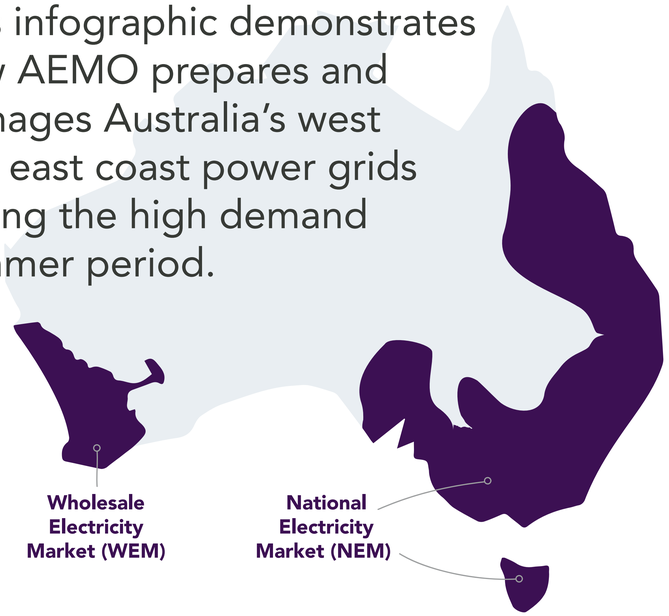
AEMO

## 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**

### Summer planning

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

**JUNE & AUGUST**

### Publish the annual 10-year investment opportunity reports for the WEM and NEM

Known as the Electricity Statement of Opportunities (ESOO), these reports highlight investment opportunities to meet forecast demand, helping to inform planning and policy decisions to meet demand.

**SEPTEMBER ONWARDS**

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

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

### AEMO starts pre-summer industry and government briefings

## Summer

**NOVEMBER - DECEMBER**

### Issue Summer Readiness Overview

This 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)**

AEMO plans extensively to secure adequate generation supply, including a constant reserve buffer, to meet demand throughout the year. However, the summer period remains the most challenging, with an increased risk of electricity shortfalls or 'LOR conditions'. LORs are categorised 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 (energy use) needs to be shed and when. The transmission network service provider will then work with distribution businesses to action this based on their schedules, including rotating outages if required.

## Post-summer

**APRIL**

### Incident report (if required)

AEMO will conduct in-depth investigations and publish reports into significant power system incidents. We also issue reporting when emergency reserves (RERT) are contracted and activated.

## What impacts electricity supply levels in summer?

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