2026-27

Summer outlook

AEMO seasonal readiness



AEMO

AUSTRALIAN ENERGY MARKET OPERATOR

Contents

04 Executive summary

05 Outlook at a glance

10 Climate outlook

26 How the sector has prepared?

29 What happens if risks emerge?

30 Stay informed

Connect with us:

AEMO on Air podcast:
Available on all major podcast platforms, including:



Acknowledgement of Country

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 (RAP) 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 at 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.

Copyright
© 2026 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the copyright permissions on AEMO's website.

Preparing for the season ahead

As Australia prepares for another summer, the Australian Energy Market Operator (AEMO) remains focused on its core responsibility: operating electricity and gas systems and markets securely and reliably in the long-term interests of consumers.

To achieve this, we need to work closely with industry and governments to navigate increasingly complex operating conditions and seasonal impacts on energy supply and demand.

Drawing on detailed weather forecasting, market assessments, operational planning and extensive engagement across the sector, the Summer Outlook outlines the analysis for the months ahead and the preparations underway across Australia's energy systems.

The outlook indicates that electricity and gas supplies are expected to remain sufficient under forecast conditions this summer.

However, the season is also expected to bring a range of challenges, with potential for network and generation outages with periods of extreme heat leading to elevated electricity demand and bushfire risk.

The continued growth of distributed energy resources and large-scale renewable generation and storage is creating new opportunities, while also requiring careful management of both peak operational demand and increasingly low daytime operational demand.

This challenge as it relates to distributed energy resources, is driven in part by the limited real-time visibility of residential batteries and electric vehicles, increasing the complexity of forecasting and operational planning.

Preparing for each season and its impact on energy systems and markets is a year-round effort focused on ensuring AEMO together with industry can continue to deliver reliable energy services for consumers through changing conditions.

AEMO works closely with generators, network businesses, gas producers, market participants, consumer representatives and governments to identify risks, coordinate outages, assess asset readiness and strengthen contingency arrangements.

These activities are supported by regular briefings, operational exercises and the exchange of industry and consumer insights, helping the sector prepare for the risks and challenges that may lie ahead.

Throughout summer, AEMO will continue to monitor conditions closely, communicate about any emerging risks, coordinate with government and industry stakeholders, and take operational actions to maintain system security and reliability.

Through collaboration, careful planning and operational vigilance, we are working together to support reliable energy supply for Australian homes, businesses and communities throughout summer 2026-27.



Michael Gatt
Executive General Manager, Operations

Preparing for each season and its impact on energy systems and markets is a year-round effort focused on ensuring AEMO together with industry can continue to deliver reliable energy services for consumers through changing conditions.

Executive summary

Electricity and gas supplies are expected to remain sufficient under forecast conditions for the 2026–27 summer period.

The summer outlook indicates warmer-than-average and drier conditions across large parts of Australia, increasing the risk of fire across northern and south-eastern New South Wales, south-east Queensland, north-eastern Tasmania, parts of Western Australia, South Australia and Victoria, and much of the Northern Territory.

These conditions are contributing to elevated bushfire risk across several critical transmission corridors, including the Heywood Interconnector, QNI, northern New South Wales, South-West Victoria and Gippsland.

The rainfall outlook also indicates an increased likelihood of below-average rainfall across large parts of northern Western Australia, the Northern Territory, Tasmania, and Queensland, increasing the potential for unusually dry conditions.

AEMO's Loss of Load Probability (LOLP) scenario-based assessment in the National Electricity Market (NEM) identifies periods of elevated risk in Victoria and South Australia during January 2027.

In the Wholesale Electricity Market (WEM), available generation is projected to remain sufficient; however January and February present elevated risk due to tighter operating margins.

Heatwaves have the potential to drive new record maximum demand levels in both the NEM and WEM, with Queensland and New South Wales forecast to experience longer and more intense heatwave conditions. Continued growth in rooftop solar generation is also expected to contribute to periods of low daytime operational demand.

Operational challenges may arise where extreme heat and high electricity demand coincide with low renewable generation, network or generation outages, or fuel supply disruptions. Severe weather events, including bushfires and grassfires, may also impact generation, transmission, and fuel supply infrastructure.

These conditions will shape the operational challenges that AEMO and industry are preparing to manage over summer. Preparations include coordinated outage planning, asset readiness assessments, operational training and preparedness activities, and the maintenance of contingency arrangements to respond to changing conditions.

AEMO has also engaged extensively with network operators on summer preparedness and contingency planning.

The summer outlook summarises the key weather, demand, supply, and market risks for the season ahead. Forecasts reflect information available at the time of publication and may change as the season approaches and conditions become clearer.



Outlook at a glance

Likely to be less challenging

Similar or unchanged

Likely to be more challenging

Comparison to an average summer season

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. For example, even while national storm risk is reduced, there is potential for enhanced heavy rainfall hazard with east coast severe storms.
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.
Minimum / maximum demands	!	Summer heatwaves have the potential to drive new record maximum demands in both NEM and WEM (refer to operational demand graph). 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.

Note: Summer is defined as the period from 1 November to 31 March. It should be noted that climate model accuracy improves closer to the start of the season. Information on scheduled generation availability and planned transmission outages are subject to change. Comparison to an "average" summer is based on the past three summer seasons. For gas supply/demand adequacy assessment "southern regions" or "southern demand" means New South Wales (and Australian Capital Territory), South Australia, Tasmania and Victoria gas system supply/demand.

Continued on the next page →

Comparison to an average summer season

Likely to be less challenging

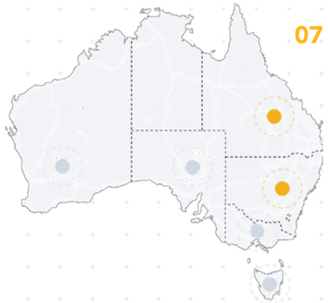
Similar or unchanged

Likely to be more challenging

Generation and storage availability	Likely to be less challenging	Synchronous generation availability is expected to be similar to an average summer availability across most NEM regions and the WEM. NSW and Queensland are expected to have a notable reduction in November due to increased planned maintenance (refer to regional generation availability forecasts and major outage schedules). 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	Likely to be more challenging	Outage plans are still being finalised (refer to the HIO details). 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 are reviewing 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.
Reliability	Similar or unchanged	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	Likely to be more challenging	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	Similar or unchanged	Prudential risks and coal / gas price risks are being monitored.

Outlook by region

QLD NSW VIC TAS SA WA



Queensland

Weather

Warmer days and nights are likely, with potentially longer and more intense heatwaves. Below-average rainfall is also more likely across northern Queensland and parts of the east coast, while higher than average rainfall is expected across southern areas, particularly over the southeast region.

Supply

LOLP is low in the assessment, but extreme heat, low renewable output and outages remain relevant. High-impact outage areas include Broadsound, Nebo, Strathmore and Ross. NSW-to-Queensland transfer capability may increase to 950 MW, subject to testing opportunities.

The northern gas assessment forecast indicates a supply surplus. Actual gas-fired generation use remains sensitive to weather, renewable output and electricity outages.

Key risks

- Heightened bushfire risk is identified in south-east Queensland and may impact QNI.
- Extreme heat may reduce generation output and network capability when demand is high. November maintenance increases the importance of availability monitoring.

New South Wales

Weather

Warmer days and nights are likely. Heatwaves may be longer and more intense. Above-average rainfall is more likely in northern NSW, while south-eastern NSW has a pronounced risk of unusually dry conditions.

Supply

High-impact outage areas include Armidale, Tamworth, Canberra, Marulan, Murray, Tumut and Wagga.

Project EnergyConnect Stage 2 was energised in early November, increasing NSW-to-SA capability from 150 MW to 350 MW, subject to testing. Queensland-to-NSW transfer capability will continue at 1,400 MW while waiting for testing opportunities.

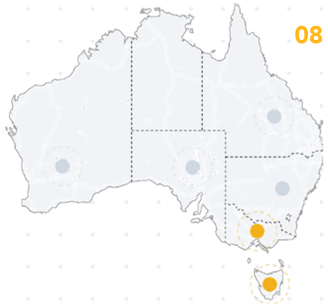
The southern regions gas outlook forecast indicates sufficient supply. Reduced summer maintenance supports production and Iona refilling from December; no material pipeline maintenance is forecast.

Key risks

- Heightened bushfire risk in northern and south-eastern NSW may affect transmission, generation and fuel infrastructure.
- Extreme heat can derate generation and transmission. Planned and unplanned outages may reduce reserves and transfer capability.

Outlook by region

QLD NSW VIC TAS SA WA



Victoria

Weather

Warmer days and nights are likely. Southern hot spells may be more intense but generally shorter than those in NSW and Queensland. Parts of Victoria have a pronounced risk of unusually dry conditions. Intense but short hot periods may drive high demand. Low daytime demand remains possible during weekends and public holidays.

Supply

Generation availability is broadly comparable with recent summers, with additional battery capacity. The LOLP identifies higher-risk January days under extreme demand, low renewable output and outage combinations. High-impact outage areas include Koorangie, Red Cliffs, Wemen, Moorabool, Sydenham, South Morang, Hazelwood and Keilor. Heywood transfer capability is expected to increase from 600 MW to 650 MW in both directions, subject to testing opportunities.

The southern regions gas outlook forecasts sufficient supply. Reduced summer maintenance supports production and Iona refilling from December; no material pipeline maintenance is forecast. This is a regional assessment, not a separate state supply guarantee.

Key risks

- Heightened bushfire risk is identified in parts of Victoria, with potential impacts on generation, transmission and fuel infrastructure. Critical transmission elements such as the Heywood Interconnector and the South West 500 kV corridor are forecast to have increased bushfire risk.
- Increased bushfire risks are also forecast in Gippsland, approaching the Latrobe Valley.
- Keilor transformers may overload during significantly high demand. AusNet and VicGrid are developing control schemes and considering network support agreements to guarantee availability over summer.

