Security of Supply Outlook – 16 February 2026

Transpower as the System Operator must provide information and short- to medium-term forecasting on all aspects of security of supply, and manage supply emergencies. This document provides the System Operator's assessment of the security of supply outlook into winter 2026 based on the latest Energy Security Outlook, New Zealand Generation Balance (NZGB), generation commissioning expectations, annual Security of Supply Assessment (SOSA), and observed operational conditions. We provide these updates four times per year.

In summary:

- Current fuel stocks are healthy and need to remain so heading into winter with forecast dry conditions in the coming months.
- National hydro storage is just below the 90th percentile and sitting at 115% of mean for this time of year. The latest reported coal stockpile[1] at Huntly is ~1.2MT and Ahuroa gas storage is near full (97%).
- South Island storage is now dropping from its highs earlier in the year. Earth Sciences New Zealand (formerly NIWA) are forecasting dry conditions in for major hydro catchments in the South Island for the next 35 days, and drier than normal conditions on the West Coast for the next three months. This increases the risk of drier conditions heading into winter. If that risk is realised, increased thermal generation will be required and thermal fuel stocks will need to be replenished to ensure sufficient thermal fuel is available through winter.
- Exposure to risks (both capacity and energy) due to unplanned asset outages remains, particularly in relation to aging thermal plant.

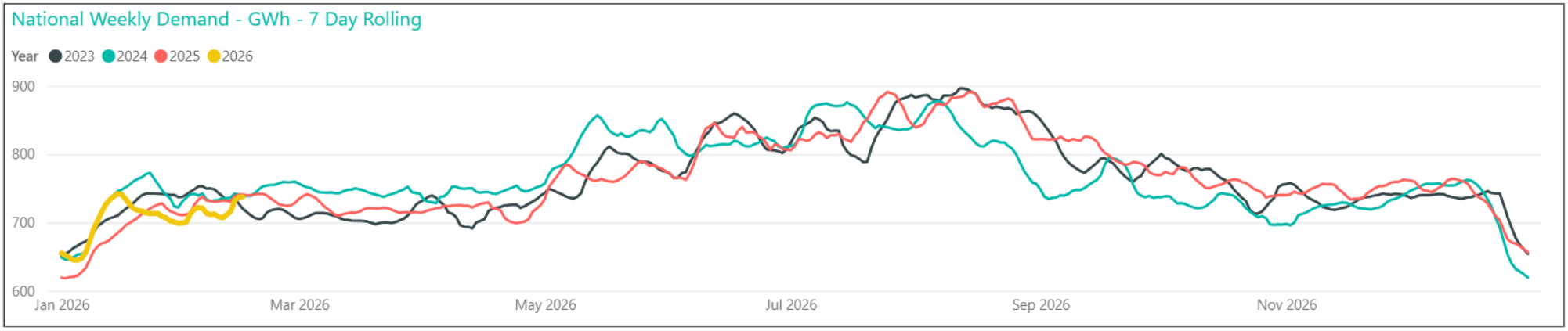
[1] This is double the stockpile for the same time last year and the highest we've seen since October 2021 (based on monthly modelled stockpiles). It is also higher than Genesis-reported quarterly stockpile levels going back to Q1 FY16. These are quarterly values so there might have been higher values between the quarterly-reported numbers.

- Contact is now decommissioning TCC (330 MW). Genesis is refurbishing its third Rankine (240 MW), which is due back from outage at the end of April. We note that new generation projects have been tracking behind the SOSA 2025 pipeline.
- Looking ahead, demand is expected to increase with the new electric arc furnace load coming online at NZ Steel, various industrial electrification projects planned or progressing (particularly at Fonterra sites) and as we head into the colder autumn and winter months. These are captured in our forecast.
- The Government has announced it will be progressing a liquified natural gas (LNG) import facility (most likely in Taranaki). This is intended to provide insurance in the form of access to additional thermal fuel supply that can scale up to supply thermal electricity generation in a dry year[2]. Currently, the earliest this facility is expected to be operational is late 2027 to early 2028. Details on arrangements to integrate an LNG supplier into our security of supply frameworks and electricity market design efficiently and affordably are yet to become clear.

Demand outlook

Cooler weather during summer and increased rainfall have resulted in lower air conditioning and irrigation. The combined effect has resulted in 2026 load tracking below the 2025 load at the start of this year. Looking ahead, as temperatures drop heading into autumn and winter, loads will start to increase. NZ Steel's Electric Arc Furnace is expected to bring an additional ~30 MW of load in Q1 2026. Fonterra is continuing its electrification plans[3] at its various locations, which will increase electricity consumption at the Whareroa and Edgecumbe sites from mid-late 2026. This follows on from its 20 MW electrode boiler installation at Edendale in late 2024.

