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2026-27

Summer outlook

Industry briefing slides

18 November 2026



AEMO

AUSTRALIAN ENERGY MARKET OPERATOR

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Agenda

Time	Item
2:00 pm	Welcome **Sam Lloyd**, Manager – Stakeholder Engagement
2:05 pm	Summer outlook **Michael Gatt**, EGM – Operations
2:10 pm	Climate outlook **Pieter Claassen**, The Bureau of Meteorology
2:20 pm	Challenges and readiness **Teresa Smit**, GM – Operations Resilience
2:40 pm	Q&A Facilitated by **Sam Lloyd**
2:55 pm	Next steps and close



We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country, and hope that our work can benefit both people and Country.

AEMO is proud to have launched its Innovate Reconciliation Action Plan in June 2026. Pictured left and featuring on the cover of the Innovate RAP is Wiradjuri artist Lani Balzan's 'Journey of unity: AEMO's Reconciliation Path', a visual representation of our ongoing journey towards reconciliation – a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

Read our RAP

Disclaimer

This document is generally based on information available to AEMO as of 7 October 2026 unless otherwise indicated. This document or the content in it may be subsequently updated or otherwise changed.

AEMO has made reasonable efforts to ensure the quality of information but cannot guarantee its accuracy or completeness.

The relevant provisions of the National Electricity Rules and AEMO's intervention settlement timetable prevail in the case of any inconsistency.

This document does not constitute legal, business or technical advice. Participants should obtain independent expert advice.

How to interact today



Ask a question

- Use the Q&A feature to submit your question or comment at any time during the briefing.
- Questions will be addressed during the Q&A session.



After the briefing

- Please take a moment to complete our post-event survey.
- Your feedback helps us improve future sessions.

Post-event survey

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Executive summary

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Summer outlook

Summer 2026-27 is expected to bring warmer conditions, increased heatwave risk and changing demand patterns driven by rooftop solar and the growing influence of battery storage.

Together with generation outages and asset availability challenges, these factors will shape the key operational risks for the season ahead.



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Summer outlook

Comparison to an average summer season

Likely to be less challenging

Similar or unchanged

Likely to be more challenging

Unusually warm / dry

El Niño is firmly established and is expected to persist into autumn 2027. Warm conditions are forecast across Australia throughout summer, with warmer-than-average nights expected across Australia. Warmer-than-average daytime temperatures are also very likely across Australia, except for parts of north-west WA. Below-average rainfall is forecasted across large parts of northern WA, NT, TAS and QLD.

Tropical cyclones / thunderstorms

El Niño years will typically see fewer cyclones and reduced risk of thunderstorms, however conditions depend on interactions with other climate drivers and location. The BOM will provide further details on expected conditions this summer.

Bushfire risk

Climate drivers indicate very dry conditions across the south and along the Queensland coast through spring and into summer. Combined with the higher temperatures in the south and most of the eastern coast, this will result in a higher-than-normal fire risk. AFAC's Spring Bushfire Outlook predicts a heightened risk of fire across northern and southeastern NSW, south-east Queensland, northeastern Tasmania, parts of WA, SA and Victoria, and large parts of the NT. High temperatures and increased bushfire risk means that unplanned network outages may be more likely. AEMO is engaging with TNSPs to understand their readiness and risks.

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Summer outlook

Comparison to an average summer season

Likely to be less challenging

Similar or unchanged

Likely to be more challenging

Minimum / maximum demands

Summer heatwaves have the potential to drive new record maximum demands in both NEM and WEM. Heatwaves in QLD and NSW may be both longer and more intense, while in the south, hot spells may be more intense, but generally shorter duration (less built-up heat fatigue, which also is a driver for demand).

While Minimum System Load (MSL) conditions are more likely to occur during spring months, they could still arise during summer months particularly during public holidays and weekends.

Generation and storage availability

Synchronous generation availability is expected to be similar to an average summer availability across most NEM regions and the WEM. Planned maintenance in November results in lower availability, particularly in NSW and Queensland.

There is additional BESS capacity available across all NEM regions (except for Tasmania) and the WEM. Extreme heat can result in the derating of transmission and generation assets, reducing their available capacity during periods of high demand. Dry conditions may impact some hydro generation availability and requires monitoring. AEMO is engaging with Generators ahead of summer to understand their readiness and risks.

Network outages and risks

Outage plans are still being finalised. The volume of planned High Impact Outages (HIOs) is forecast to be similar to the recent average summer across the NEM and WEM. AEMO and TNSPs have reviewed the summer outage guidelines.

In addition, AEMO is engaging with TNSPs to understand their summer preparations and potential risks. AusNet and VicGrid are taking action to mitigate the risk of Keilor transformer overloads, if significantly high demand occurs. This includes the development of new control schemes and entering into contracts with generators to guarantee availability over summer.

