2025/26 Summer Readiness

Industry briefing

13 November 2025

This briefing will be recorded

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.

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO Group is proud to have launched its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate 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

Today's agenda

Time (AEDT)	Item	Speaker
2:30 pm	Agenda & welcome	**Samantha Lloyd**, Manager - Stakeholder Engagement
2:35 pm	Introduction	**Michael Gatt**, Executive General Manager - Operations
2:40 pm	Weather and climate	**Felix Levesque**, Interim Head Communications Meteorologist, DTN APAC
2:55 pm	• Electricity and gas systems readiness • Network and generation availability risks • System security and reliability risks	**Ken Harper**, Group Manager - Near-Time Operations
3:15 pm	Q&A	*Facilitated by Samantha Lloyd*
3:30 pm	Webinar close	**Samantha Lloyd**, Manager - Stakeholder Engagement

How to interact today

Option 1: Raise your hand to speak during Q&A

- Use the Raise Hand feature if you'd like to ask your question verbally.
- We'll unmute you when it's your turn.

Option 2: Post your question in the chat

- Share your question or comment in the meeting chat at any time.
- We'll monitor the chat and answer questions during our Q&A section.

After the briefing

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

Introduction

Michael Gatt
Executive General Manager - Operations

Weather and climate

Felix Levesque

Interim Head Communications Meteorologist, DTN APAC

Electricity and gas systems readiness

Ken Harper

Group Manager - Near-Time Operations

Summer outlook

Improved
Similar or unchanged
Potential to get worse

Impact	West/East	Comparison to an average summer season
Unusually warm		Warmer than average days are very likely for central and northern parts of Queensland and most southern parts of the country, including parts of Victoria, and Tasmania. Warmer than average nights are very likely for most of the country with a slightly reduced likelihood for parts of WA and SA.
Widespread flooding		ENSO outlook is likely to return to neutral by November however a continued weak La Nina is possible. BOM outlook indicates average to above average rainfall is likely for eastern Australia. Soil moisture has decreased however there is still a slightly enhanced flood risk for parts of eastern Australia. Below average rainfall is expected for most of WA, parts of SA, and western Tasmania.
Bushfire risk		Most southern parts of the country (parts of WA, SA, Victoria, and Tasmania) with seasonally low rainfall and soil moisture may see increased fire risk during spring and leading into summer. Higher soil moisture and increased rainfall likelihood is leading to a lower-than-average fire outlook for much of the east. Summer bushfire outlook is typically published in November.
Tropical cyclone risk		On average there are 9-10 tropical cyclones (TCs) in the Australian region with at least 1 impacting the Australian coast each season. Severe TCs are more likely mainly due to very warm ocean temperatures. Tropical lows can also cause damaging winds, widespread rainfall, and dangerous flooding.
Record maximum / minimum demands		Increased likelihood of new record minimum demands in the NEM and WEM during spring and summer seasons. Record minimum demand occurred during November 2024 in WA, January 2025 in Victoria, and February 2025 in NSW for the previous summer season. Tasmania minimum record demand occurred in November 2025. Record maximum demand occurred during January 2025 in Queensland and Western Australia for the previous summer season. Summer heatwaves have the potential to drive new record maximum demands in both NEM and WEM. Majority of forecast Minimum System Load (MSL) conditions in the NEM are more likely to occur during spring months however they could still arise during summer months, particularly during public holidays and mild weekends. There is low likelihood of Minimum Demand Threshold (MDT) conditions in the WEM, with additional BESS available to manage any unplanned events.
Generation and storage availability		On average, synchronous generation availability is expected to be higher in NSW region due to commissioning of new Hunter Power station (GT1 (330 MW) now and GT2 (330MW) from December 2025) and reduced overall level of planned maintenance. Other regions are expected to have slightly reduced levels of synchronous generation to previous season, with more notable reduction in Queensland due to planned maintenance. There is additional BESS capacity in all NEM regions except for Tasmania. In the WEM, additional BESS capacity (approximately 350 MW) is available, with further 500 MW undergoing commissioning process during Summer.
Network outages		Latest information indicates that the volume of planned High Impact Outages (HIOs) are forecast to be similar or at reduced levels in the NEM and the WEM, compared to last summer. Some outages have the potential to reduce regional export capability and may place pressure on reserves or increase MSL thresholds. AEMO and TNSPs reviewed and updated summer outage guideline. In addition, AEMO sought input from TNSPs regarding summer preparations and potential risks.
Reliability		There is a high number of days where LOLP (loss of load probability) is 70% or higher in all mainland NEM regions (except Tasmania), this occurs when potential of extreme demands, combined with times with low VRE and outage events (planned and unplanned) could lead to reduced reliability. WEM supply demand balance is also heightened during the summer months. The 2025 WEM ESOO identified a potential shortfall against the Reserve Capacity Target (RCT) for 2025-26. Supplementary Capacity is being procured in 2025 to mitigate this residual shortfall risk.
Fuel supply		Coal storage levels are expected to be at normal levels in the NEM and WEM. Gas storages are at typical levels for this time of the year. Monitoring of storage refill rates is critical ahead of winter 2026. In the WEM there is adequate gas supply for the summer season.
Health of markets		Prudential risks / extreme energy price risks are considered low in the NEM and WEM.

Notes: 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 3 summer seasons.