[2] While its primary benefit is in providing fuel insurance for dry years, the LNG facility could also be a fuel source for industrial, commercial and residential gas users.
[3] See Fonterra announces electrification plans to future-proof operations



Supply outlook

Towards the end of 2025 aggregate hydro storage levels increased to full due to above average inflows from September 2025. As a result, hydro generation has increased and, when combined with lower demand and a strong contribution from wind generation, has resulted in lower thermal generation and lower wholesale spot prices. This has allowed a build-up of thermal coal stockpile at Huntly and gas storage in Ahuroa as discussed later. As at 15 February, renewable share of electricity generation had been >96% for 19 consecutive weeks.

Contact is now decommissioning its 330 MW combined-cycle generator (TCC), as had been well signalled by Contact including through the Planned Outage Coordination Process (POCP). TCC is now excluded from all our energy and capacity risk modelling. While TCC had limited availability in 2025, it did provide additional generation capacity particularly as thermal backup generation during extended low hydro inflow periods.

Since our last Outlook the Commerce Commission authorised the agreement between Genesis, Meridian, Mercury and Contact to keep the third Rankine unit (HLY2) in service with a strategic coal stockpile level ahead of each winter.[4] Consequently, HLY2 will not exit in early 2026 as had previously been signalled by Genesis. HLY2 is currently being refurbished and expected to be available from 28 April 2026.

[4] See Genesis Energy Limited, Contact Energy Limited, Meridian Energy Limited, and Mercury NZ Limited (the Gentailers) | Commerce Commission

Between April 2025 and 12 February 2026, a total of ~350 MW of additional generation capacity has been delivered to the system. This capacity includes ~110 MW of geothermal, ~130 MW of solar, 100 MW of BESS and 8 MW of hydro.

While we state capacity contributions, these technologies have quite different contributions to the peak and energy requirements of the system. For example, over the winter months the average[5] contribution from solar is ~16% of its installed capacity (compared, for example, to geothermal which typically operates at ~90% capacity factor). During peak demand periods on cold, dark winter evenings, solar (without BESS) makes no contribution, whereas geothermal, hydro and BESS are firm (non-intermittent) generation sources and could generate up to their maximum. While the new solar generators are an important component of the new supply mix, they provide limited winter energy support and potentially very little during winter peak loads.[6]

Supply pipeline progress against SOSA 2025

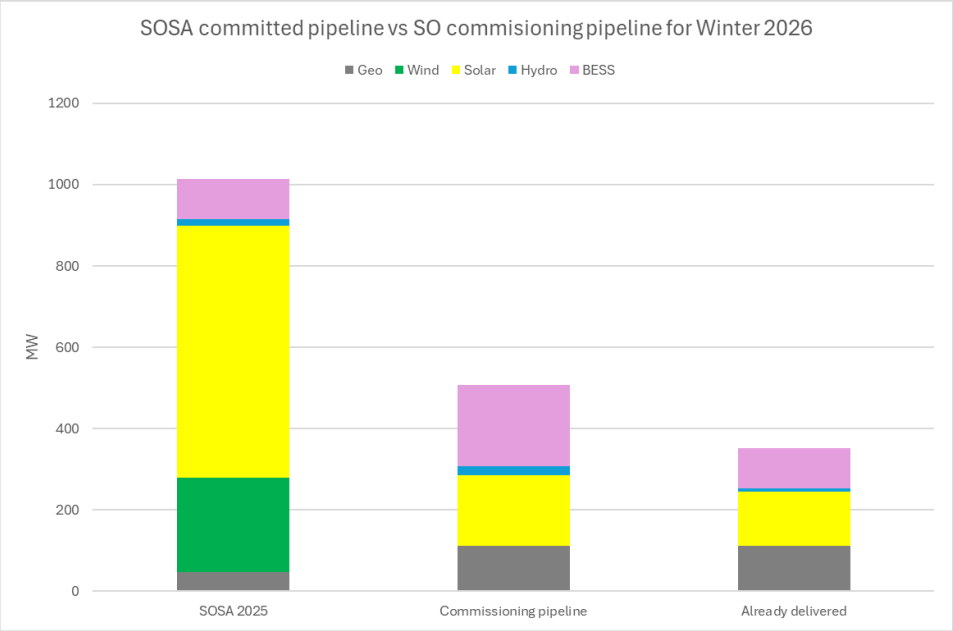
We are tracking how new generation delivery compares against the committed ("stage 1") generation pipeline published in our most recent Security of Supply Assessments (SOSA 2025).[7] If aggregate generation is tracking ahead of the stage 1 pipeline it would indicate build faster than signalled and as a result margins are likely to be higher than forecast, and the opposite if generation build is lagging. The figure below shows the comparison for winter 2026 and winter 2027.[8]