Tasmania

Weather

Warmer days and nights are likely; eastern Tasmania has an increased likelihood of unusually high maximum and minimum temperatures. Below-average rainfall is more likely across large parts of Tasmania, with a pronounced risk of unusually dry conditions across most of the state.

Supply

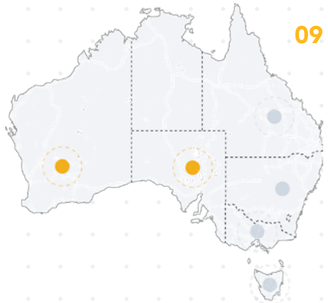
Planned hydro outages include Cethana, Mackintosh and Reece 1; Tungatinah remains on an unplanned outage across the assessment period. Dry conditions may affect hydro availability. There is no additional battery capacity for Tasmania. High-impact outage areas include George Town and Comalco.

Key risks

- Heightened bushfire risk is identified in north-eastern Tasmania. This is not expected to significantly impact major transmission, generation or fuel infrastructure but will require monitoring due to proximity to Basslink and Musselroe Wind Farm.
- Dry conditions may reduce hydro availability. Planned and unplanned hydro outages and network outages require continued monitoring.

Outlook by region

QLD NSW VIC TAS SA WA



South Australia

Weather

Warmer days and nights are likely. Hot periods may be intense but generally shorter. Above-average rainfall is more likely in western and southern SA. Parts of SA also have a pronounced risk of unusually dry conditions over the earlier November-January outlook period.

Supply

Generation availability is broadly comparable with recent summers and additional battery capacity is available. Higher-risk January days arise in scenarios combining extreme demand, low renewable output and outages. High-impact outage areas include Tailem Bend and Tungkillo. Project EnergyConnect Stage 2 was energised in early November, increasing NSW-to-SA capability from 150 MW to 350 MW. Heywood capability is expected to increase from 600 MW to 650 MW in both directions. Both depend on testing.

Key risks

- Heightened bushfire risk is identified in parts of SA, with potential impacts on network and fuel infrastructure. Increased risk related to the Victorian section of the Heywood Interconnector will also impact South Australia.
- The Project EnergyConnect introduces new operational considerations.
- Heat-related derating, low renewable output and depleted storage can reduce reserves.

Western Australia

Weather

Warmer days and nights are likely across most of WA, with parts of north-west WA an exception to the daytime outlook. Below-average rainfall and unusually dry conditions are more likely in northern WA. Above-average rainfall is more likely across large parts of central and southern WA.

Supply

More than 1 GW of transmission-connected storage improves flexibility and reduces minimum-demand-threshold (MDT) risk, while changing operational demand patterns. Generation availability is forecast to remain above peak demand and planning-margin requirements. Margins are tightest in January and February; concurrent Bluewaters, Alinta Wagerup and Alinta Pinjarra outages reduce March reserves. High-impact outage areas include the Eastern Goldfields and ongoing Clean Energy Link-North works. Outage plans remain subject to change.

Gas production and storage capacity are forecast to remain adequate. Storage inventories are reported at about 29 PJ.

Key risks

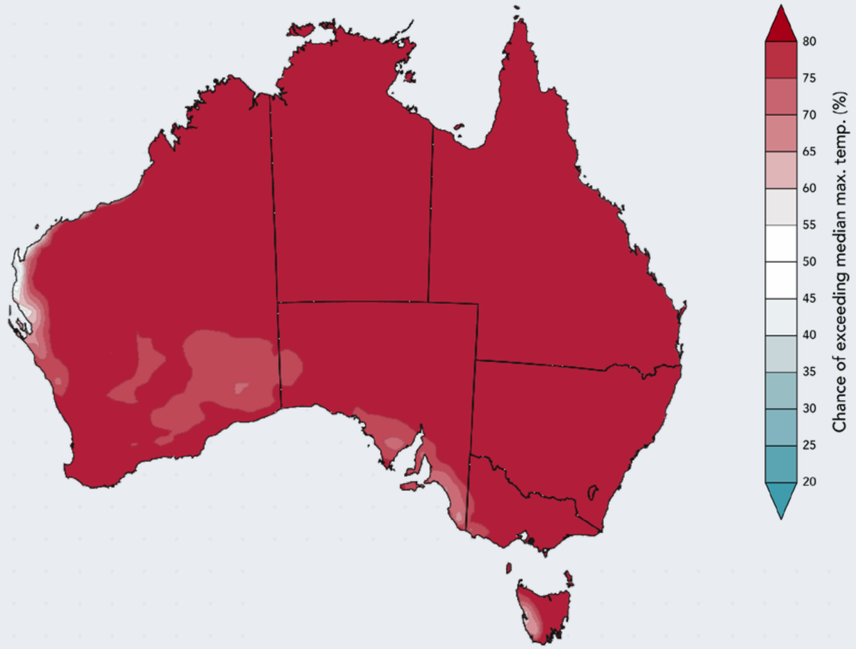
- Heightened bushfire risk is identified in parts of WA.
- Extreme heat may reduce generation and network capability. Concurrent March outages and changing storage-driven demand patterns require monitoring.
- Industrial action at Premier Coal could disrupt supply to coal-fired generators.
- Gas supply disruptions remain a risk despite adequate forecast capacity; storage inventories have declined from about 52 PJ in January 2022 to about 29 PJ.

Climate outlook

Median maximum temperatures outlook (Dec 2026 - Feb 2027):

Chance of exceeding the median maximum temperature

Warmer than average days are very likely across most of the country except over parts of northwest WA.



Median minimum temperatures outlook (Dec 2026 - Feb 2027):

Chance of exceeding the median minimum temperature

Warmer than average nights are very likely across most of the country.



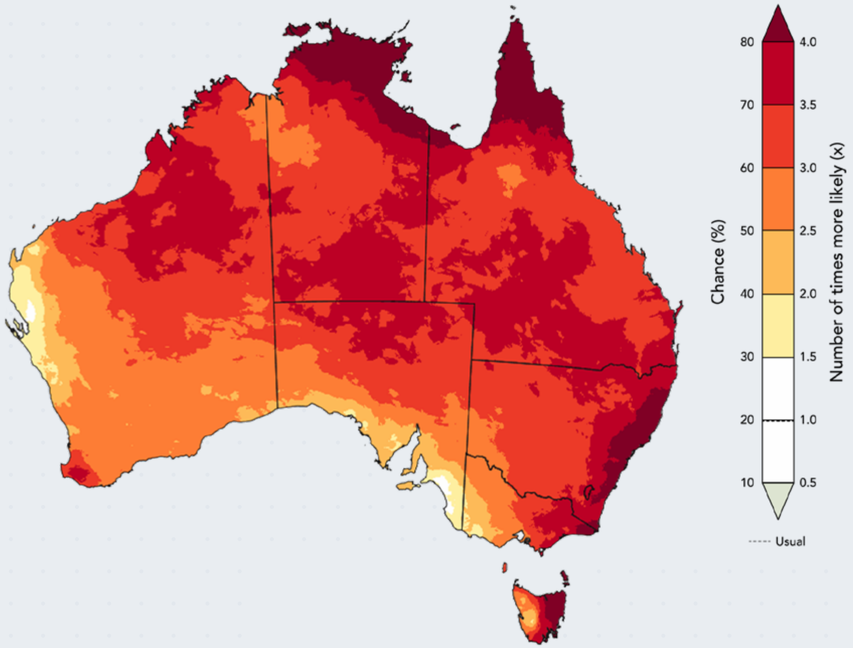
*Images provided by Australian Government Bureau of Meteorology

Climate outlook

High maximum temperatures outlook (Dec 2026 - Feb 2027):

Chance of unusually high maximum - amongst the hottest 20% of seasons for this time of year

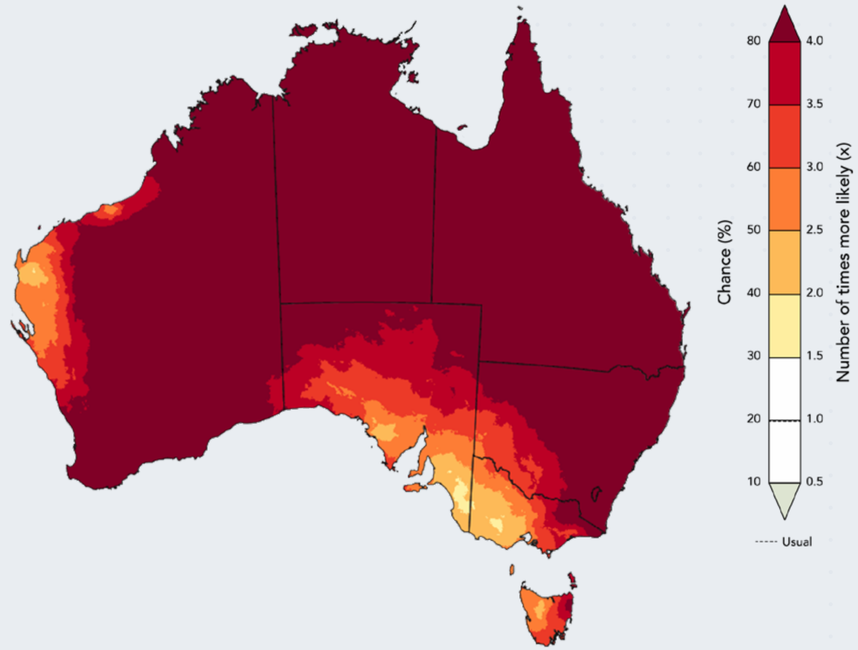
Increased likelihood (3.0 to 4.0 times more likely) of unusually high maximum temperatures across much of WA, the NT, NSW, QLD, SA, VIC and eastern TAS.



High minimum temperatures outlook (Dec 2026 - Feb 2027):

Chance of unusually high minimum - amongst the hottest 20% of seasons for this time of year

Increased likelihood (3.0 to 4.0 times more likely) of unusually high minimum temperatures across the NT, QLD, NSW, WA, eastern VIC and eastern TAS.