Generation and storage availability

On average, synchronous generation availability is expected to be higher in NSW but at slightly reduced levels in SA, Victoria and Tasmania. There is a more notable reduction in Queensland region due to additional planned maintenance. There is additional BESS capacity in all NEM regions except for Tasmania. In the WEM, additional BESS capacity (COLLIE_BESS2 300MW) is available.

Major Generator changes

- Coal stockpiles in the NEM and WEM are at normal levels.
- Hunter GT1 (330MW) available on gas fuel from late November & GT2 (330MW) available on gas fuel from mid December.
- Several generating units have planned outages:

  QLD: Barron 1, Braemar 3&7, Gladstone 4&6, Kareeya 3, Swanbank E, Oakey, Roma 7, Tarong 1, Yabulu 2.

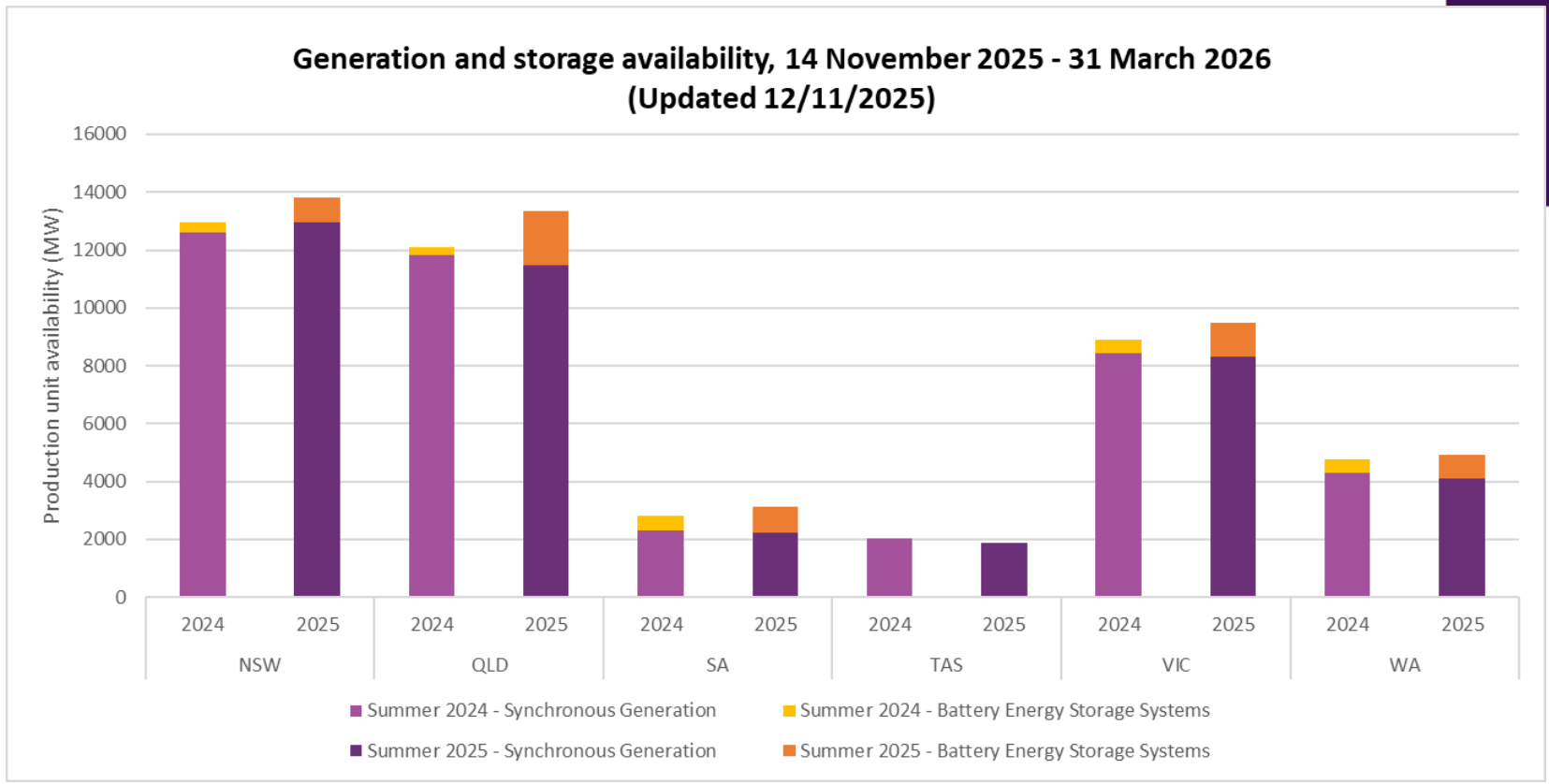
  NSW: Bayswater 4, Eraring 4, Tumut 3 capacity reduction to 1200 – 1500 MW (over 6 weeks), Uranquinty 11&12, Vales Point 5.

  VIC: Dartmouth, Jeeralang A2&A3, Laverton North GS1, Loy Yang A2, Newport, Valley Power 2&4, Yallourn 2 (forced outage) and shorter outages impacting all other Yallourn units.

  SA: Ladbroke, Lonsdale, Mintaro, Port Stanvac, Pelican Point (reduced capacity during November), Quarantine 2&4, Torrens Island B3&B4.