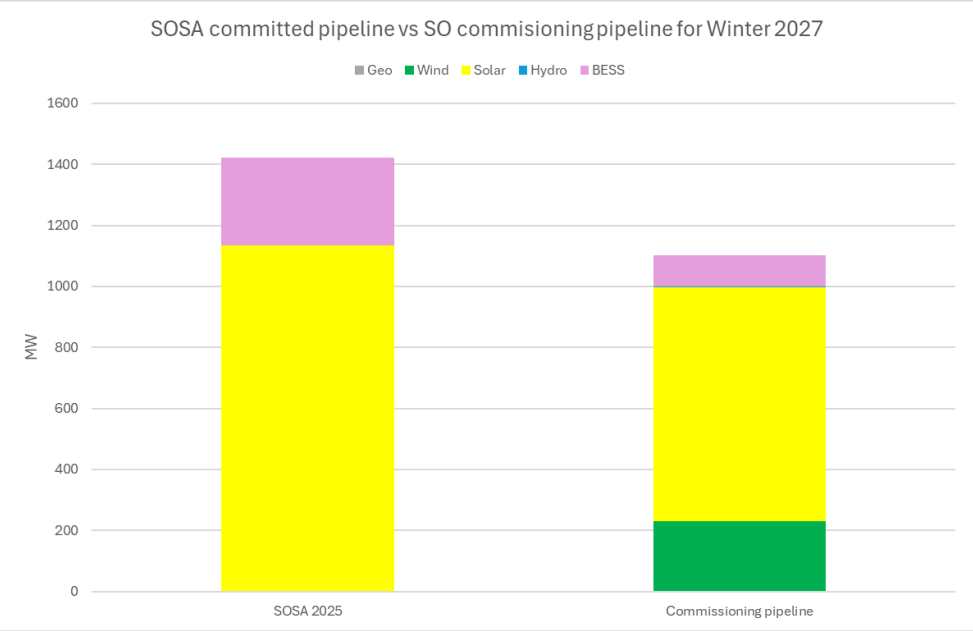
Delivery of solar and wind projects for winter 2026 have been slower than the respective SOSA pipelines. The net effect is there has been slower than modelled growth in supply to meet the New Zealand Winter Energy Margin (NZ-WEM) in 2026 and subsequent years. SOSA 2025 raised the NZ-WEM for 2026 as a key security concern and further delays in new generation coming online will exacerbate these security risks, all else being equal.

Supply projects the System Operator is supporting to commission into the power system and markets by winter 2027 do not meet what was modelled in SOSA 2025. While there could be some projects for delivery ahead of winter 2027 that are yet to enter the System Operator commissioning pipeline, we consider these are likely to be smaller projects. If the commissioned projects for 2027 also end up falling behind

[5] Average contribution is an indication of its energy contribution.
[6] Solar with BESS could be used to store solar energy for later use during peak load periods.
[7] In this case the 2025 SOSA. See 2025 SOSA - Final Report.pdf
[8] Note the start of winter as defined in the SOSA is 1 April. We have used this date for this comparison.

the SOSA committed pipeline for 2027, then it will mean lower security margins into winter 2027 (relative to that signalled in SOSA 2025[9]), all else being equal.