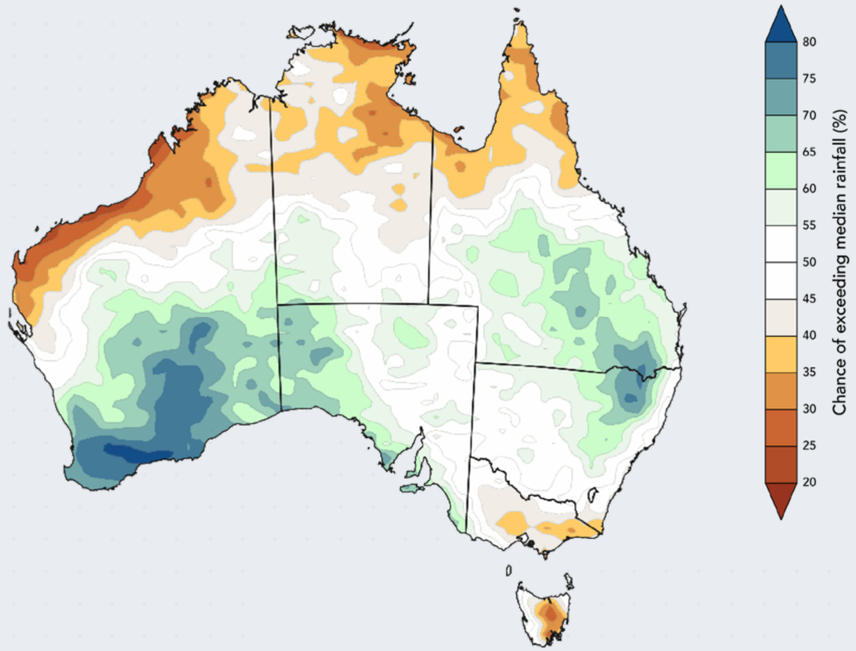
*Images provided by Australian Government Bureau of Meteorology

Climate outlook

Median rainfall outlook (Dec 2026 - Feb 2027):

Chance of exceeding the median rainfall

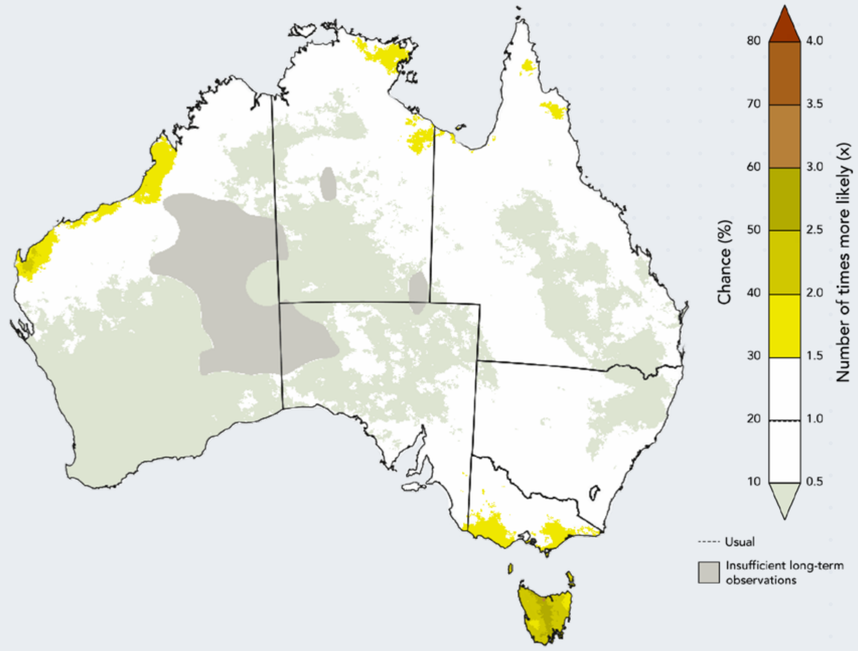
High chance of below average rainfall across large parts of northern WA, NT, TAS and QLD. High chance of above average rainfall across southern QLD and northern NSW, as well as large parts of central and southern WA and western and southern SA.



Low rainfall outlook (Nov 2026 - Jan 2027):

Chance of unusually low rainfall - amongst the driest 20% of seasons for this time of year

Climate models are showing a pronounced risk of unusually dry conditions over northern WA, most of Tas and parts of SA, VIC and southeastern NSW.



*Images provided by Australian Government Bureau of Meteorology

Top challenges for summer

What matters most this season?



1 Severe weather

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

2 Extreme heat and 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.

1. Severe weather

Why it matters

Severe weather conditions can materially affect power system operations. El Niño conditions are expected to persist through summer, bringing warmer and drier conditions across parts of Australia. Australasian Fire and Emergency Service Authorities Council Limited (AFAC) Spring Bushfire Outlook provides the latest assessment of bushfire conditions at the time of publication.

It identifies a heightened risk of fire across northern and southeastern New South Wales, south-east Queensland, northeastern Tasmania, parts of Western Australia, South Australia and Victoria, and large parts of the Northern Territory.

Heatwaves may drive elevated electricity demand (see 2. Extreme heat and demand impacts), while hot, dry conditions increase the risk of bushfire-related impacts on generation, transmission and fuel supply infrastructure. Transmission outages may constrain access to generation and reduce transfer capability, particularly where key transmission corridors are affected, increasing operational challenges during periods of high demand.

What could happen

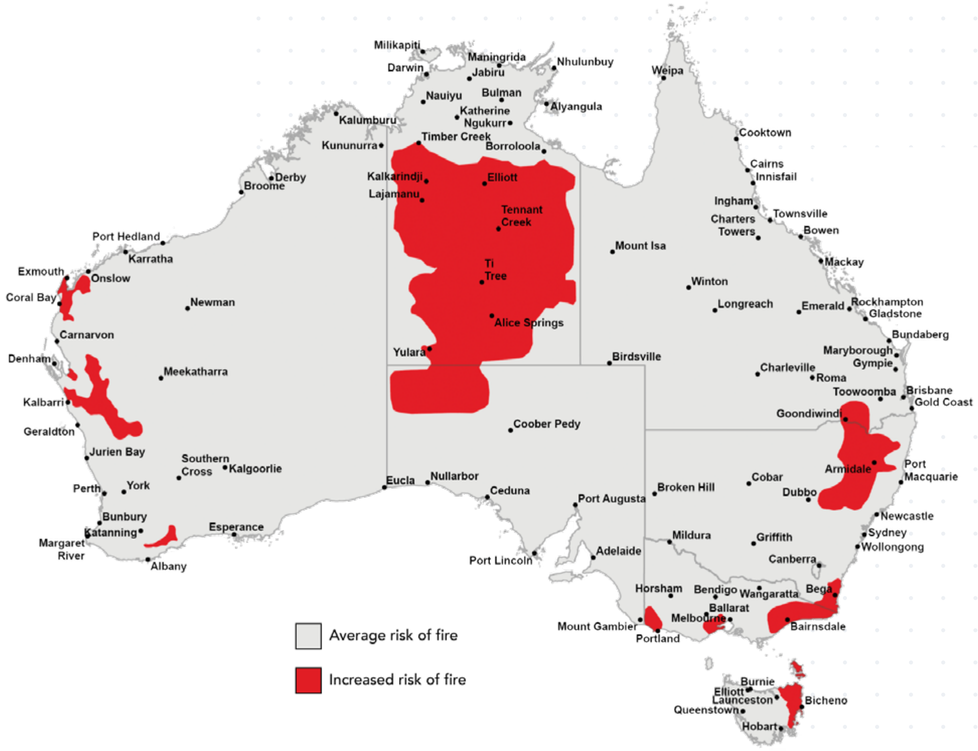
Depending on location and severity, a weather event or bushfires could cause unplanned network or generation outages, reduce transfer capability, or interrupt fuel supplies. These impacts could reduce available reserves and increase operational risks.

How the sector is preparing

AEMO is engaging with Transmission Network Service Providers (TNSPs) to understand summer readiness, local risks, and contingency arrangements, and is reviewing planned high-impact outages.

AEMO is working with NEM TNSPs to finalise the Guideline for Transmission Network Outage Planning Summer 2026-27 and outage plans are being finalised. TNSPs' vegetation management, asset inspection and fire mitigation programs remain important measures to reduce bushfire-related risks.

Seasonal bushfire outlook: spring 2026



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

2. Extreme heat and demand impacts

Why it matters:

1. Severe weather highlights the risk of extreme heat during summer and El Niño conditions contributing to an increased likelihood of above-average temperatures. Prolonged or concurrent heatwaves may significantly increase electricity demand while reducing the output or transfer capability of some generation and transmission assets, placing pressure on available reserves. In extreme conditions, AEMO may need to intervene to maintain power system security and reliability.

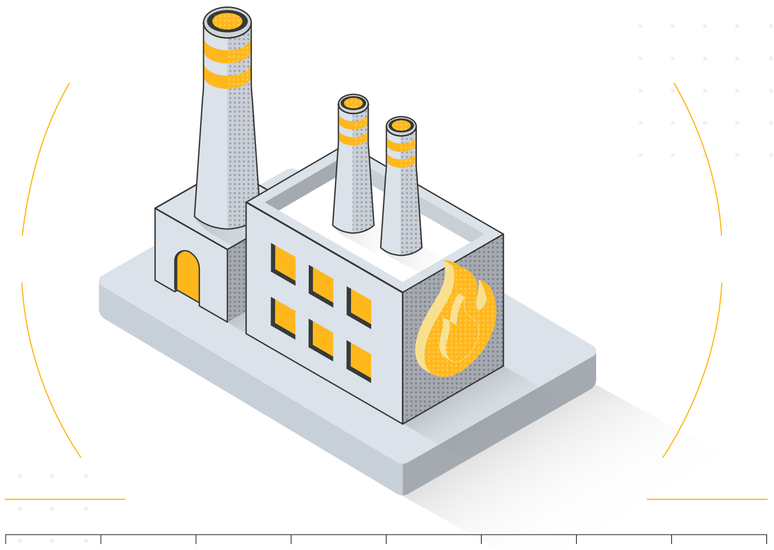
What could happen:

In QLD and NSW, heatwaves may be both longer and intense, while hot spells may be more intense and shorter duration in southern regions. Periods of high demand may approach peak levels, increasing the likelihood of low reserve conditions if high demand coincides with reduced availability of generation, significant planned/unplanned outages, and/or constraints on the network.