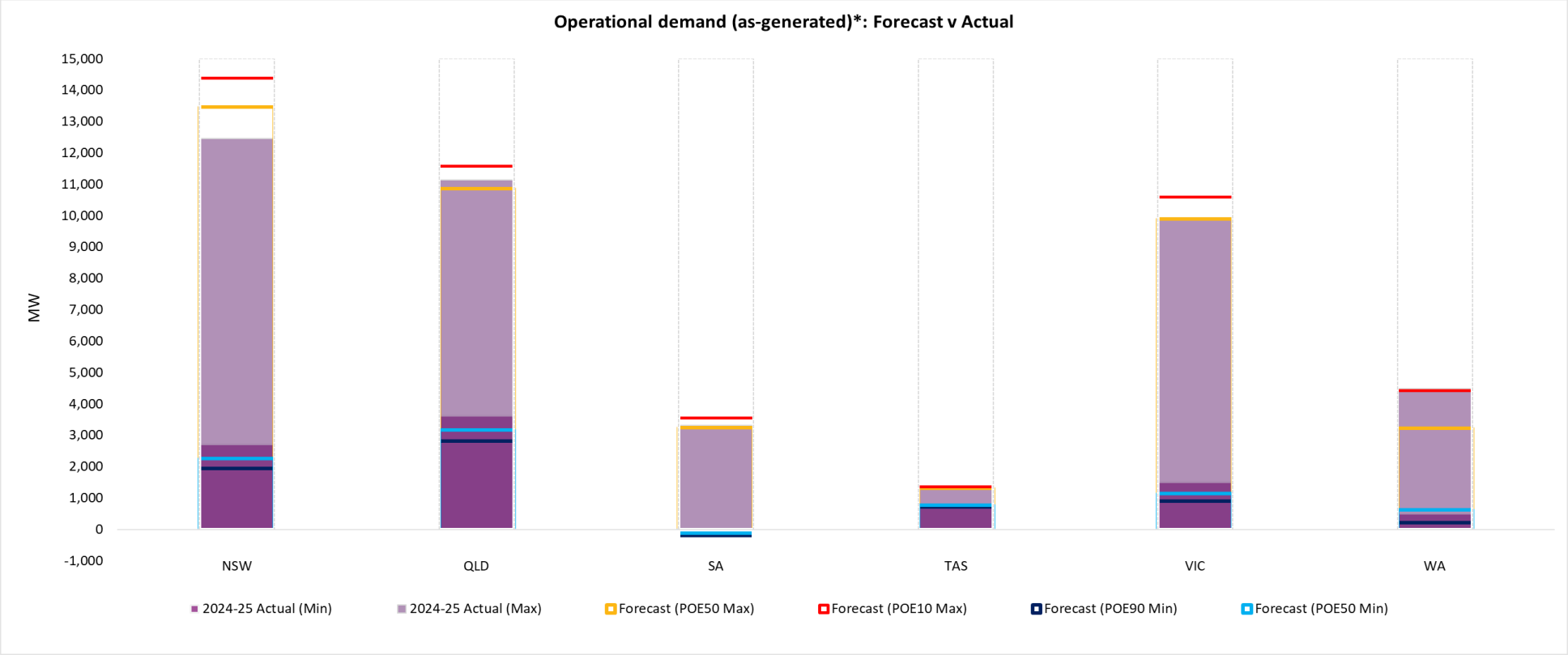
  TAS: Bastyan, Cethana, Fisher, John Butters, Mackintosh, Reece 1, Reece 2 (forced outage).

  WA: Newgen_Kwinana_CCG1 (Nov outage), COCKBURN_CCG1 and BW2_BLUEWATERS_G1 (short outages), SIMCOA_IPT_LD_01 21MW SIL Outage



Source: MTPASA, analysis includes planned generation and storage outages.

