitor reserve levels to maintain adequate supply.

**LOR 2**

Signals when reserve levels are lower than the single largest supply resource in a state, calling for a market response.

At this level, there is no impact to the power system, but supply could be disrupted if a large incident occurred. Once a forecast LOR 2 is declared, AEMO has the ability to direct generators or activate reserve mechanism to improve the supply-demand balance.

**LOR 3**

Signals a deficit in electricity supply resulting in a system security condition.

On a forecast LOR 3, load shedding may be required, while for an actual LOR 3, load shedding will be or is already activated.

**Controlled load shedding**

After AEMO has exhausted all intervention options, manual load shedding may be required as an absolute last resort to avert the risk of power system collapse or physical damage. AEMO will inform the regional transmission network service provider of how much load needs to be shed and when. The transmission network service provider will then work with distribution businesses to action this, including rotating outages if required.

## Post-summer

**APRIL**

### Incident report (if required)

AEMO will conduct an in-depth investigation of the events before, during and after controlled load shedding has occurred. This report will be published on the AEMO website, and the lessons learned will be incorporated into the next Summer Preparedness report.

## What impacts electricity supply levels in summer?

AEMO plans extensively to secure adequate generation supply for the summer period. However, unplanned events can impact our available resources.

**HIGH DEMAND**

High usage of air conditioners on hot days contribute to summer being the highest demand period for the year.

**EXTREME WEATHER**

Prolonged heatwaves, torrential rain, flash flooding, lightning and damaging winds.

**NATURAL DISASTERS**

Bushfires, hurricanes, tornadoes.

**REDUCED WEATHER-RELATED GENERATION**

Extensive cloud cover, dust storms, wind droughts, water droughts.

**CRITICAL EQUIPMENT MAINTENANCE**

Urgent maintenance that is required to keep equipment safe or operational.

**GENERATOR OUTAGES**

Unplanned outages due to an event or technical fault.

**TRANSMISSION OUTAGES**

Unplanned outages due to an event or technical fault.