Extreme heat may 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 risk is heightened when variable renewable generation is low and storage is depleted. The operational response and impacts depend on the location, timing and duration of these conditions.

How the sector is preparing

AEMO is monitoring demand and generation availability forecasts, engaging generators on summer readiness, reviewing planned transmission outages with TNSPs, and maintaining reserve and emergency response arrangements. Forecasts and availability information will continue to be updated as conditions evolve.

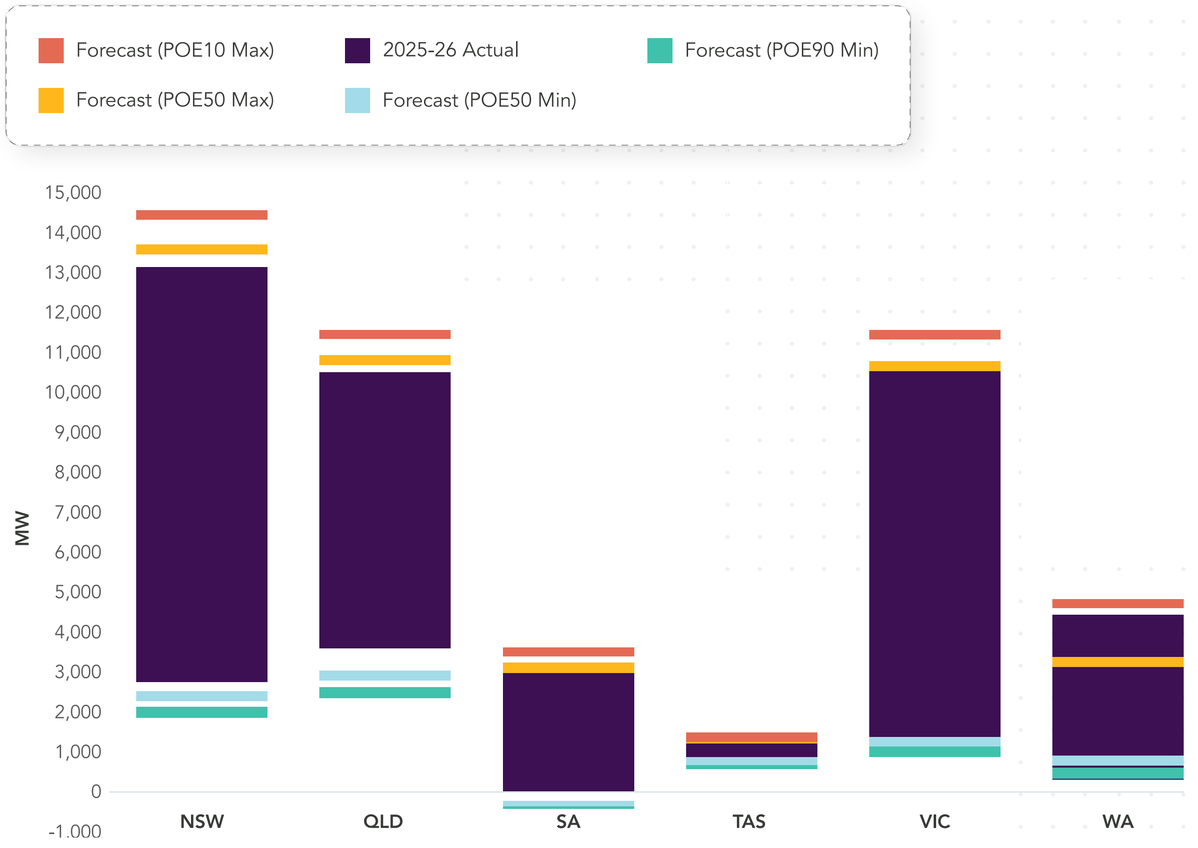


Operational demand

- Above-average summer temperatures and El Niño conditions may increase the likelihood of demand approaching 10% Probability of Exceedance (POE) maximum levels in the NEM, while heatwaves may drive high demand across the NEM and WEM.
- High demand with low VRE output, planned generation or network outages may increase the risk of Lack of Reserve (LOR) events.
- Minimum System Load (MSL) risks may arise under certain outage conditions in NEM regions.
- Addition of more than 1 GW of transmission-connected Electric Storage Resources (ESR) will provide greater operational flexibility with supply-demand balancing and reduces the risk of Minimum Demand Threshold (MDT) events in the WEM.

Region	Record maximum demand (MW)	Record minimum demand (MW)
NEM	**35,796** (29/01/09)	**9,422** (24/09/26)
NSW	**14,744** (01/02/11)	**2,718** (16/02/25)
QLD	**11,170** (22/01/25)	**2,741** (20/09/26)
SA	**3,399** (31/01/11)	**-263** (25/12/25)
VIC	**10,736** (27/01/26)	**1,287** (27/12/25)
TAS	**1,790** (21/07/08)	**678** (02/11/25)
WA	**4,484** (20/01/25)	**348** (04/10/26)

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.

WEM MTPASA process is POE0.6 (max) instead of POE10 (max) as stated in the graph legend.

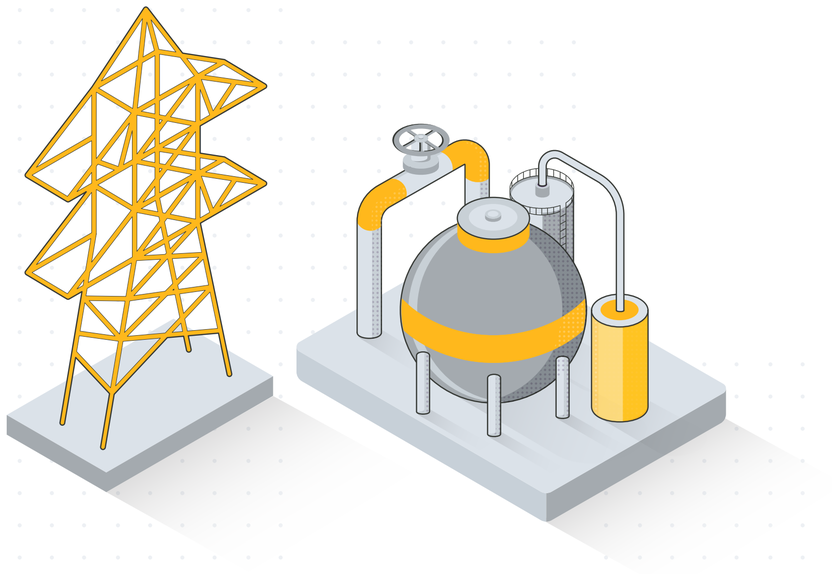
3. Maintaining reliable electricity and gas supply

Electricity

Synchronous generation availability is expected to be similar to recent summers across most NEM regions, while additional Battery Energy Storage Systems (BESS) facilities provide greater operational flexibility. AEMO's Loss of Load Probability (LOLP)[1] study highlights a period of time with high LOLP in Victoria and South Australia during January 2027 where demand may exceed available supply under specific reduced reliability scenarios.

In the WEM, the September 2026 PASA forecasts, generation is projected to remain sufficient, although January and February present a higher period of risk due to tighter margins.

While the addition of new BESS facilities reduces the risk of reliability challenges, this may be offset by the extreme conditions expected.



Gas and other fuel

Forecast gas production indicates sufficient supply to meet summer demand, with an aggregate surplus of approximately 55 PJ before storage refilling and 43 PJ after. Gas storage inventories remain within their typical seasonal range (see NEM gas supply-demand balance).

Demand for gas-fired generation could increase if weather conditions, renewable generation output or electricity system outages differ from forecast assumptions. Coal stockpile levels and liquid fuels are at normal levels across Australia. In Western Australia, production and storage capacity are forecast to remain sufficient, although disruptions to gas supply remain a risk (see WA gas outlook).

How the sector is preparing

AEMO continues to monitor generation availability, gas supply and storage levels, engage with asset owners and assess reserve requirements. Reserve and emergency response arrangements are in place, including access to short-notice reserve contracts (SN-RERT[3] and NCESS[4]) in both the NEM and WEM.