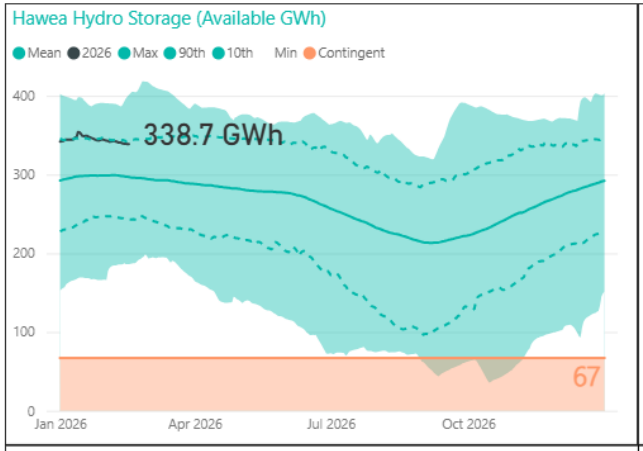


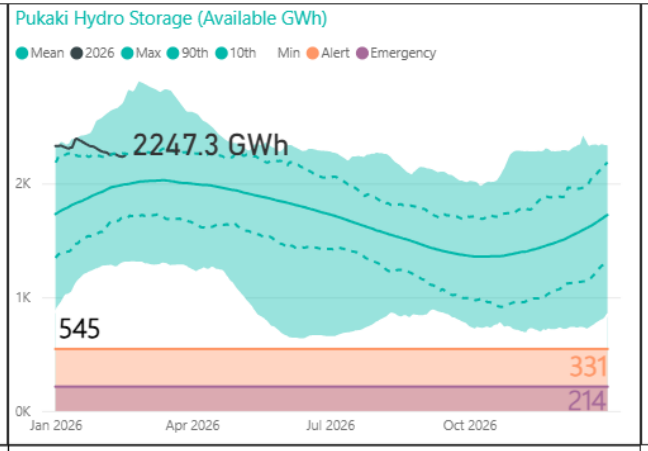


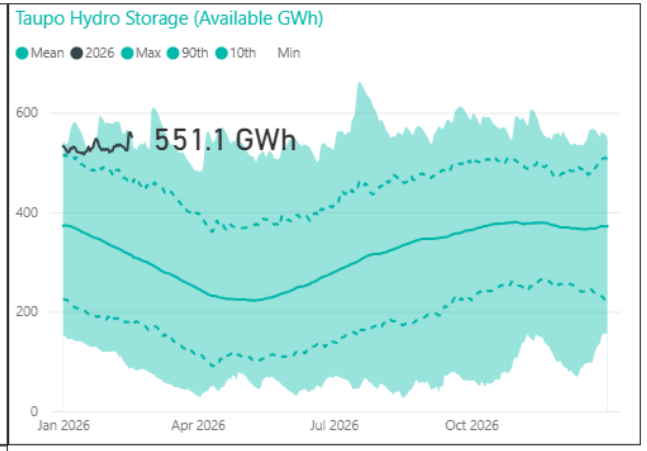
National hydro storage

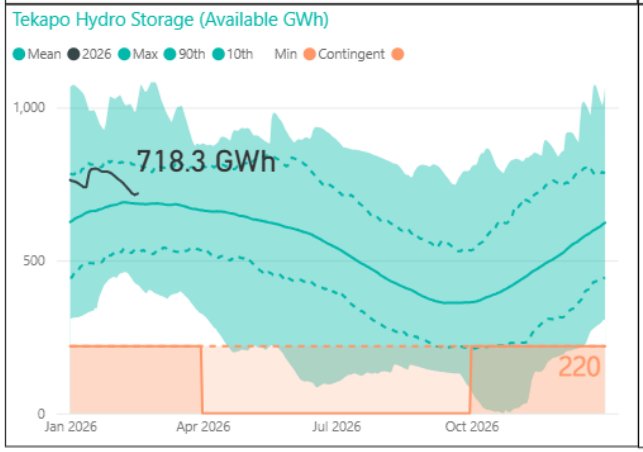
Above average hydro inflows from September 2025 helped increase national controlled storage up to near full levels at the start of this year. Storage has since declined but is still high for this time of year with national controlled storage sitting at 115% of historic mean levels as at 15 February. Most of the major controlled hydro catchments are at or near the upper end of their storage expected for this time of year with the exception of the Waiau catchment which is around its average level. South Island controlled storage is at 109% of average.

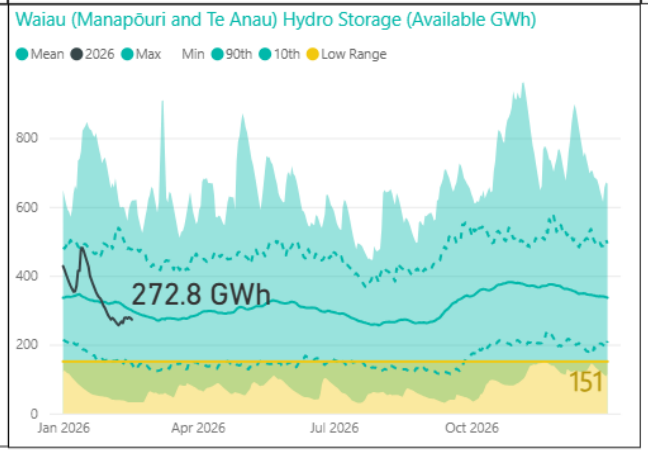
[9] The 2025 SOSA indicated winter energy margins recovering above the standards in 2027.







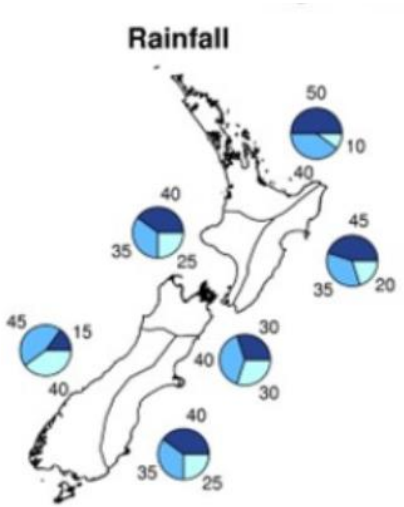




Lake	Current (%) avg
nz_controlled	115
si_controlled	109
hawea	114
pukaki	113
manapouri	101
te_anau	86
tekapo	105
taupo	176

