Why may load shedding be needed?

Preparing for the summer months, AEMO engages with market participants to secure reserve generation and demand management contracts that support AEMO in maintaining system security and reliability. This function is known as the Reliability and Emergency Reserve Trader (RERT) and is a mechanism available to AEMO to mitigate risk to energy supply during high demand conditions for the National Electricity Market (NEM).

Each year, AEMO's Electricity Statement of Opportunities (ESOO) report forecasts electricity supply reliability in the NEM over a 10-year period, including the upcoming summer. The report identifies the need for a combination of actions by market participants and policy makers across the NEM, including required RERT resource volumes for each state if there is a supply shortfall below the reliability standard.

While AEMO plans extensively to secure adequate generation supply for the summer period, unplanned events can impact available resources. This might include a combination of high demand, extreme weather, natural disasters, generation or transmission outages, or critical infrastructure maintenance.

When there is a supply and demand imbalance, AEMO takes proactive steps to manage forecast reserve shortfalls by issuing Lack of Reserve (LOR) notices to the industry. LOR notices encourage more generation and wholesale demand response to improve reserve margins and maintain power system reliability. AEMO has three levels of reserve notices, which are dependent on the conditions and available reserve levels.

If AEMO has issued LOR notices, but generation and wholesale demand response is still not sufficient to meet demand, AEMO will call on supply reserves and demand management contracts through the RERT mechanism as an "emergency backstop" to meet the reliability standard. This means participants are contracted by AEMO to either use less energy or generate power from their own generators.

Short and medium notice RERT are reserves that are contracted to manage unexpected risks in the power system, such as an unanticipated outage at a major generator.

Short notice RERT is contracted with less than a week's notice, while medium-notice RERT can be contracted in certain circumstances from 1 to 10 weeks in advance.

What is the Interim Reliability Reserve?

The "interim reliability reserve" replaces long term RERT. It is a new out-of-market capacity reserve agreed by the COAG Energy Council in March 2020 to improve the reliability of the power system. Where it is cost effective, AEMO can procure reserves for up to three years to address an enduring reliability shortfall identified in the supply forecast (ESOO).

What is the Interim Reliability Measure?

Unserved energy (USE) or load shedding results when there is insufficient supply to meet demand. The reliability standard sets the level of USE that is acceptable at 0.002% of regional demand over a financial year. From 2020 to 2025 a tighter standard of 0.0006% called the interim reliability measure has been introduced. This is used to trigger the RRO and sets the threshold where AEMO can procure interim reliability reserves.