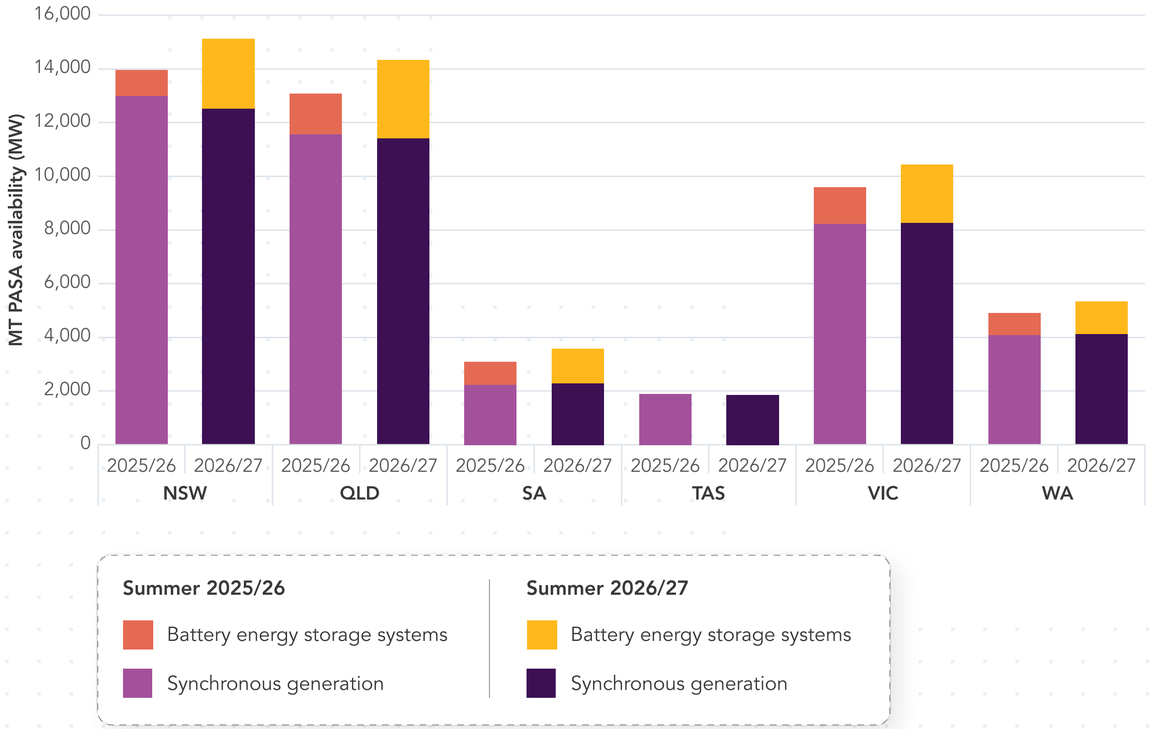
Notes:

1. LOLP assessment uses probabilistic modelling to determine the probability of demand exceeding available supply during the highest-risk 30-minute period of each day, whilst incorporating planned and unplanned outages modelled in the Medium Term Projected Assessment of System Adequacy (MT PASA) system, to identify potential reliability risks under challenging circumstances. The metric does not account for RERT or other potential emergency interventions to which AEMO has access to support reliability outcomes.
2. Short Notice Reliability and Emergency Reserve Trader (SN-RERT). AEMO | Reliability and Emergency Reserve Trader (RERT)
3. Non-Co-optimised Essential System Services (NCESS). AEMO | Essential System Services

Generation and storage availability

Synchronous generation availability is expected to be similar to average summer availability across most NEM regions. NSW and Queensland are expected to have a reduction in November due to increased planned maintenance. Additional BESS capacity is available across all NEM regions except Tasmania. Additional generation and storage capacity is expected in the WEM.

Scheduled production unit availability, 1 November - 31 Mar (Updated 07/10/26)



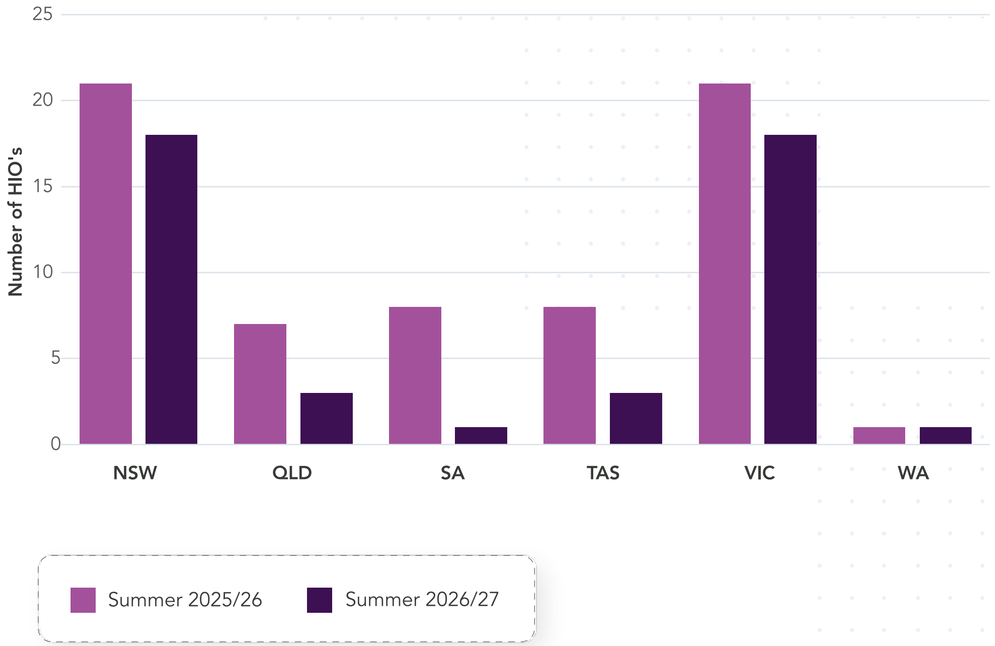
Source: Source: MTPASA Run (NEM) on 11/10, analysis includes planned production unit outages.

High impact outages and augmentations

The volume of High Impact Outages (HIOs) is forecast to be similar to the recent average summer across the NEM and WEM (as of 7 October 2026).

(Note: Outage plans are still being finalised by TNSPs).

High Impact Outages (HIO) 01 November - 31 Mar (Updated 7/10/26)



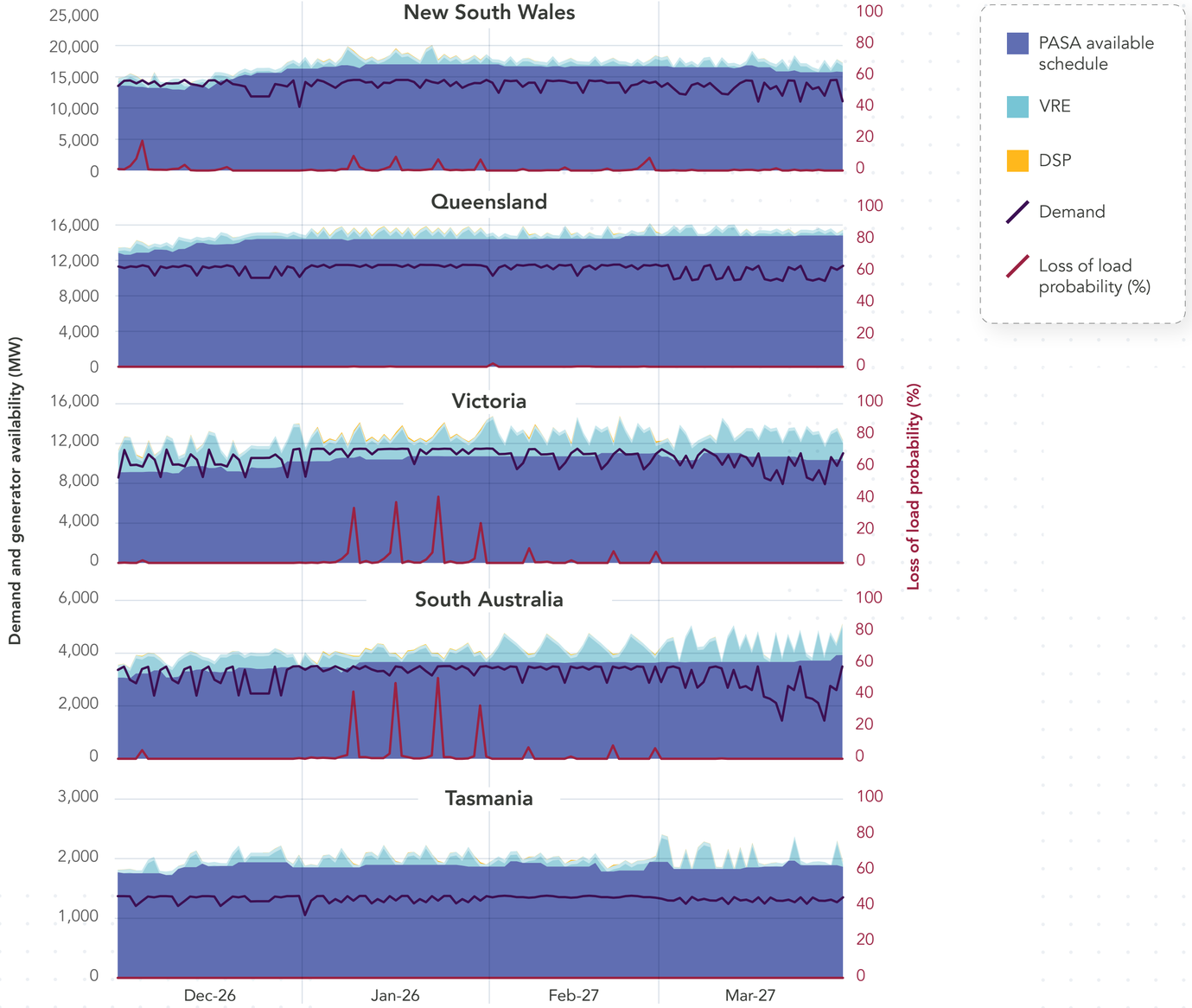
Loss of load probability study

LOLP is forecast to remain low across all regions this summer, with only a few high LOLP days in Victoria and South Australia during January 2027 (20-40%).

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.



Note: MTPASA run 1196 (3 November 2026). Period displayed: December 2026 to March 2027.