Summer outlook

Comparison to an average summer season

Likely to be less challenging

Similar or unchanged

Likely to be more challenging

Reliability

Loss of Load Probability (LOLP) is comparable to an average summer season. When considering extreme demands, combined with low VRE and unplanned events, there are few days with high LOLP in Victoria and South Australia during January. LOLP is low in all other NEM regions. This does not account for RERT or other emergency interventions to support reliability outcomes (refer to LOLP forecast graphs).

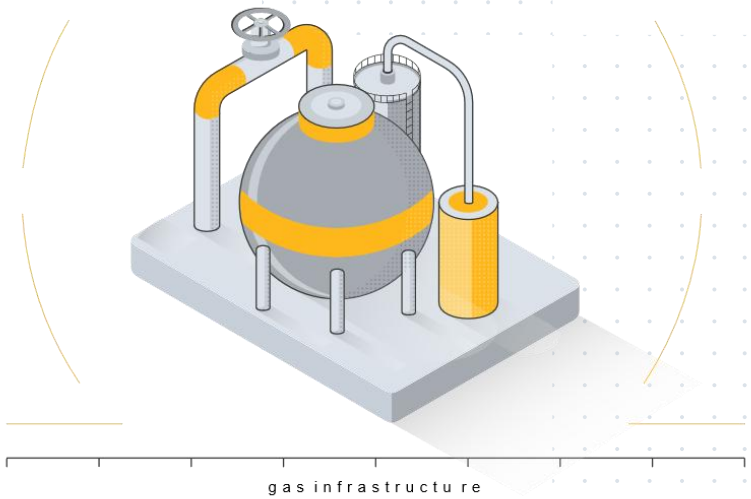
WEM supply demand balance risks are also heightened in summer months during extreme heat events, typical of the season, while the addition of new BESS facilities reduces the risk of reliability challenges, this may be offset by the extreme conditions expected.

Fuel supply

Coal stockpile levels and liquid fuels are at normal levels in the NEM and WEM. Gas storage levels remain within their typical seasonal range and are expected to build further over summer, improving availability to support higher gas-fired generation requirements. Reduced maintenance activity is forecast during summer relative to spring, supporting higher southern production availability and facilitating Iona storage refilling. In the WEM there is an adequate gas supply for the season. The Middle East conflict has the potential to impact fuel supplies and AEMO is continuing to actively monitor and assess fuel supply impacts. Industrial action at Premier Coal in Collie could disrupt coal production and supply to coal-fired generators in Western Australia. AEMO will also continue to advise state and Commonwealth governments on gas supply.

Health of markets

Prudential risks and coal / gas price risks are being monitored.



Note: [1] This does not account for RERT or other emergency interventions to support reliability outcomes.

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Climate outlook

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Key challenges

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What matters most this season?

Key challenges



1. Severe weather

Extreme heat, bushfires, storms and other severe weather events may impact critical energy infrastructure and network capability

2. Extreme heat & demand impacts

Prolonged heatwaves may drive demand to extreme levels while reducing asset capability, placing pressure on reserves and system reliability

3. Maintaining reliable supply

Reliability risks are concentrated in extreme weather, outage and contingency scenarios.

4. Managing a changing power system

A changing resource mix creates new operating challenges, including managing periods of both high and low demand while maintaining reserves.