We are mindful of factors that could impact controlled hydro storage levels, including:

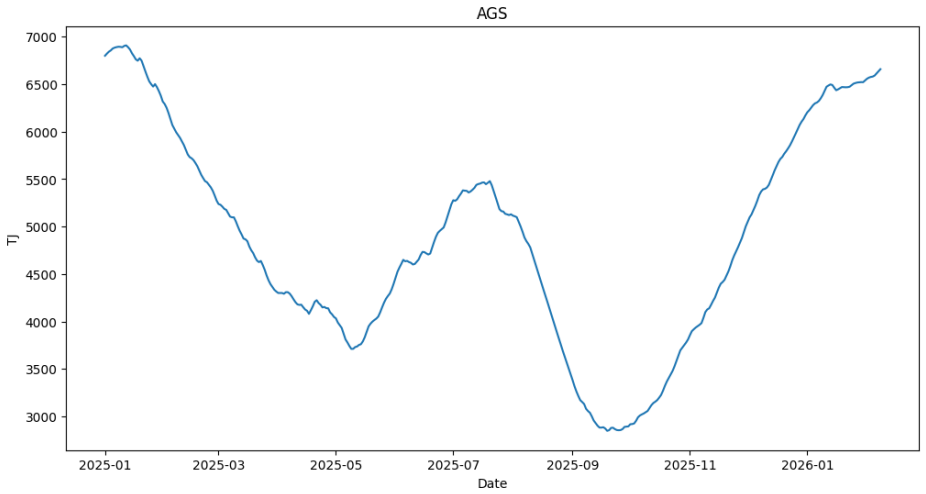
- Earth Sciences New Zealand (formerly NIWA) middle scenario forecast (as at 15 February) is for dry conditions[10] over the next 35 days in regions of the South Island with major hydro catchments. As shown in the chart alongside the forecast[11] for the next three months (February-April) has a higher chance of normal to below normal rainfall in the west coast of the South Island and normal to above normal in the North Island.
- Meridian's snowpack estimate shows an above average contribution (for this time of year) from Waitaki snow storage.[12]



Thermal fuels

The latest publicly[13] reported Huntly coal stockpile is 1,180 kT (as at 25 January), which is sufficient to produce ~2,380 GWh of electricity from the Rankine generators. This is enough coal to fuel a Rankine generator operating at full output for ~410 days (Rankine days). The approved Huntly Rankine arrangement[14] indicates the Huntly strategic reserve stockpile will initially be set at 600 kT and needs to be maintained at a target level ahead of each winter (600 kT is equivalent to ~1210 GWh which is the energy from one 240 MW Rankine at full capacity for ~210 days). This is in addition to an operational stockpile which Genesis will hold to support its customers which it has indicated would be between 350 and 550 kT.[15]

Ahuroa gas storage (AGS) is currently at 6.6PJ (as at 15 February), which is ~95% of full (~117 Rankine days or ~670 GWh of electricity generation).



[10] Represented as 50%-80% of normal.
[11] The pie-charts in the figure indicate the forecast probabilities with below normal represented as light blue, normal represented as blue and above normal shown as dark blue.
[12] As reported by Meridian on 16 February 2026 (Snow storage | Meridian Energy)
[13] The Authority has been publishing on its website aggregate information on thermal fuels to increase its transparency in the market. See Thermal fuel information | Electricity Authority
[14] See paragraph 91.5 here
[15] See here.

Diesel-fired generation is largely used to provide fast-start, flexible generation during peak load periods (i.e. peaking generation). As such, diesel-fired generators are not expected to run for extended periods of time. There was ~3.85ML of stored diesel available for electricity generation as at 25 January. This is equivalent to ~14 GWh or ~2.4 days of running a Rankine unit at full output.