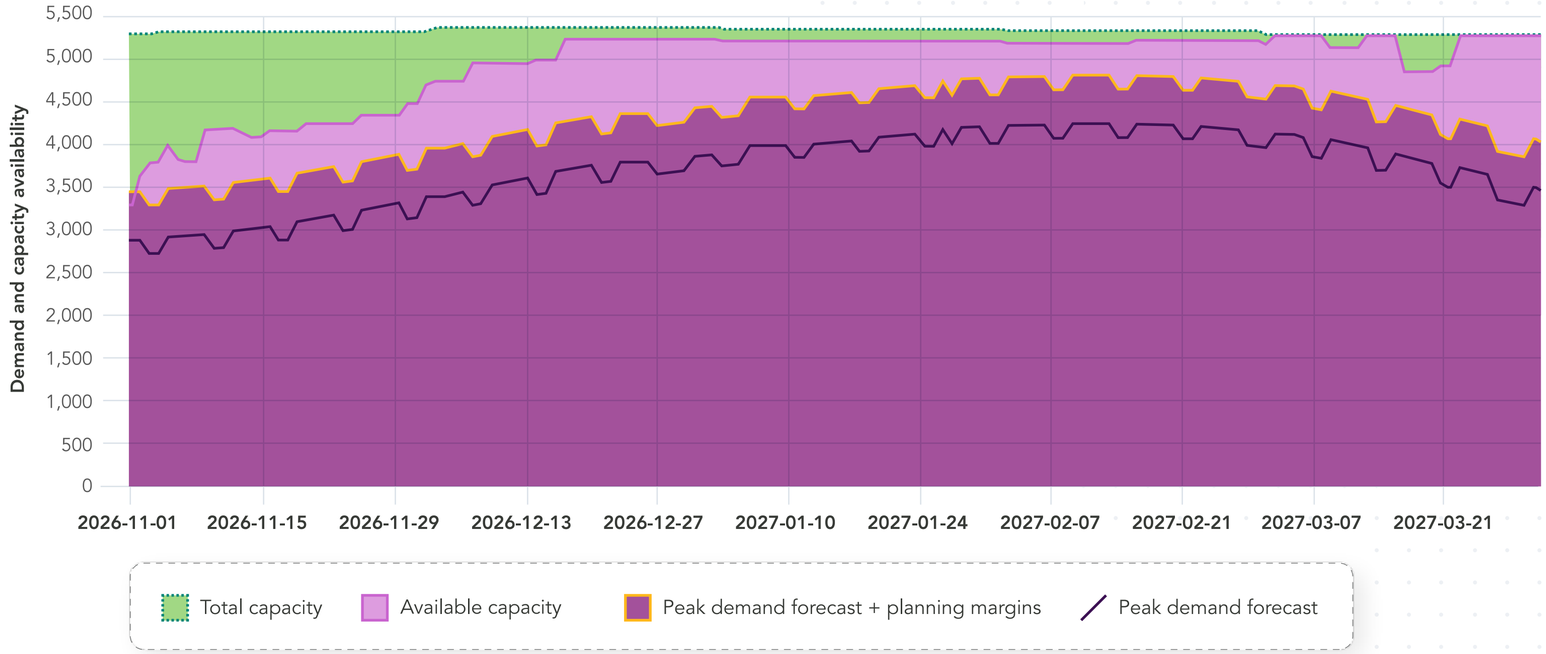
Electricity

Operational outlook (WEM)

Capacity availability is forecast to remain sufficient throughout Summer, with the tightest conditions forecast during January to March.

- Available capacity is forecast to remain above peak demand and planning margin requirements, with the smallest margin occurring during January and February.
- Lower reserve levels are forecast in March due to concurrent routine generator outages of Bluewaters PS, Alinta Wagerup PS and Alinta Pinjarra PS.

Reserve margin outlook - Western Australia



Planning margin = largest supply contingency + 70% of second largest supply contingency.

Note: MTPASA Run 28 October 2026. The capacity from Merredin ESR 1, which is expected to commission during this period, is not included in the total capacity and Reserve calculation.

MT PASA reserve margin outlook provides a forward three-year assessment of available capacity against forecast peak demand and reserve requirements. Potential LOR conditions are identified where available capacity falls below forecast demand plus reserves, enabling AEMO to implement measures including outage recall. Available capacity excludes solar, DSP and contractual services, with wind and battery contributions adjusted to reflect operational variability.

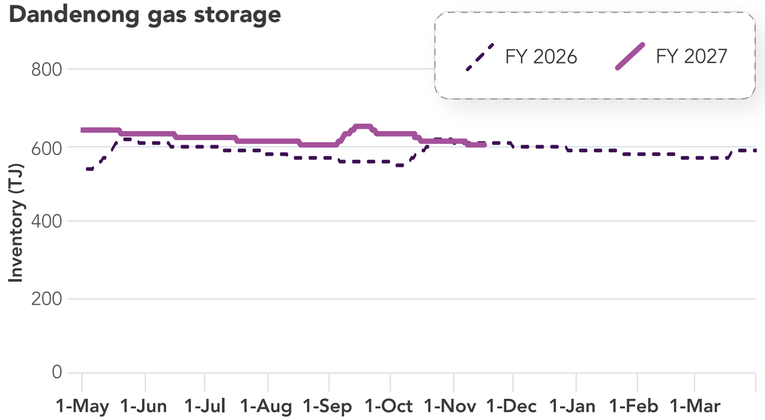
Gas

Storage inventory

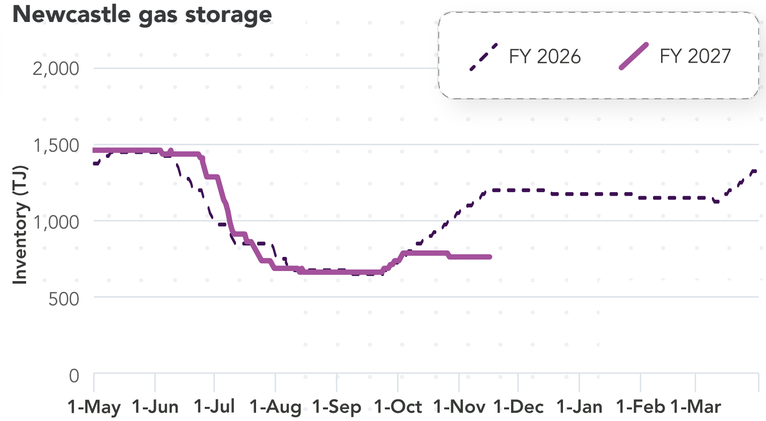
Storage inventories remain above risk tolerance levels, with Iona expected to refill from December 2026.

- Current storage inventories are within their typical seasonal range and are expected to stay above AEMO's risk tolerance level.
- AEMO modelling forecasts meaningful refill of Iona storage to commence in December 2026 and continue throughout Summer, like previous years, supporting the necessary refill of inventories ahead of the 2027 winter period.

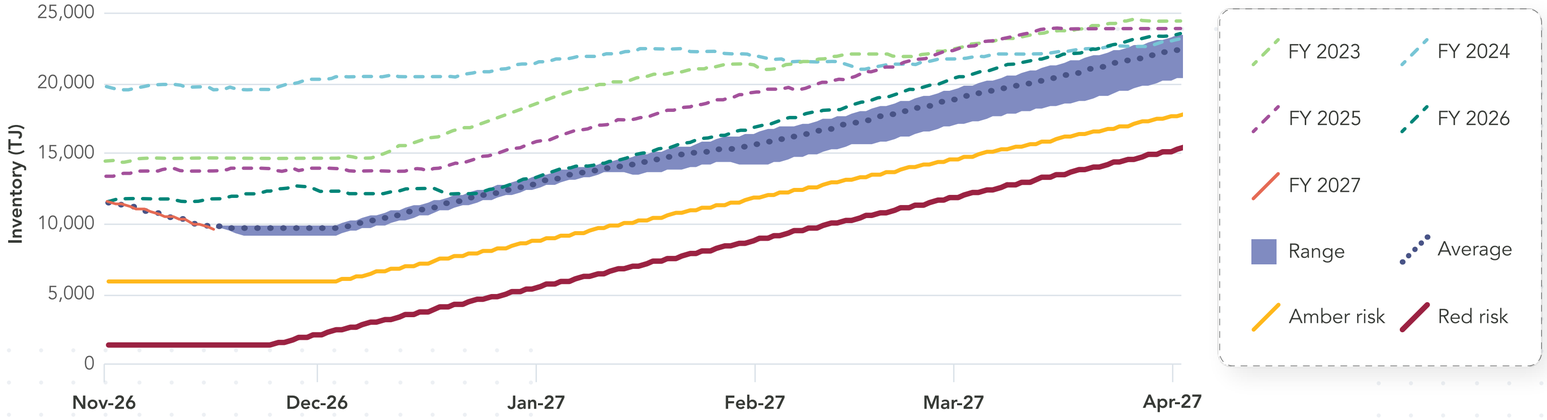
Dandenong gas storage



Newcastle gas storage



Iona UGS inventory



Note to Iona UGS inventory modelling: Demand variability and participants' contracting arrangements could result in slower storage refills, or greater withdrawals, than currently modelled.