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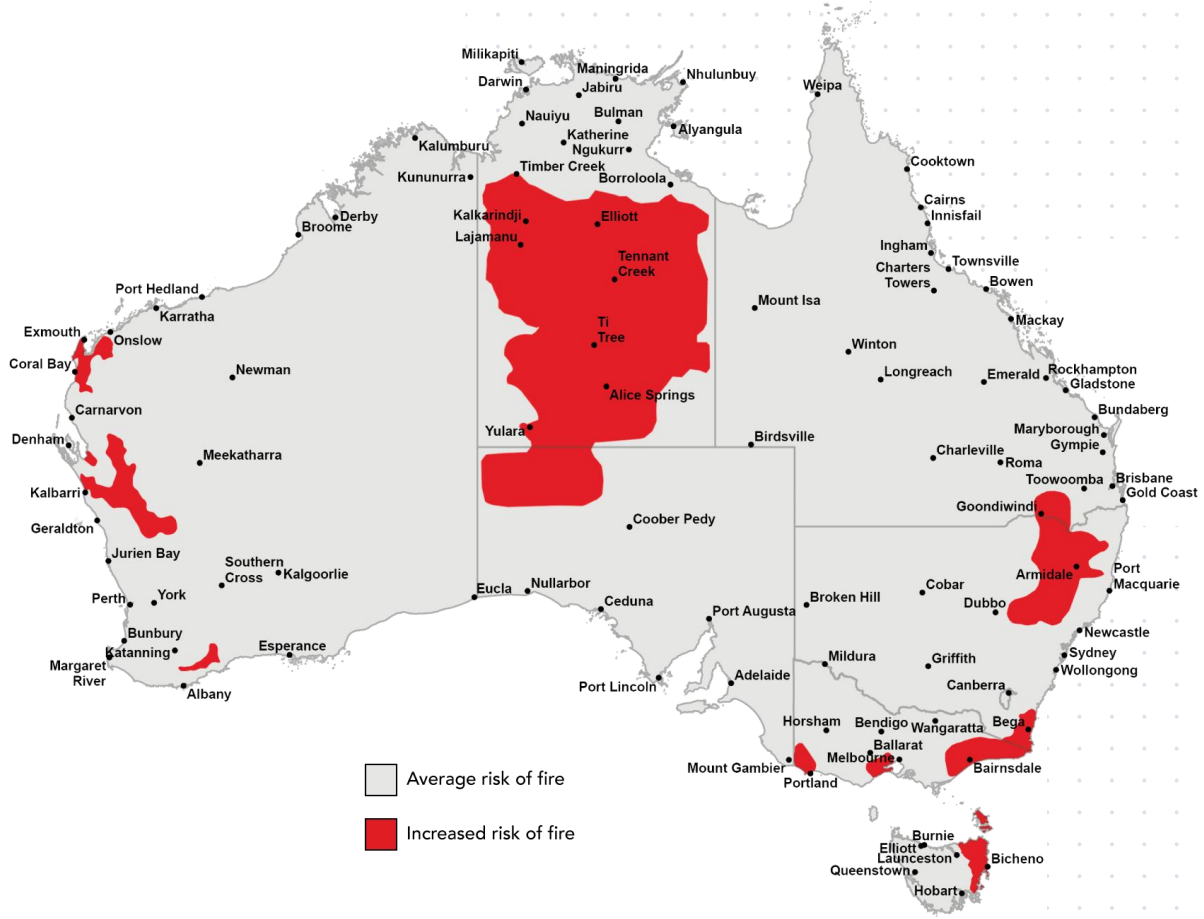
Challenge 1
Severe weather
Key challenges

Outlook

- El Niño conditions are expected to persist through summer, bringing warmer and drier conditions across parts of Australia and increasing bushfire risk.
- Both maximum and minimum temperatures are likely to be above average throughout summer, with unusually hot days and nights forecast across many regions, increasing the likelihood of prolonged heatwaves and periods of elevated electricity demand.
- Elevated bushfire and weather risks may affect generation, transmission and fuel supply infrastructure, increasing operational challenges.
- Maintaining network resilience and contingency planning remains a key summer preparedness priority during high-impact weather events.

Seasonal bushfire outlook: spring 2026



Note: Map courtesy of the Australasian Fire Authorities Council (AFAC)