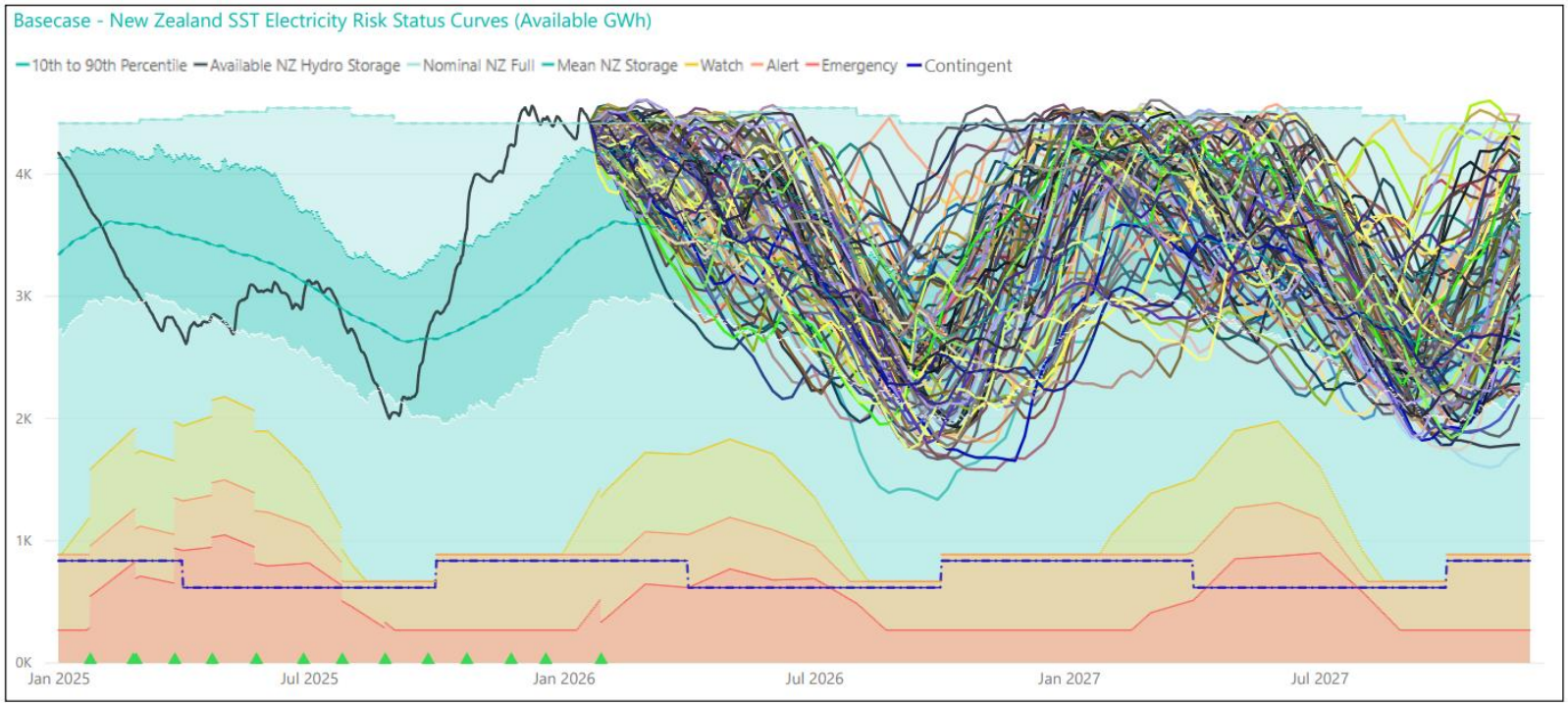
The government has recently announced the decision to go ahead with a liquified natural gas (LNG) facility which will increase the availability of thermal fuel on the system[16]. The details of this delivery are still being developed however our understanding is that a requirement is to provide 12PJ of gas over any 3-month period. In terms of availability of this fuel, we understand that if an acceptable accelerated delivery solution is received, it could be in place by late 2027 or early 2028. If there are no acceptable accelerated solutions then a delivery by 2029 could be pursued. Providing additional thermal back-up fuel provides greater insurance of fuel availability for electricity generation, especially considering the decline in domestic gas production. We note that this also places greater emphasis on the availability and reliability of thermal generators to convert this additional fuel to electricity to ensure sufficient electricity supply during dry years. Details on arrangements to integrate an LNG supplier into our security of supply frameworks and electricity market design efficiently and affordably are yet to become clear.[17]

[16] See Government says yes to liquefied natural gas | Ministry of Business, Innovation & Employment

[17] The government analysis indicates that this insurance will help reduce the dry-year risk premium currently built into contracts. In addition to providing fuel insurance for dry years, LNG could also be useful for the gas sector facing declining local gas supply.

Energy Security Outlook

Our latest Energy Security Outlook (ESO) update was published on 28 January.[18] It shows a low energy risk over the next 12 months with no SSTs crossing any of the risk curves.[19] This is a result of the increased coal stockpile, gas storage and hydro storage. The electricity risk curves (ERCs) and simulated storage trajectories (SSTs) reflect the availability of all three Huntly Rankine units, the exit of TCC, and the assumption that thermal fuels storage will be replenished at the physical capacity to do so during any extended dry period.