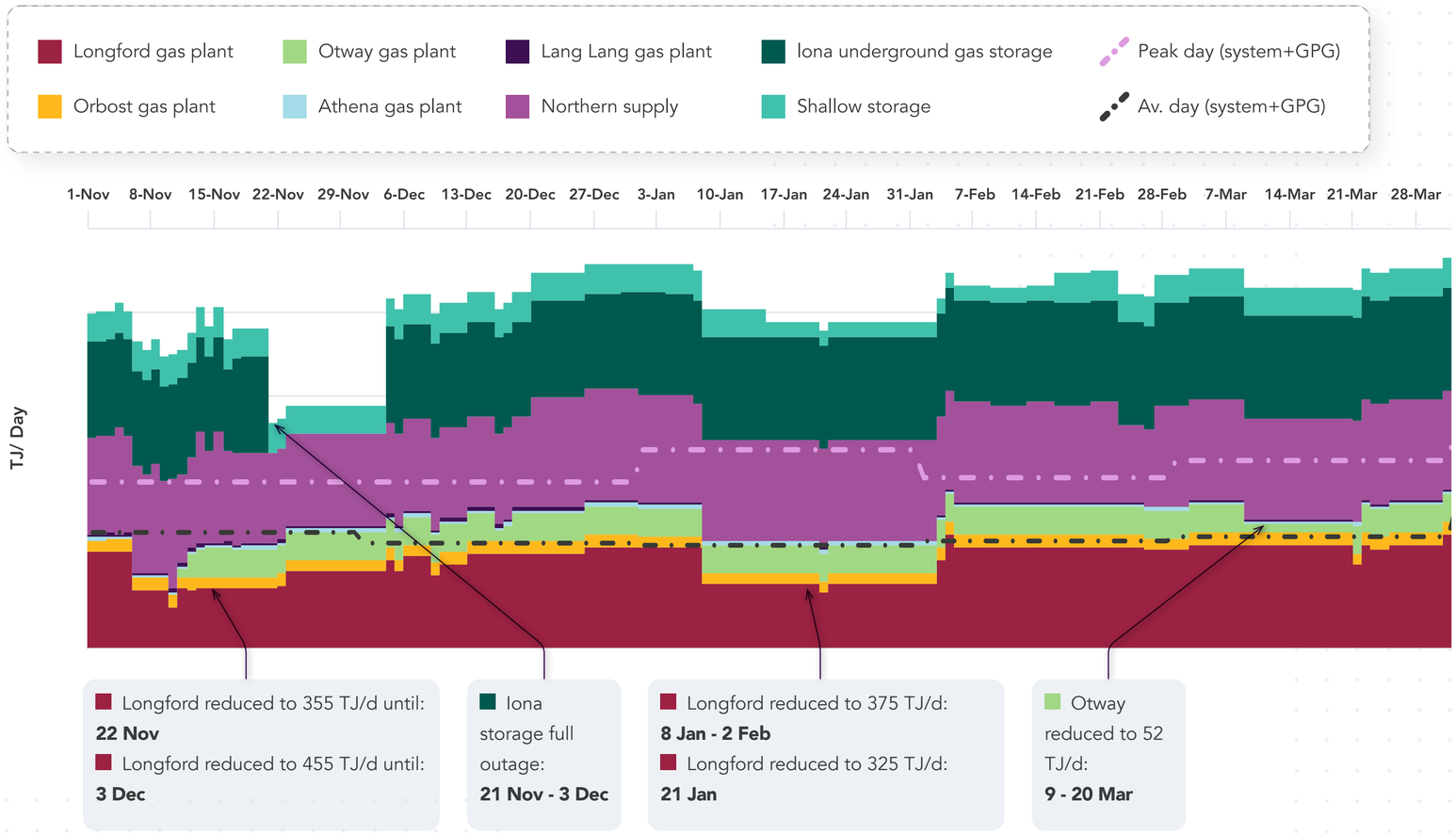
Note: Figures reflect dates as of 17 November 2026.

Gas

Victorian production supply

- Sufficient southern supply is forecast over summer, despite major maintenance and overlapping Victorian production outages.
- This will increase reliance on Moomba, Queensland and storage. There is planned pipeline maintenance, with transportation capacity expected to remain available to support inter-regional flows and storage refilling.

Southern jurisdiction peak day outlook



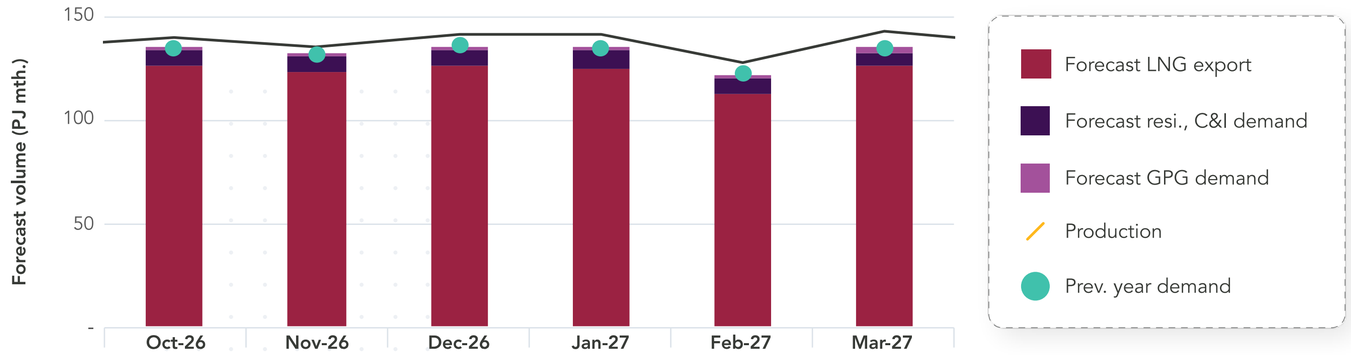
Note: Figures reflect dates as of 17 November 2026.

Gas

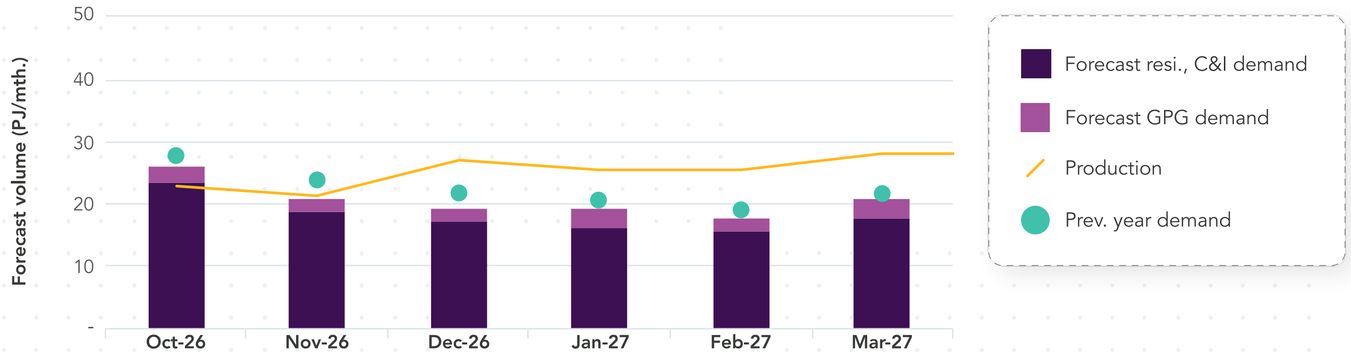
GPG supply balance (NEM)

Gas production is forecast to exceed demand throughout summer and sufficient to meet the upper bound of Gas Power Generation (GPG) demand scenarios.

Northern supply-demand balance (18 PJ supply surplus)



Southern supply-demand balance (23 PJ supply surplus)



Note: Southern production is expected to support northern LNG export demand over summer under existing swap arrangements. Forecasts will continue to evolve as participants respond to market conditions. Figures reflect dates as of 17 November 2026.

GPG Outlook

- Average demand over summer is forecast to be similar to last summer and lower than earlier years, reflecting the growing contribution of large-scale battery storage.
- Actual usage will remain sensitive to weather, VRE output, generation outages and periods of high operational demand.
- Gas supply is forecast to be sufficient to meet the upper bound of forecast GPG demand with sufficient gas supply available to refill the Iona gas storage reservoirs.

Market balance

- Production is forecast to exceed demand in every summer month, creating a 41 PJ aggregate surplus.
- Following forecasted storage refilling, approximately 28 PJ of surplus supply is expected to remain.
- Surplus capacity provides flexibility to meet higher LNG exports or GPG demand.

Month	Total east coast gas production supply surplus
Nov-26	-1.4
Dec-26	9.6
Jan-27	8.5
Feb-27	12.1
Mar-27	12.3

Gas

WA gas outlook

Production and storage capacity are forecast to remain adequate to support medium term WA gas demand over summer.

Key capacity changes:

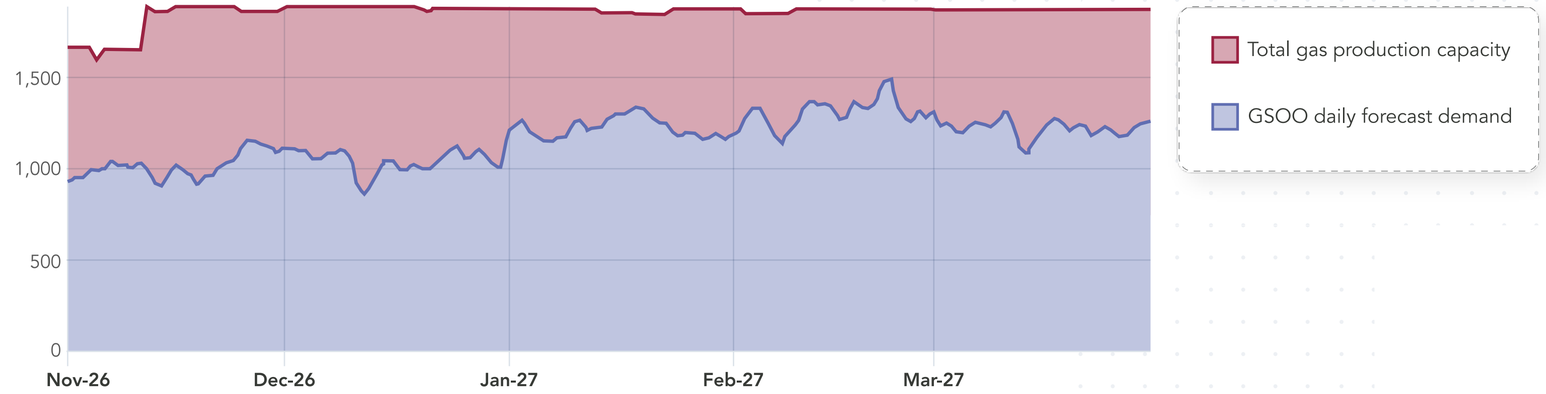
- Macedon, Xyris and Waitsia capacity changes
- Varanus Island well constraint
- Wheatstone maintenance resulting in zero flow for 11/10/2026 until 11/11/2026.