Challenge 2

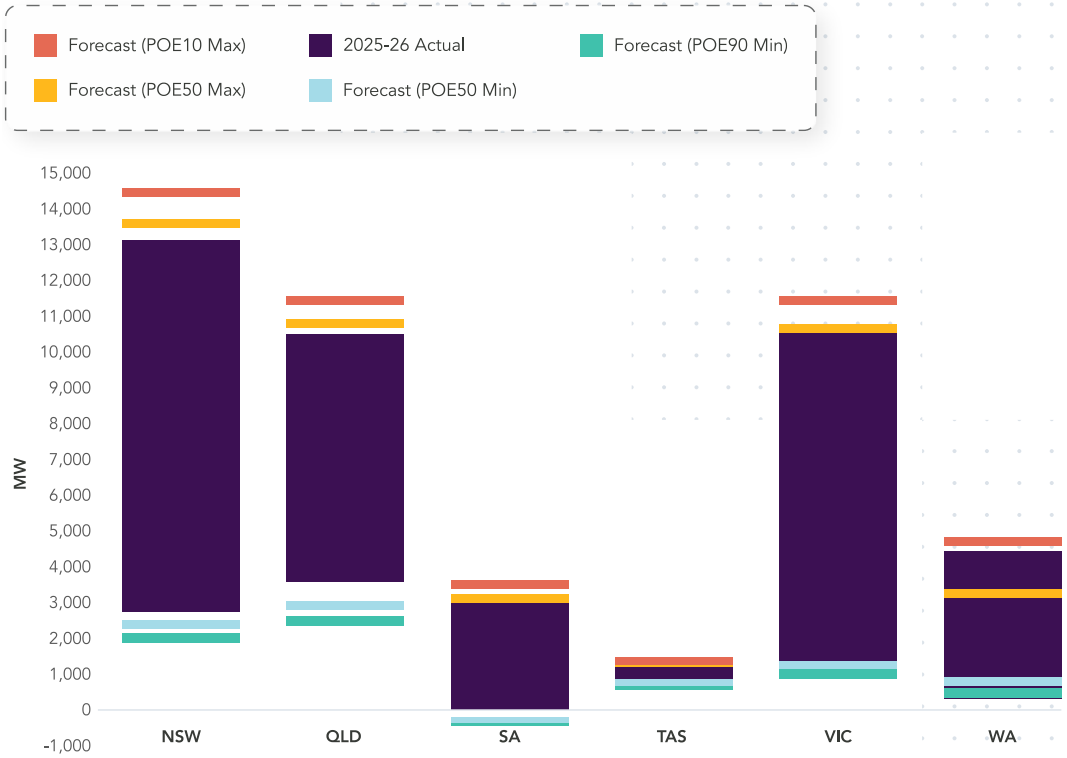
Extreme heat & demand impacts

Key challenges

Outlook

- Extreme heat may increase demand and place pressure on reserves, particularly when multiple regions experience concurrent peak demand events.
- In QLD and NSW, heatwaves may be both longer and more intense, while in the south, hot spells may be more intense, but generally shorter duration.
- Based on recent underlying demand growth, heatwaves may drive maximum operational demand towards record maximum levels.
- Extreme heat can result in the derating of transmission and generation assets, including transmission lines, DC links and generating units, reducing their available capacity during periods of high demand.
- The combination of elevated demand, reduced asset capability and network constraints may increase reliability risks and the potential for low reserve conditions.

Operational demand forecast v actual



Notes:
NEM actual values are as-generated, WA actual values are of 5-minute average Unscheduled Operational Demand (UOD) (as defined in the WEM) that is NOT as-generated.
WA "Forecast" values are of instantaneous UOD sourced from latest approved MTPASA 30min time-series. Note, the POE thresholds used in the current WEM.
MTPASA process is POE0.6(max) and POE90(min) instead of POE10 (max) and POE90 (min) as stated in the graph.

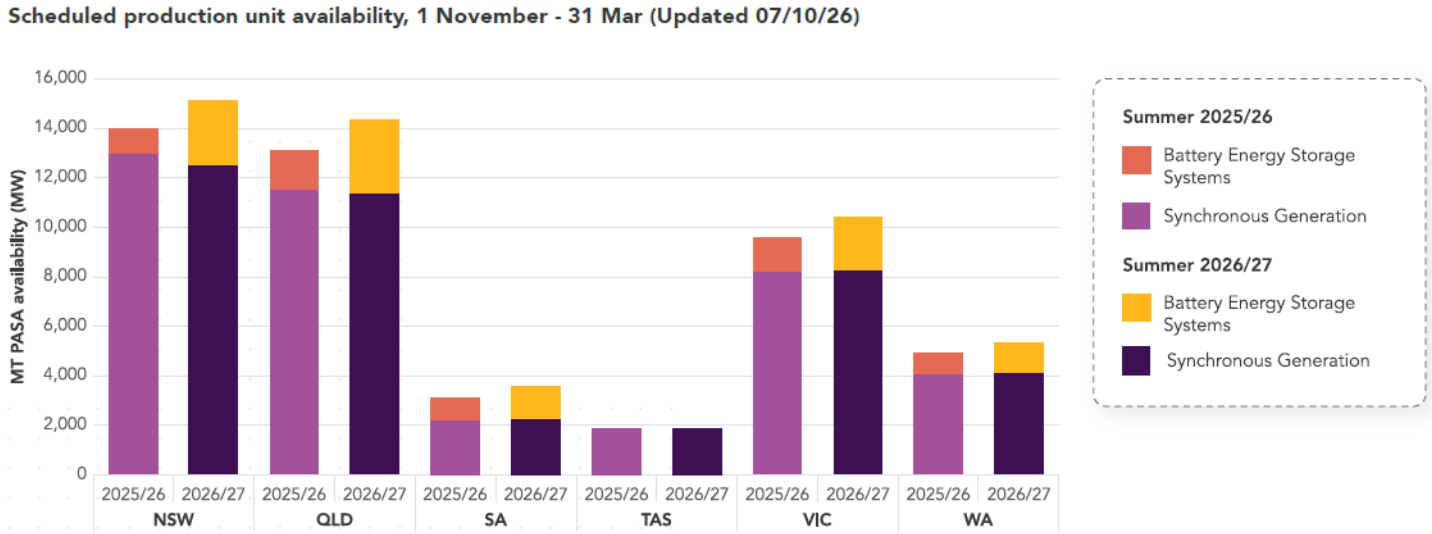
Challenge 3

Maintaining reliable supply

Key challenges

Outlook

- Maintaining reliable supply becomes challenging during severe weather, outage and contingency scenarios that can simultaneously increase demand and reduce available supply.
- Generation availability is expected to be broadly consistent with an average summer in most NEM regions. NSW and Queensland are expected to have a reduction in November due to increased planned maintenance.
- There is additional BESS capacity available across all NEM regions (except for Tasmania) and the WEM, providing additional operational flexibility.



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Challenge 3 (cont.)

Maintaining reliable supply

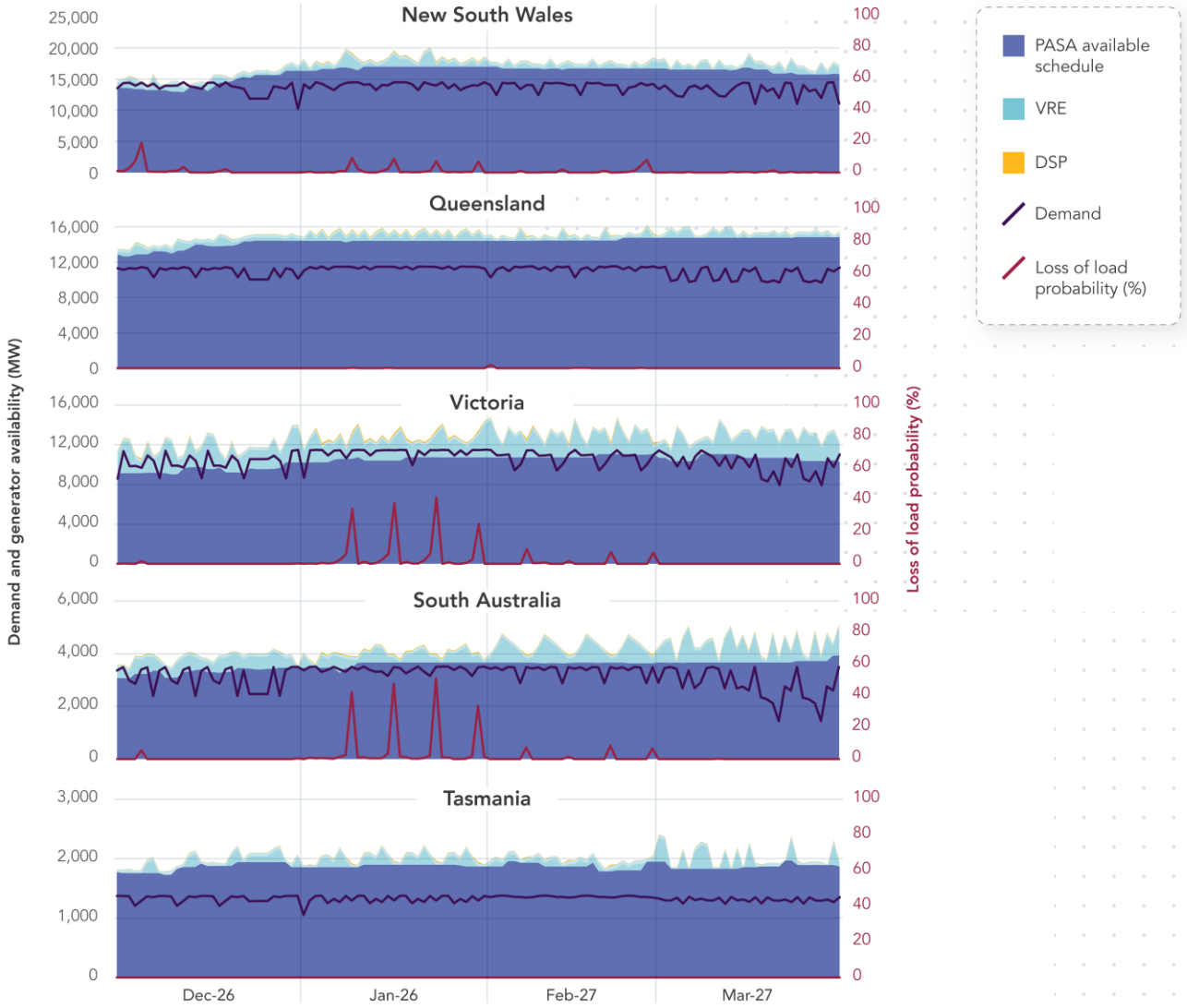
NEM

- Reliability assessments indicate sufficient supply is available under most forecast conditions, with risks concentrated in extreme weather and outage scenarios.
- AEMO's LOLP study highlights a period of high LOLP in Victoria and South Australia under specific reduced reliability scenarios.

Methodology

The LOLP assessment uses probabilistic modelling of historical high-demand and low-VRE scenarios, whilst incorporating random unplanned outages and planned outages captured in MT PASA, to identify potential reliability risks under challenging circumstances.

LOLP (red line) represents the probability of demand exceeding available supply during the highest-risk 30-minute period of each day. The metric does not account for RERT or other potential emergency interventions to which AEMO has access to support reliability outcomes in such circumstances.