Operational demand

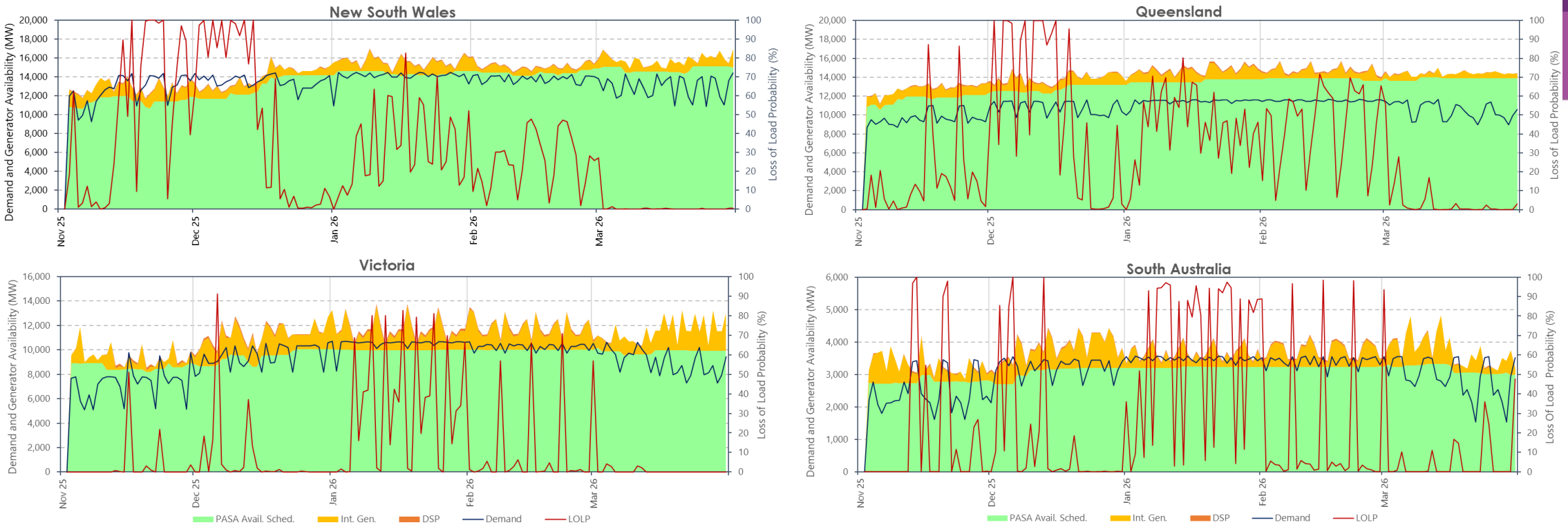


Region	Record Maximum Demand* (MW)	Record Minimum Demand* (MW)
NEM	35,796 (29/01/09)	9,666 (04/10/25)
NSW	14,744 (01/02/11)	2,718 (16/02/25)
QLD	11,170 (22/01/25)	2,790 (31/08/25)
SA	3,399 (31/01/11)	-205 (19/10/24)
VIC	10,576 (29/01/09)	1,504 (01/01/25)
TAS	1,790 (21/07/08)	678 (02/11/25)
WA	4,486 (20/01/25)	511 (10/11/24)

- There is a possibility of 1 in 10-year maximum demand levels (10% POE - Probability of Exceedance) to occur in the NEM and WEM.
- 10% POE demand combined with periods of low VRE availability and or scheduled generation and network outages could lead to days with increased risk of load shedding. Loss of Load Probability Study on the next slide provides further indication of potential risks.
- Minimum System Load (MSL) risks may arise in mainland NEM regions during summer under some outage and system normal conditions.

*WEM "Actual" values are of 5 minute average Operational Demand (as defined in the WEM) that is NOT as-generated. WEM "Forecast" values are of instantaneous Unscheduled Operational Demand.

Loss of load probability study (NEM*)



- The NEM LOLP assessment applies a probabilistic modelling approach, drawing on historical reference years to capture scenarios of extreme high demand and low VRE generation. It also incorporates random unplanned outages and the planned outage schedule from the MT PASA at the time.
- The LOLP metric indicates the probability of demand exceeding supply during the highest risk 30-min period each day. It does not account for RERT, IRR, or other potential emergency interventions.
- The study demonstrates multiple periods of increased risks across most regions. NSW faces the highest risk in November and December, Queensland in December (within both regions, LOLP sometimes above 90%) driven by reduced generation availability and co-incident high demands in NSW and Queensland, Victoria in January and February (50-90% LOLP), and South Australia throughout November to February (over 90% LOLP).
- AEMO maintains operational tools to help optimise generation and transmission network availability during high-risk periods.

**LOLP for individual NEM regions excluding Tasmania as LOLP events are insignificant in Tasmania. Note: MT PASA Run 1055 (ran on 10 November 2025).*