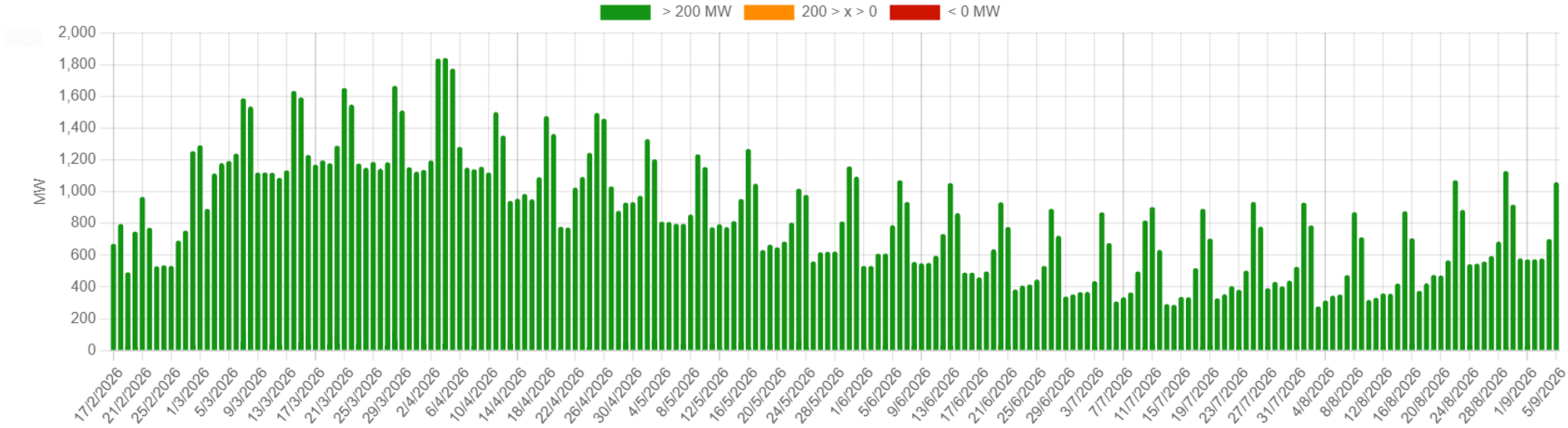
[18] The Energy Security Outlook (ERCs and SSTS) are published on our webpage and stakeholders can subscribe to be notified when updates are published: Energy security outlook | Transpower. The ERCs and SSTs use updated generator commissioning information so include the effect of delays discussed in the Supply Outlook section. Our Energy Security Outlook 101 provides more information.

[19] This assumes the market will procure sufficient thermal fuel if needed during periods of extended low hydro inflows.

Capacity outlook

The New Zealand Generation Balance (NZGB)[20] provides a forward assessment of the potential generation margins 200 days ahead based on a P90 forecast peak demand,[21] asset outage information provided by asset owners, and considering different generation availability and demand scenarios. The figures below show NZGB margins for two scenarios as at 17 February. The scenarios are described before each figure.

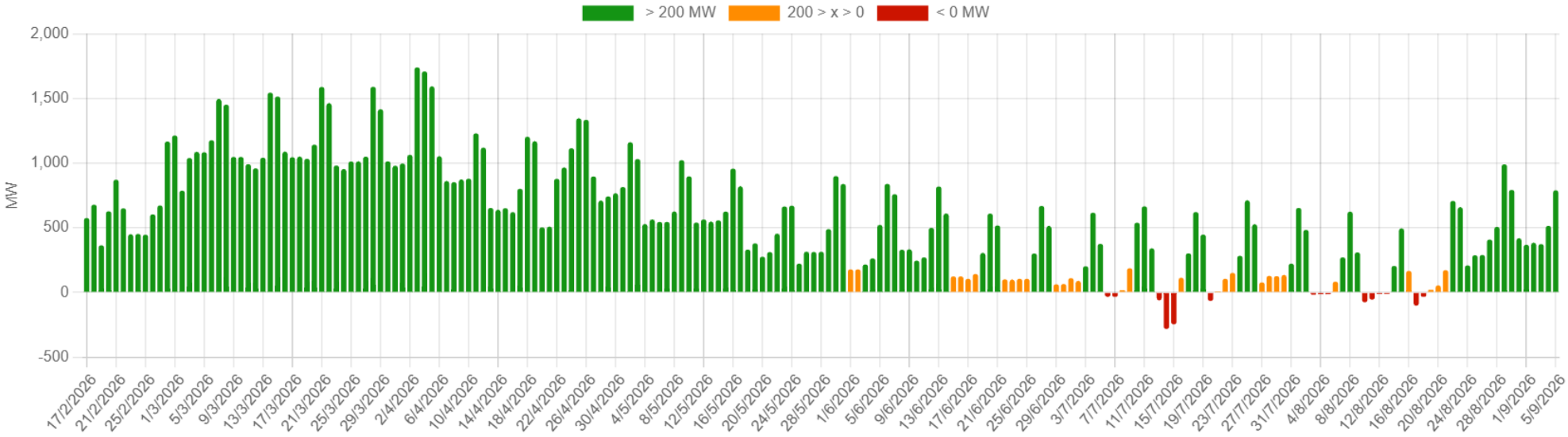
The NZGB scenario below is where all generation not planned to be on outage is available during peak load periods (based on a P90 load forecast and covering the "N-1" risk).[22] Based on current information the forecast residual generation margins over the 200 days to early September 2026 is likely to be sufficient to cover peak national demand assuming the market co-ordinates the available generation and commits sufficient generation capacity during peak load periods.