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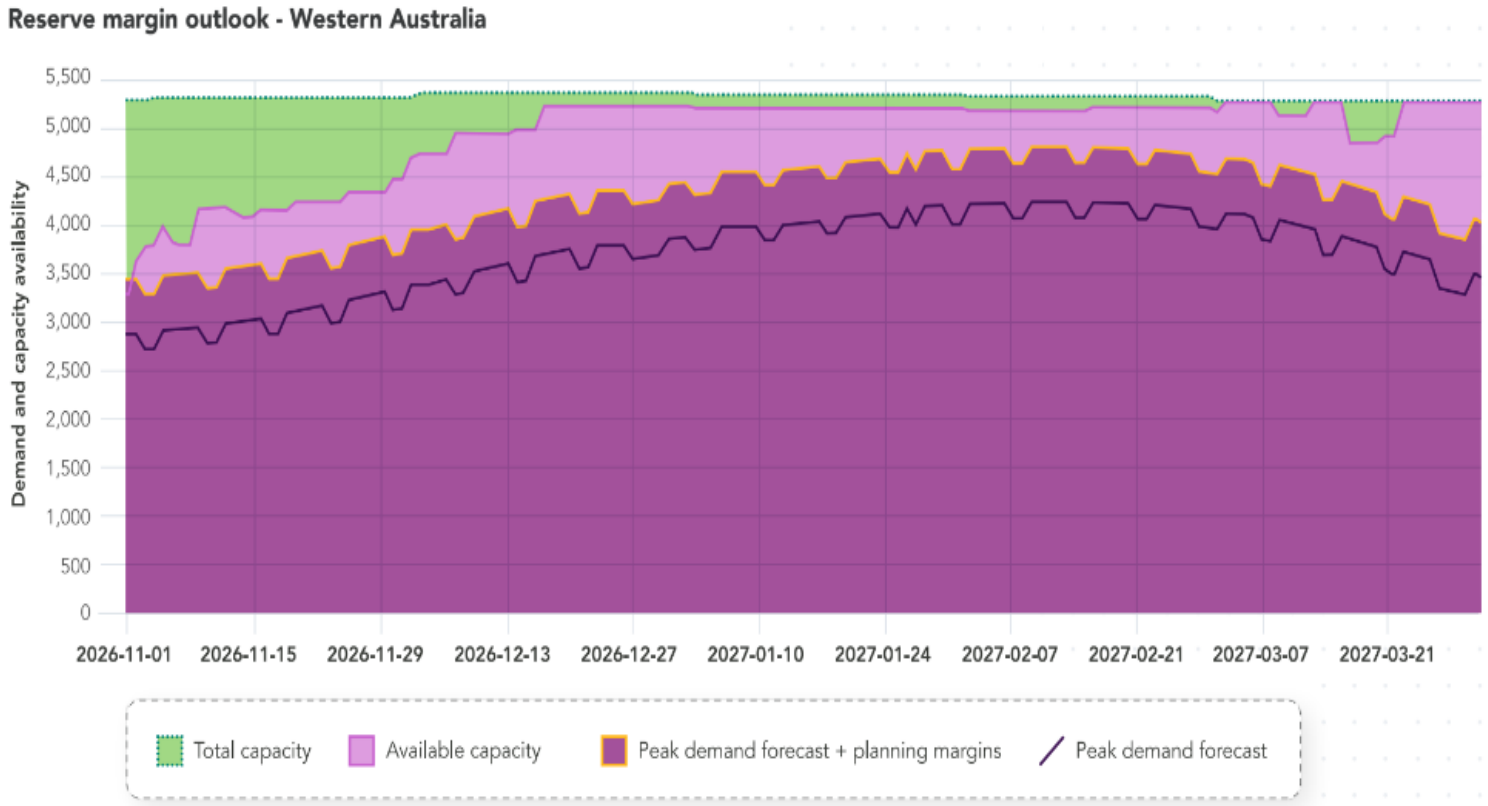
Challenge 3 (cont.)

Maintaining reliable supply

WA

- MT PASA forecasts sufficient capacity is projected to remain sufficient, although January and February present a higher period of risk due to tighter margins.
- Additional reserve and demand response services have been secured to support reliability during extreme demand and contingency events.



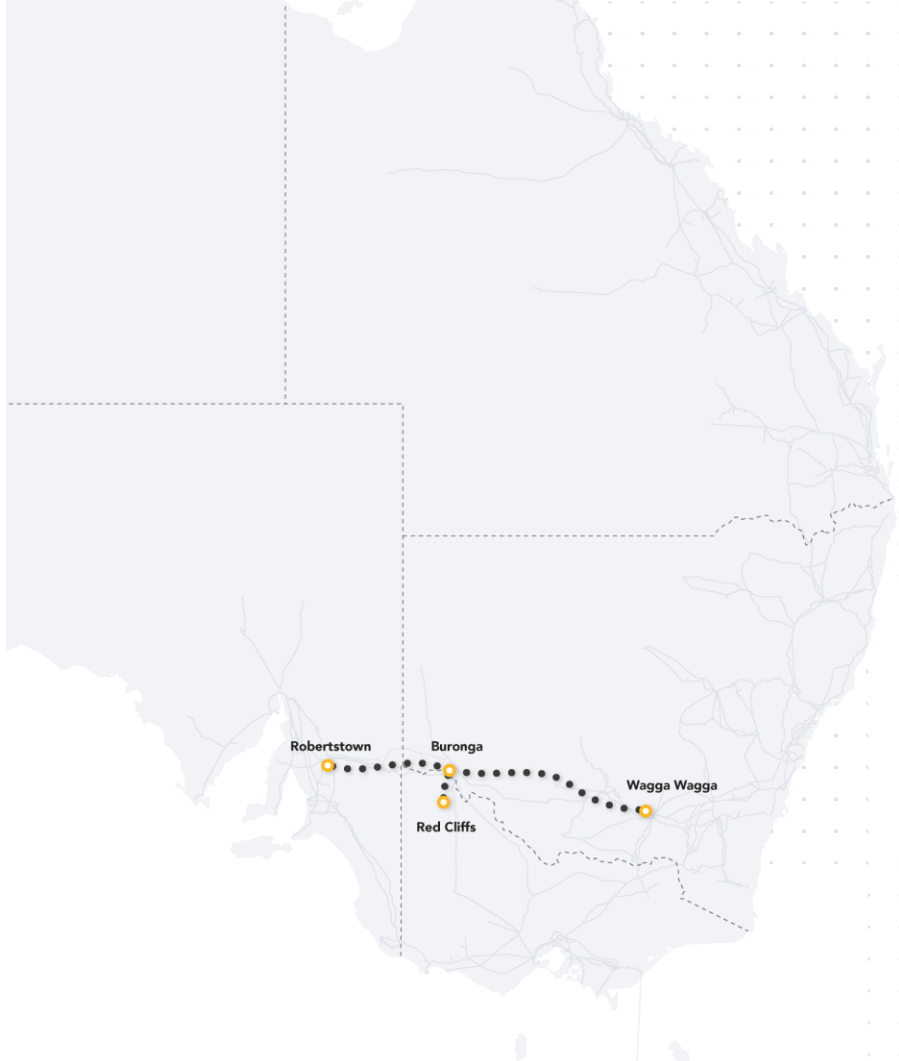
Challenge 4

A changing power system

Key challenges

Outlook

- Growing rooftop solar generation reduces daytime demand to levels that challenge secure system operation across Australia. This increases the risk of Minimum System Load (MSL) conditions occurring during summer weekends and public holidays in the NEM. The risk of Minimum Demand Threshold (MDT) events in the WEM has decreased with the installation of BESS.
- Managing ageing thermal generation fleets with forced outages and deratings potentially reducing available capacity.
- Delays to network augmentation projects may limit capacity and flexibility during summer peak demand periods.
- Greater reliance on Variable Renewable Energy (VRE) and inverter-based resources continues to change system operating conditions, increasing the need for firming capacity and active operational management during peak demand periods.



- Early operation of Project EnergyConnect (PEC) adds complexity to NEM operations creating potential for previously unobserved dispatch and market outcomes.

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How AEMO and the sector have prepared

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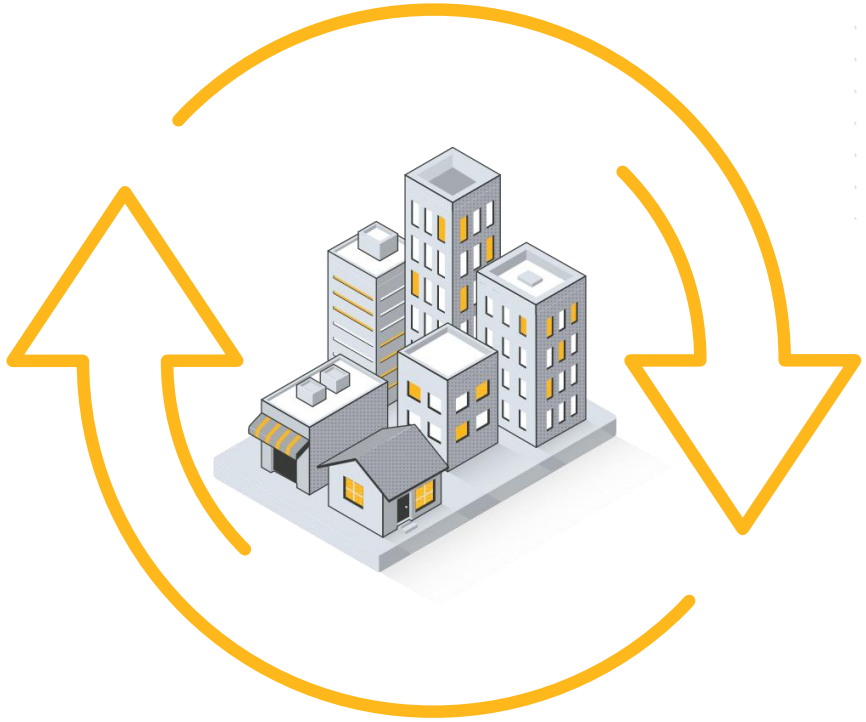
How AEMO manages emerging risks

Preparing for summer

1. **Monitor** weather conditions, demand forecasts, generation availability, gas supply and emerging system security risks



2. **Assess** reliability, resource adequacy and prudential risks under a range of summer operating scenarios

3. **Coordinate** outage planning, reserve arrangements and contingency preparedness with industry and government stakeholders

4. **Inform** stakeholders through seasonal outlooks, risk assessments, operational updates and weekly briefings

5. **Implement** operational, reserve and emergency response measures to maintain reliability and system security when required

How AEMO and the sector have prepared

Preparedness Activities



Training

AEMO dedicated summer readiness training including response to bushfires. Assurance of training of NSPs in relevant bushfire management procedures.

Online training for Responsible Officers, Jurisdictional System Security Coordinators and Jurisdictional Designated Officers provided.

Internal Crisis and Emergency Management training provided.



Planning

Risks identified by TNSPs and market participants through direct engagement are considered in the summer preparation activities.

Crisis and Emergency Management Framework, Crisis Management Plan and Emergency Management Plan updated.

Bushfire procedures and operational arrangements reviewed.



Exercises

The National Gas Emergency Response Advisory Committee (NGERAC) and National Energy Market Emergency Management Forum (NEMEMF) exercise on 21 & 22 October 2026

Joint committee meeting on 22 October 2026

During pre-summer planning, AEMO asks participants to identify potential issues so they can be factored into seasonal preparedness activities. We maintain regular engagement with participants to understand emerging concerns, align on priorities and to address seasonal challenges collaboratively.

Stakeholder Engagement



Engagement

Early and extensive engagement with governments supporting preparedness across the Australian energy landscape.

Pre-summer briefing conducted with stakeholders as part of the NEMEMF and NGERAC held on 22 October 2026.

Bushfire readiness with industry and governments.

Whole of industry
Annual Industry Summer Briefing held on 18 November 2026.
Summer Outlook and Readiness Briefing at WA Electricity Consultative Forum and with Energy Policy WA (Coordinator of Energy).

Ongoing engagement
Weekly operational updates with jurisdictions throughout summer to support sector-wide situational awareness.

Continued fortnightly meetings with industry, key stakeholders and ad hoc in response to system events.

Use of digital platforms, Media engagement.

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Bushfire Preparedness Activities

AEMO

Risk visibility
Incorporate BoM fire danger forecasts, active bushfires, and wind direction updates into daily operational meetings.

Contingency uplift
Review and prioritise high-risk transmission corridors, including reassessment of constraints following PEC S2 energisation.

Capability
Integrate additional bushfire preparedness activities into seasonal readiness.

Engagement
Strengthen engagement with NSPs, emergency services and government agencies

NSPs

Readiness assurance
Confirm completion of inspections, vegetation programs, and defect rectification activities ahead of summer.

Information sharing
Provide details on escalation processes, emergency services interfaces, and contingency plans associated with outages, testing, commissioning or upgrade projects.

Cross-NSP collaboration
Identify planning, monitoring, exercise and response practices across NSPs.

Improved visibility and tools
Identify situational awareness tools, including Indji, hotspot detection, and bushfire extent tools to strengthen forecasting and operational awareness.

Generators

Preparation assurance
Confirm preparedness of generating facilities, including maintenance status, workforce capability, training, response arrangements, and key contacts.

Operational data
Collect key information on derating curves, vulnerabilities and availability to support situational awareness.

Forecasting
Identify and communicate bushfire and smoke-related risks affecting nearby solar farms, through daily operations meeting.

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Questions and comments

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Next steps and upcoming engagement

Next steps

- AEMO will publish the recording and presentation on our website next week.
- Once the materials have been published, an email notification will be sent to all registered participants.
- Stay informed by subscribing to AEMO updates

Upcoming engagement opportunities

1 December 2026, Transition Plan for System Security (TPSS)

- Describes how AEMO plans to maintain power system security through the transition.
- Communicates current technical understanding of needs and services required.

8 December 2026, Draft 2027 Inputs, Assumptions & Scenarios Report (IASR)

- Key inputs to guide the development of the 2028 Integrated System Plan.

8 December 2026, Draft Demand-side Statement of Opportunities (DSOO)

- AEMO is partnering with DCCEEW to deliver the first DSOO; this report will outline and assess the potential contribution of demand-side opportunities available. A Draft report is scheduled for publication by the end of 2026.

2027 Plant Capability Review (PCR)

- Building on the 2025 Thermal Audit, the 2027 PCR will consider planned and potential changes, risks and opportunities associated with energy resources over a 2-year time-frame

2027 General Power System Risk Review (GPSRR)

- Integrated, annual review of major power system risks in the National Electricity Market (NEM)

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