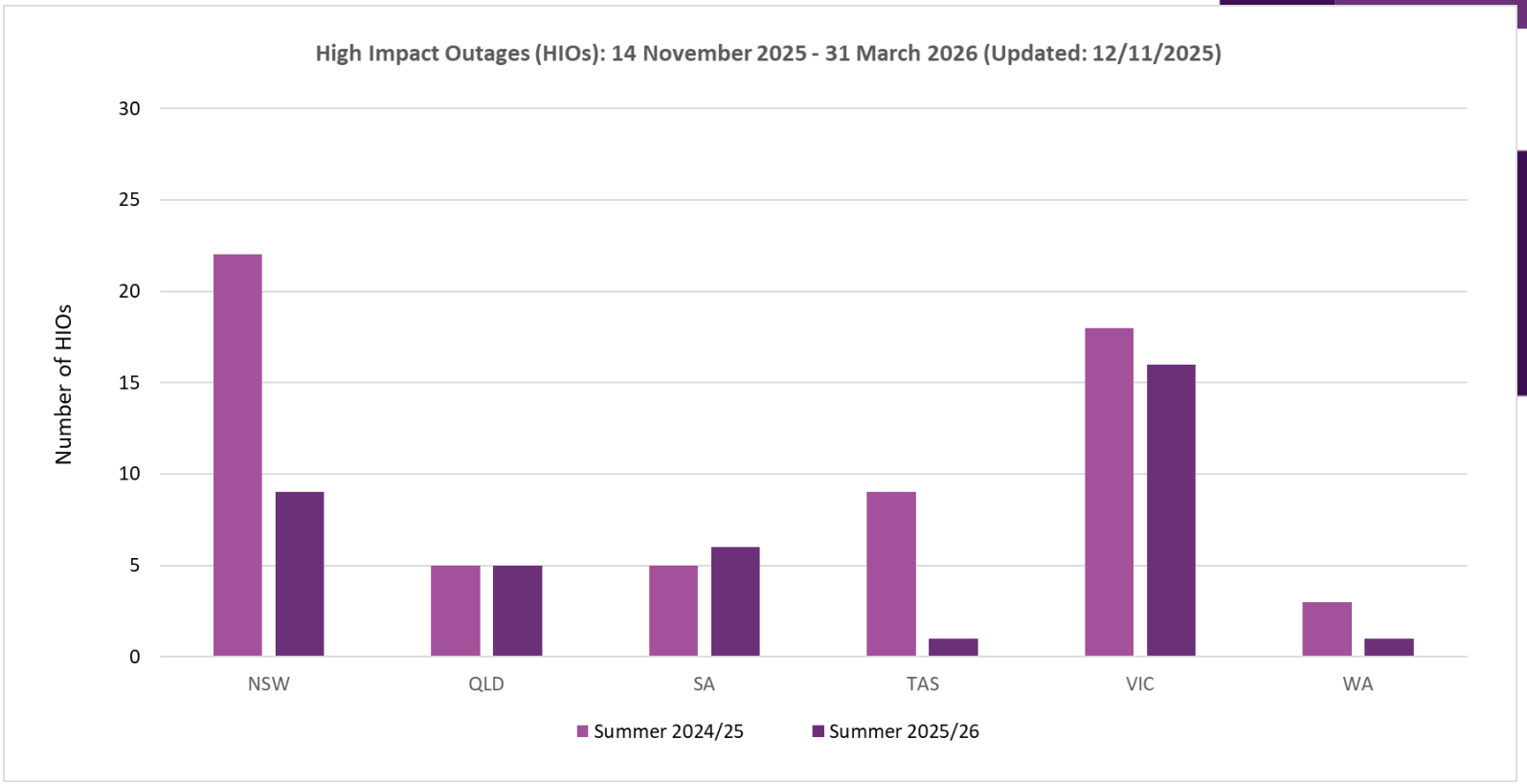
High impact outages / augmentations

Number of planned High Impact Outages (HIOs) are forecast to be similar in QLD, SA and VIC and reduced in NSW, TAS and WA compared to last summer season.

Key transmission lines / substations impacted:

- **QLD**: Broadsound – Nebo and Nebo – Strathmore and Stanwell – Broadsound 275 kV feeders.
- **NSW**: Lower Tumut – Wagga and Dapto – Kangaroo Valley 330 kV lines and 330 kV lines around Armidale, Dumaresq and Tamworth.
- **VIC**: 500 kV network around Moorabool, Sydenham and South Morang, 500 kV Hazelwood – Loy Yang line 3, Heywood – South East 275 kV lines 1 and 2, 220 kV lines in north western Victoria.
- **SA**: Tailem Bend to South East 1 and 2 275 kV lines and Tungkillo to Tailem Bend 1 275 kV line.
- **TAS**: Sheffield – Farell 2 220 kV line.
- **WA**: Shotts Tee-Line to connect COLLIE_ESR4/5 largest contingency risk over Summer (augmentation only, outage completed pre-summer), PJR-RGN81 Line Relocation (works for future Clean Energy Link project).

Note: HIOs are allowed to proceed if there are no identified system security or reliability issues.



Inter-regional augmentations and capacity increases:

- Possible 50 MW increase from QLD to NSW (from 1400 MW to 1450 MW).
- Possible Project EnergyConnect (PEC) and Heywood combined transfer capacity increase:
  - SA – VIC (from 700 to 750 MW)

Note: capacity increases are dependent on completion of the commissioning tests influenced by prevailing market conditions.

East Coast Gas - Overview

Summer season is typically characterised as a period of reduced domestic demand and increased LNG exports. Participants are expected to refill storage prior to winter 2026 and production, storage and pipeline operators schedule capacity impacting maintenance activities.