Our NZGB tool allows participants to assess the impact on the power system's capacity to meet peak demand should downside risks be realised (for example unplanned outages, commitment of fewer slower-start thermal generators, different levels of forecast demand), as

[20] See here Customer Portal - NZGB (transpower.co.nz)
[21] A P90 load forecast represents the 90th percentile load that we could expect to see on any given day.
[22] Running the system to cover "N-1" risk is normal market operation. The market is cleared to supply the demand and the reserve requirements (largest contingent event risk on the system).

outlined in the scenario below. This example considers a scenario if there were an unplanned outage of the largest risk[23] and high demand[24] (as would be expected during a severe cold snap). There is likely to be sufficient capacity heading into winter (green) however capacity margins tighten during winter when loads increase as shown by the orange and red bars. Shifting generator outages can help reduce these risks during high winter peak load periods.



While energy was a key challenge in 2024 and 2025, peak capacity risks are ever-present and will become more acute if there are unplanned outages and/or colder weather. Capacity risks will persist until there is sufficient investment in flexible resources such as BESS, demand response and peaking generation.

The Ruakākā BESS is now operational and the Glenbrook BESS is expected online in Q1 2026. Genesis is also exploring potential for additional fast-start generation capacity at its Huntly power station, which if progressed will increase the flexibility of the generation fleet.[25] These investments will help meet the system need for firm, fast-start and flexible supply, as would other BESS investments currently signalled in the supply pipeline.

[23] Large generator or HVDC pole
[24] Represented as the P99 load.
[25] See Genesis exploring new generation plant for Huntly site | Genesis NZ

System Operator planning for winter 2026

The System Operator has been and is continuing to work on multiple initiatives for better managing upcoming security risks. These include:

- In December 2025 we published a System Operator thought piece on supporting resource adequacy.[26] The paper presents independent analysis by John Culy Consulting and discusses the importance and challenges of resource adequacy in our islanded, energy-constrained power system with changing risks, economics and expectations and the role contingent storage currently plays and the trade-offs in easing access to it. Complete.
- In December we also submitted our final SOSFIP amendment proposal to the Electricity Authority.[27] Key proposed amendments include improved forecasting tools, enhanced risk communication, updated contingent storage buffer settings, and expanded system risk considerations. Stakeholders broadly supported the draft proposed amendments we consulted on, emphasising the importance of clarity, transparency, and timely information. We currently await the Electricity Authority Board's decision on whether to approve our proposed SOSFIP amendment, which it planned to make at its meeting in February. If approved, the amendments are set to be implemented before winter 2026. In progress.
- Engaging with key hydro generators, particularly those with contingent storage arrangements, to ensure our assumptions about operational constraints due to low lake levels remain correct. Ongoing
- Continuing our work to implement the new System Operator Rolling Outage Policy (SOROP) before winter 2026. Complete
- In late 2025 we completed 2 stages of stakeholder engagement to inform SOSA 2026: consultation on the Reference Case Assumptions and Sensitivities, and the confidential generator survey that informs the supply pipeline assumptions. Our response to the feedback we received to the Assumptions consultation was published in early February. We are now working to complete our analysis ahead of consulting on the draft SOSA 2026 report from April. The final SOSA 2026 report and supporting information will be published by 30 June. In progress
- On 1 October 2025 the Government announced its decisions following the 2025 review of the New Zealand electricity system.[28] These include a decision to "work with Transpower, as the System Operator, to ensure their security-of-supply assessments are fit for purpose

[26] System Operator - Resource Adequacy - Dec2025.pdf
[27] Invitation To Comment: SOSFIP Consultation 2025 - Draft amendment proposal (Closed) | Transpower
[28] Securing New Zealand's energy future | Beehive.govt.nz

for our evolving energy system."[29] We will continue to work with MBIE to support its implementation of the review recommendations. In progress

- The Electricity Authority has decided to establish an Emergency Reserve Scheme (ERS) as an ancillary service in the electricity market. The proposed ERS aims to enhance the reliability of New Zealand's electricity system by providing an additional tool for the System Operator to use in periods of acute system stress to help manage critical supply shortfalls over short periods of time. We have started development work on ERS with the Electricity Authority. In progress

[29] Ministerial Services briefing template