



Lack of Reserve (LOR) notices

Globally, power systems are built and operated with an extra level of reserve energy – a ‘buffer’ – available to assist in meeting electricity demand in challenging conditions.

Pre-determined reserves in Australia’s power systems refer to the spare capacity to provide this buffer, over and above the level of electricity demand that is forecast at any given time.

A number of processes and arrangements are in place to mitigate risk of electricity shortfalls, also known as LOR conditions.

What causes LOR conditions?

A combination of planned and unplanned events can impact available resources, causing a depletion of electricity reserves:



Extreme weather events such as heatwaves, bushfires, floods, and storms



High demand



Generation and/or infrastructure outages, or critical infrastructure maintenance.

What’s the difference between actual and forecast LOR notices?

When there is a supply and demand imbalance, AEMO takes proactive steps to manage reserve shortfalls by issuing LOR notices to the market to encourage more generation.



A **forecast LOR** occurs when AEMO’s forecasts show a reduced amount of electricity reserves.



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 categorised over three tiers:



LOR 1

This condition exists when reserve levels are lower than the two largest supply resources in a state. LOR 1 signals a reduction in pre-determined electricity reserve levels, encouraging generators to offer more supply, or large industrial and commercial consumers to reduce their demand. 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 a tightening of electricity supply reserves. This condition exists when reserve levels are lower than the single largest supply resource in a state. 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 the RERT mechanism to improve the supply-demand balance.



LOR 3

Signals a deficit in the supply/demand balance. This condition exists when the available electricity supply is equal to or less than the operational demand. This means there are no reserve supplies available. Controlled load shedding may be required as a last resort to protect system security and prevent long-term damage to system infrastructure.

What happens if there is still not enough supply?

If market response to the LOR notices has not been adequate, AEMO will dispatch all available generation and may call on off-market supply reserves and demand management contracts, where available.

Reliability and Emergency Reserve Trader (RERT)

AEMO can also call on the **RERT** mechanism, giving AEMO access to market participant reserve generation and demand management contracts.

Wholesale Demand Response (WDR)

The WDR mechanism commenced in October 2021, enabling large commercial and industrial businesses to bid and schedule a reduction in electricity consumption for payment.