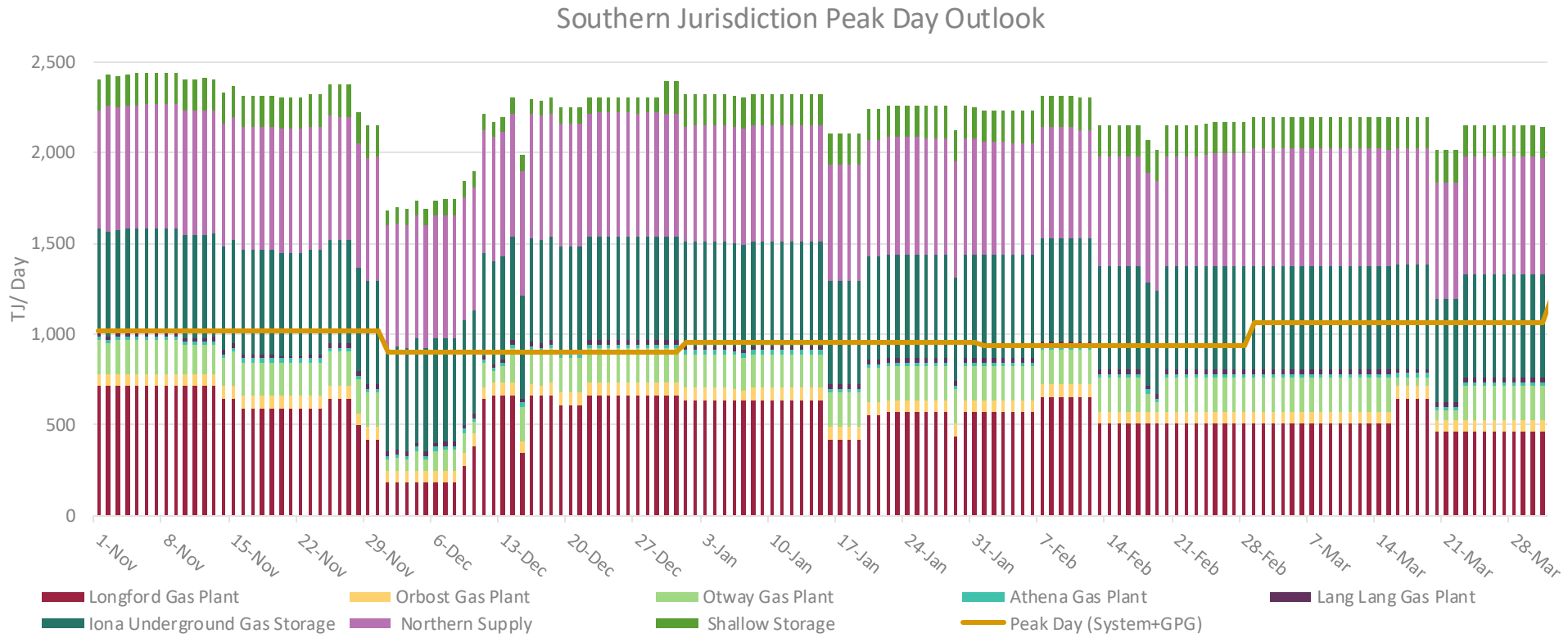
- Based on current forecasts and assumptions, the outlook is for adequate gas supply availability to meet expected demand and necessary storage refilling ahead of winter 2026.

- Operational risks and challenges may arise between now and the end of March 2026 from the electricity or gas market that may alter current forecasts, including unplanned outages and/or very high levels of gas-powered generation.

Southern States Peak Day Adequacy

Major Planned Maintenance:

- 1 to 8 December co-incident major capacity reductions at the Longford (offshore drilling rig positioning) and Otway (offshore pipeline inspection) gas plants in Victoria. AEMO highlighted the capacity reductions and sought that participants have options in place to meet required gas demand.
- Peak day gas supply adequacy will be heavily dependent on flows from Iona storage and/or Queensland.

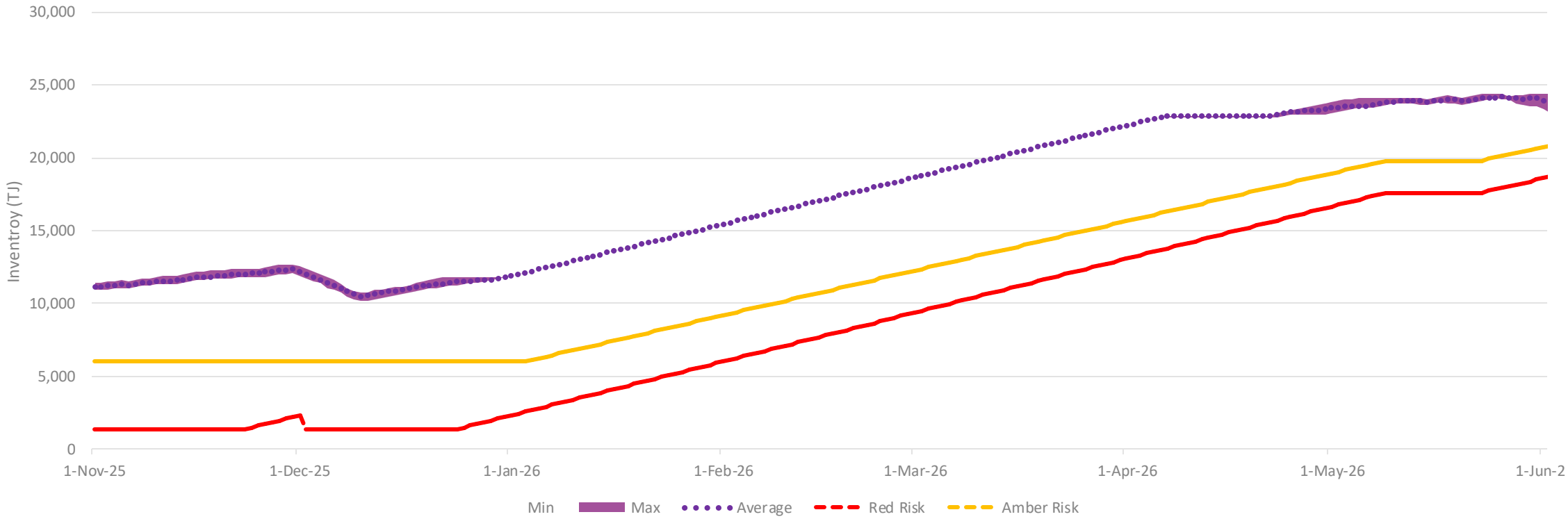


FORECASTS - presented production capacities are forecast by Facility Operators and were provided to AEMO on 27 October 2025. Peak day demand forecasts are developed by AEMO and presented in the 2025 Gas Statement of Opportunities as the 'step change' scenario.

Iona UGS Refill Forecast

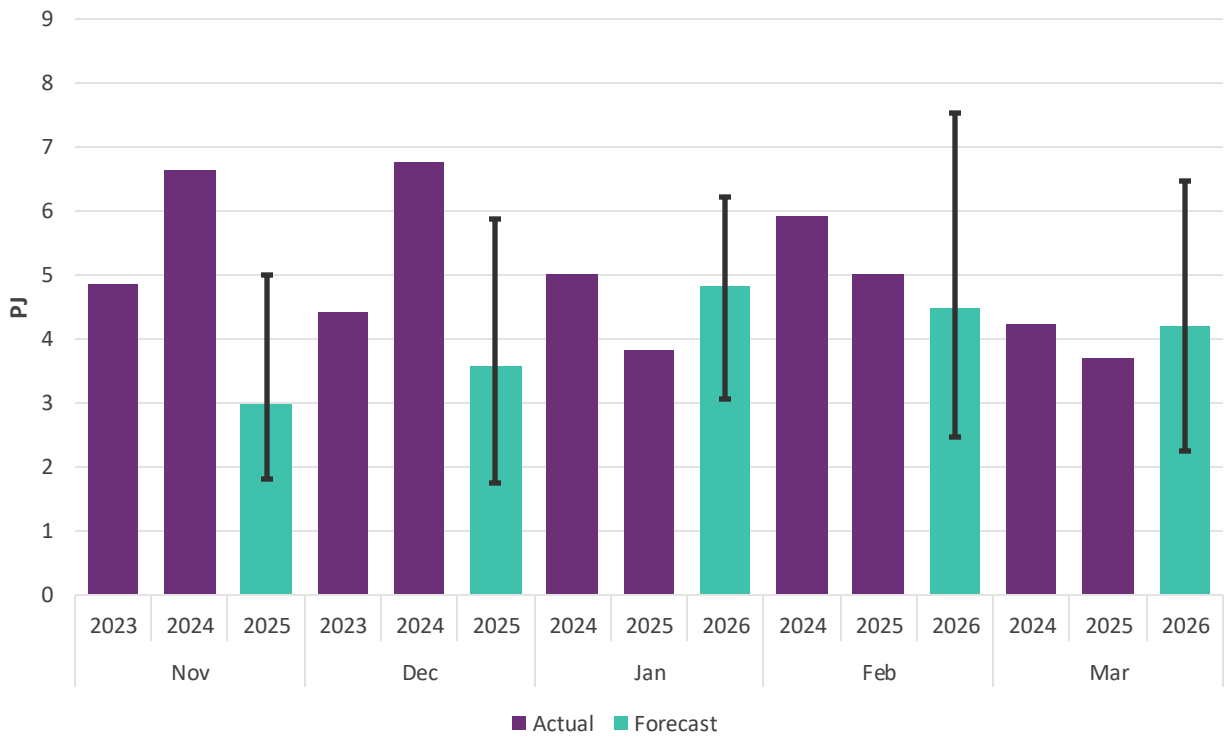
There is adequate available supply to refill Iona underground storage ahead of winter 2026.

- Modelling indicates potential for negligible inventory refill over the remainder of 2025. Influenced by lower supply availability (at a low price) and higher LNG exports during Q4 2025 relative to early 2026 (when the ACCC LNG netback price is forecast to be lower).
- Likely draw down in Iona UGS inventory in early December due to concurrent planned capacity reductions at the Longford and Otway gas plants.
- Planned full Iona UGS facility outage 8 to 21 April will require storage to be refilled by early April.



GPG Demand

- GPG will play a critical role in meeting the NEM demand in summer 2026.
- In Nov – Dec 2025, average GPG across a range of weather patterns is forecast to be lower than observed in 2024.
- Depending on weather conditions GPG levels are forecasted to be similar or higher to previous years in Jan – Mar 2026.
- A large uncertainty range for GPG demand exists, as it is influenced by VRE generation, coal and hydro generator outages, operational demand and the utilisation of new large-scale battery storage.
- Supply is expected to be adequate to meet "high" GPG demand (upper bound of demand forecast range).



Note: The error bars in this chart represent the uncertainty in the forecast across a range of weather conditions or unexpected generator outages.

Source: 2025 GSOO *Step Change* scenario and reference years 2014 to 2023
Updated heat rate assumptions from 2025 IASR

Reliability Emergency Reserve Trader (RERT)
Short Notice RERT

- To mitigate any potential reliability risks AEMO maintains a panel of suppliers that can provide / contract reserves at short notice – the short notice RERT panel.
- Short notice RERT costs are only incurred if reserves are pre-activated or activated, as such reserves are not guaranteed to be available.
- Typically, short notice RERT panel agreements were designed to cover the summer months only, however AEMO is now encouraging 12-month panel membership with extension options.

Communication and engagement is central to our success

Roles and relationships

During pre-summer planning we ask participants to identify potential issues so we can incorporate them in our planning process. We continue to engage with participants through multiple touchpoints so that their concerns are understood and we manage the seasonal challenges together as trusted partners.

Pre-summer

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.

Training

- Online training for Responsible Officers, Jurisdictional System Security Coordinators and Jurisdictional Designated Officers provided.
- Internal Crisis and Emergency Management training provided.

Exercises

- External emergency exercise with National Electricity Market Emergency Management Forum (NEMEMF) held on Tuesday 21 October 2025.
- Various emergency exercises with TNSPs held in September and October 2025.

Engagement

- Pre-summer briefing conducted as part of the National Electricity Market Emergency Management Forum (NEMEMF) and National Gas Emergency Response Advisory Committee (NGERAC) held on Wednesday 22 October 2025.
- Fortnightly seasonal readiness meetings with Energy Policy WA (Coordinator of Energy) and WA Govt-owned entities (Western Power and Synergy)

Whole of industry

- Industry briefing scheduled for 13 November 2025.Consumer forum briefing scheduled for 26 November 2025.
- Summer Outlook and Readiness Briefing at next WA Electricity Consultative Forum.

During summer

- Planned briefings – jurisdictional (weekly) and industry (fortnightly).

Ongoing engagement

- Continued fortnightly meetings with WA Government and key stakeholders and ad hoc in response to LRC events.
- Use of digital platforms, Media engagement.

Network and generation availability risks

Risks	Mitigation
Network and generation forced outages exceeding limits historically observed.	• GPG to provide backup generation. • Additional battery storage commissioned in all NEM and WEM regions (except Tasmania). • Ensuring regular maintenance activities are carried out and risks identified early by asset owners. • Emergency Reserves: Short Notice RERT (NEM) and NCESS Peak Demand Service (WEM). • AEMO is monitoring generation availability across all regions.
Network and generation maintenance / commissioning activities extending beyond target completion dates.	• AEMO guideline for NEM transmission network outage planning reviewed and finalised with TNSPs for summer 2025/26. • AEMO is working closely with TNSPs and Generators to understand delays/modifications to planned maintenance due to resourcing issues, parts sourcing or other reasons. • Recall of planned transmission outages and generation (where possible).
Unplanned network events including during high/low demand periods.	• Contingency plans in place. • Minimum demand management and Lack of Reserve procedures. • BESS contracts to support management of minimum demand conditions in the NEM. • NCESS Peak Demand Service and Supplementary Capacity (WEM).
Storms / flash flooding impacting coal supply and transmission.	• BOM is predicting that there is an elevated flooding risk in northern Queensland and eastern NSW due to above average soil moisture and increased chance of above average rainfall. • Contracting coal from diverse sources and building up coal stock. • Monitor coal generation availability and stockpile levels. • Monitor risks with asset owners.
Plant cut-out / capacity derating due to extreme heat.	• Market notices issued in advance of extreme temperature days. NEM Local Temperature Alerts review completed and updated. • PASA availability adjusted based on weather conditions / market notice advice. • Monitoring of wind cut-out potential.
Managing Iona refilling coinciding with gas plant maintenance during summer and potentially higher GPG demand due to unplanned network / generation events.	• Signal to industry if there is a forecast shortfall. • Engage with gas facility operators to ensure that gas supply capacity is maximised. • GPG switching to alternative fuel source (diesel), AEMO's East Coast Gas System functions utilised to increase gas supply from Queensland. • Coordinated response with NEM to respond to possible gas generation fuel supply shortfall. • Review / assess impacts of overlapping outages with participants. • Emergency Reserves: Short Notice RERT (NEM) and NCESS Peak Demand Service (WEM).

System security and reliability risks

Issues	Impacted Region(s)	Impact
QNI capacity increase - commissioning tests dependent on market conditions.	QLD, NSW	Potential delays to QNI capacity increases.
AEMO, Transgrid and ElectraNet are actively monitoring and reviewing further opportunities for additional power transfers on both PEC (Stage 1) and Heywood interconnectors - commissioning tests dependent on market conditions.	NSW, VIC, SA	Transfer capacity and supporting reserves in neighbouring regions.
Operational demand may be below secure thresholds (as part of Minimum System Load framework in the NEM and Minimum Demand Threshold framework in the WEM), under both outage and system normal conditions. The risk of Minimum System Load is increased for unplanned outages that impact interconnector transfer capacity.	Mainland NEM, WEM	System security, customers, market intervention.
Potential for delayed return to service of generating units on extended outages (detailed on slide 10), monitor status with asset owners. In VIC, Loy Yang A2 and Yallourn Unit 2 (forced outage) may be at risk of delayed return to service due to potential for further repair works. In NSW, there is potential for increased power system security/reliability risk during concurrent outages of Bayswater 4, Eraring 4 and Vales Point 5, especially if combined with unplanned generation outages.	NSW and NEM	NEM reserves
Basslink often operates at reduced transfer levels due to price-driven responses. This may impact capability to support NEM reserves, MSL management in Victoria and frequency management in Tasmania. AEMO is continuing to monitor Basslink operation.	VIC, TAS	NEM reserves, MSL management in VIC, frequency management in TAS
Hunter Power Station (660 MW) is expected to be in commercial operation in late 2025: GT1(330MW) on gas fuel from late November and GT2 (330MW) on gas fuel from mid December.	NSW	NSW reserves
SHOTTS 330 kV Substation Configuration to connect new facilities via tee line	WEM	Largest Contingency Risk as significant generation connected to SHOTTS Substation

Questions and comments

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 2025, 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.
- **10 December 2025, Draft 2026 Integrated System Plan (ISP)**
  - Roadmap for the NEM power system.
  - Outlines mix of generation, storage, and network investments to meet consumer needs and government targets to 2050.

For more information visit

aemo.com.au