Insights:

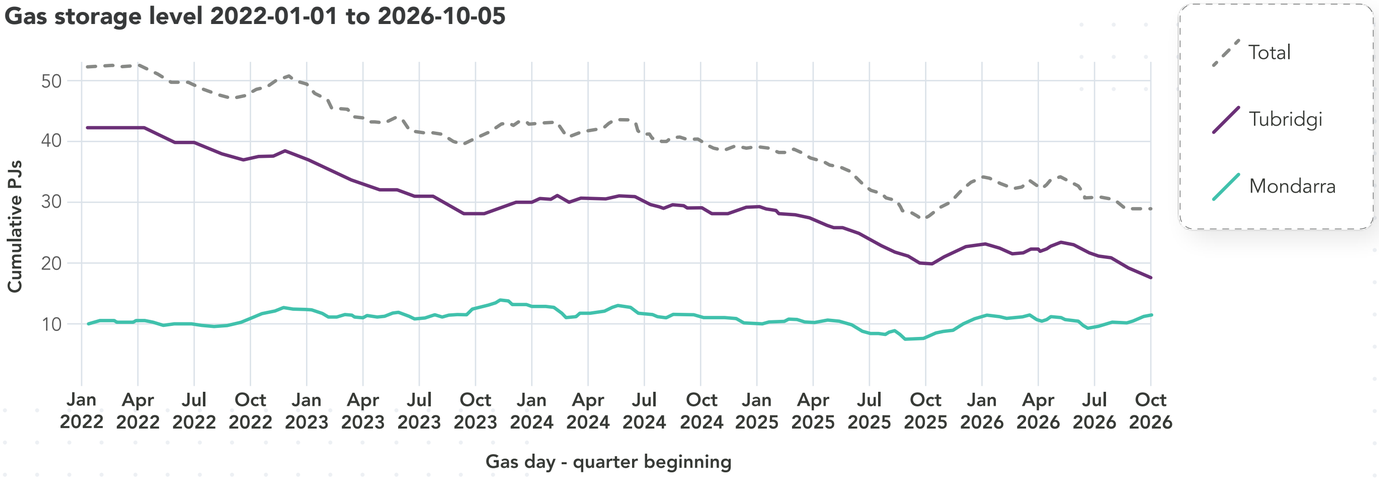
- Tubridgi (36% full) and Mondarra (64% full) can together deliver approximately 240 TJ/day for 63 days if required.
- Storage inventories have declined from a high of ~52 PJ in January 2022 and are currently ~29 PJ.

Source: Data exported from GBB (WA) on 07/10/2026

Production capacity outlook vs forecast demand - (TJ's)



Gas storage level 2022-01-01 to 2026-10-05

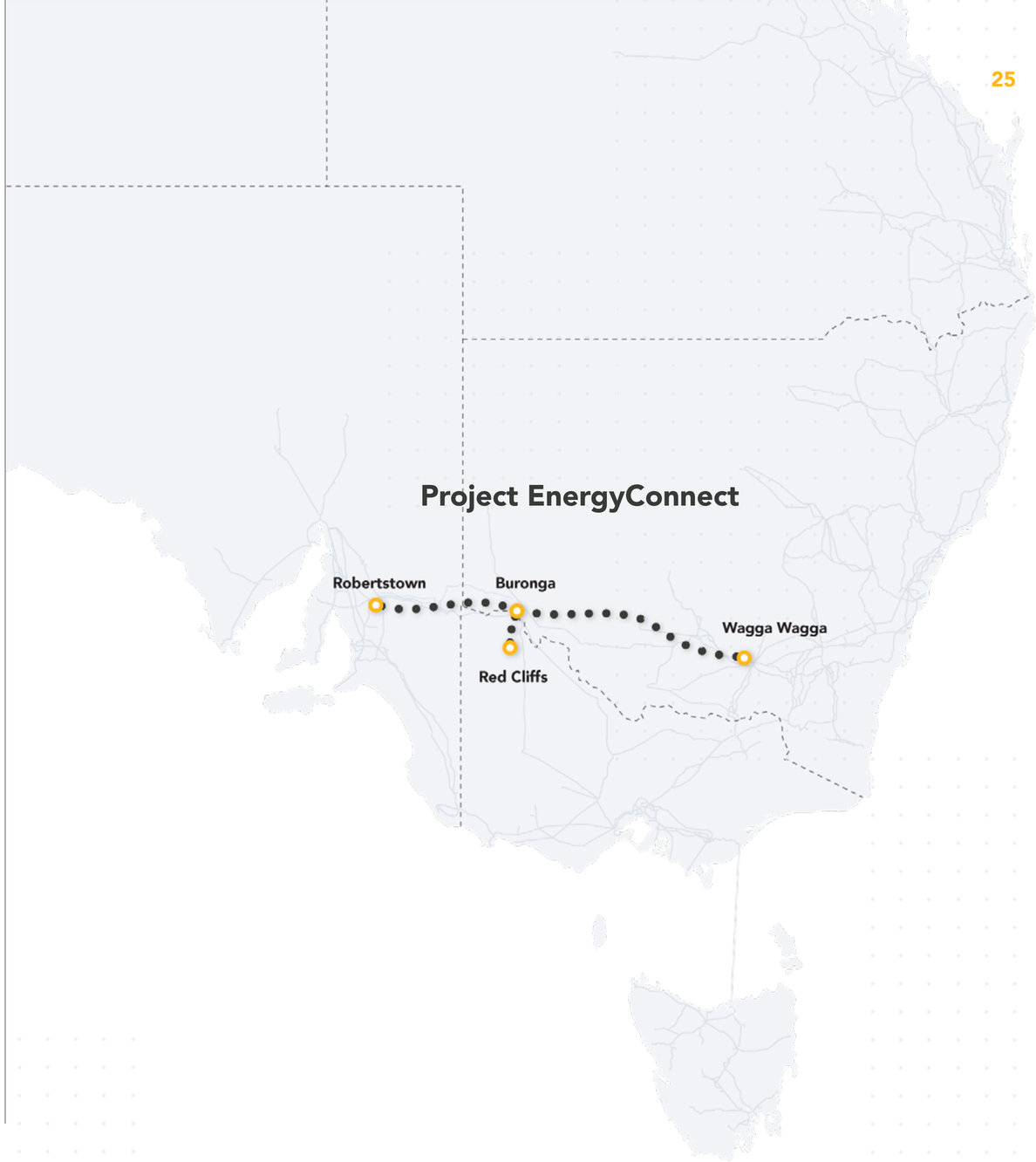


4. Managing a changing power system

As the energy transition progresses, the power system must manage both periods of high demand and increasingly, periods of very low operational demand. Growing rooftop solar generation can reduce daytime demand to levels that challenge secure system operation, particularly under certain outage conditions across Australia.

This increases the risk of Minimum System Load (MSL)[1] conditions occurring during summer weekends and public holidays in the NEM, when operational demand is lowest. The risk of Minimum Demand Threshold (MDT) events in the WEM has decreased with the installation of Electric Storage Resources (ESR). At the same time, increasing variable generation is changing how reserves and essential services are managed.

Project EnergyConnect Stage 2 has been energised in early November 2026, increasing transfer capability between New South Wales and South Australia, subject to commissioning. The resulting interconnector loop may introduce new operational and system security considerations during summer; AEMO and industry have resources dedicated to ensure any issues are identified and resolved.



Notes:

1. Refer to AEMO | Fact sheet: Minimu m system load (MSL)

How the sector has prepared?

Seasonal readiness assessments draw on a range of operational indicators, forecasts and readiness reviews across electricity and gas markets.

This includes weather and demand forecasts, network availability assessments, fuel and gas supply considerations, outage planning, emergency preparedness activities, asset readiness reviews, training and exercises, and operational readiness information provided by market participants. Together, these inputs support AEMO's assessment of seasonal conditions, risks and preparedness arrangements.

In addition to this outlook, AEMO has engaged early and extensively with industry and governments to communicate seasonal outlooks, and share preparedness information ahead of summer 2026-27.

This includes engagement through the National Electricity Market Emergency Management Forum (NEMEMF), National Gas Emergency Response Advisory Committee (NGERAC), and with broader market participants through the summer readiness industry briefing.

Following these pre-season activities, AEMO will provide weekly operational updates throughout summer to support sector-wide situational awareness, including supply and demand conditions, weather outlooks, generation and contingency arrangements.

Given the elevated bushfire risk forecast for parts of Australia this summer, AEMO has also commenced a focused program of bushfire preparedness activities. Planned activities include increased stakeholder engagement with network service providers, generators, governments and emergency services to uplift operational response and assurance.

It will also include reviews of operational procedures and training, assessment of forecasting and situational awareness arrangements, and consideration of emergency response measures. This work is intended to enhance coordination, improve preparedness and support operational decision-making during periods of heightened bushfire risk.



Bushfire preparedness activities

AEMO has implemented a targeted program of bushfire preparedness activities focused on strengthening coordination and operational readiness across the energy sector.

This includes enhanced engagement with network service providers (NSPs), generators, governments and emergency services, along with reviews of operational procedures, training and readiness assessments.

The table adjacent outlines the distinct roles of AEMO, NSPs and generators during bushfire events, highlighting how each organisation contributes to maintaining power system security, managing risks and supporting a coordinated response during periods of heightened bushfire risk.

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

Bushfire preparedness contined

Pre-summer

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 summer

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.

Note: 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.

What happens if risks emerge?

AEMO continuously monitors weather, demand, generation and network availability, gas supply and power system security conditions.

If a risk emerges, AEMO assesses its potential impact, coordinates with relevant industry and government stakeholders, and communicates with market participants using established operational processes.

Where required, operational, reserve or emergency measures may be implemented according to relevant frameworks. The response will depend on the nature and severity of the event, with multiple actions able to occur in parallel.



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

Stay informed

Market participants should refer to current AEMO market notices and operational forecasts as conditions change, supplemented by seasonal updates and industry briefings for broader context.

For local fire conditions and emergency warnings, stakeholders should follow advice from the relevant fire and emergency authorities.

- Market notices AEMO | Market Notices
- Operational forecasts AEMO | Operational forecasting
- AEMO website AEMO | Australian Energy Market Operator
- Seasonal updates AEMO | Summer operations
- Briefings and webinars AEMO | Industry meetings calendar
- Emergency communications AEMO | Emergency management

The Summer Outlook reflects information available at the time of preparation. Forecasts, planned outages, commissioning activities and asset availability may change.

Australian Energy Market Operator Limited

ABN 94 072 010 327

www.aemo.com.au

Connect with us:

AEMO on Air podcast:
Available on all major podcast platforms, including: