



Market Operations Weekly Report - Week Ended 11 October 2026

Overview

National hydro storage has declined to below the 90th percentile from 130% to 121% of the historic mean for this time of year but remains healthy and above average. While solar generation did not break another record last week (compared to the pattern in recent weeks), it remains high at 21 GWh, or 2.7% of the generation mix.

In this week's insight we provide an overview of NZGB and its importance in securing supply in the medium-term forecast.

Security of Supply Energy

National hydro storage decreased to 121% of the historic mean from 130% the week prior with low inflows and high hydro generation. South Island storage decreased from 139% to 129% and North Island storage decreased from 77% to 74%.

Capacity

Residual generation was mostly healthy last week, but we had a morning tight spot of 287 MW when low wind coincided with relatively high demand and the beginning of a geothermal station outage on Monday 5 October.

The N-1-G margins in the NZGB forecast continue to increase with healthy levels through to early December. Within seven days we monitor these more closely through the market schedules. The latest NZGB report is available on the [NZGB website](#).

Electricity Market Commentary

Weekly Demand

Total demand decreased last week to 755 GWh from 780 GWh the week prior with warmer temperatures coming to New Zealand. The highest demand peak occurred at 8:00 am on Monday 5 October at 5,787 MW.

Weekly Prices

Wholesale electricity spot prices increased last week with the average Ōtāhuhu price up at \$60/MWh from \$35/MWh the previous week. Prices peaked at \$233/MWh at 8:00 pm on Monday 5 October.

Some periods of inter-island energy and reserve price separation occurred during the week with high HVDC transfer.

Generation Mix

Solar generation continues to remain high as we move closer to summer at 2.7% of the generation mix. Wind generation is below average at 7.5% and geothermal is below average at 22% with the beginning of a full station outage. Hydro remains above average at 65% of the mix.

HVDC

HVDC flows last week were entirely northward. In total 136 GWh was transferred north.

Consultations

Today we have released our [TSO:DSO coordination: operations requirements paper](#). This discussion paper seeks feedback on proposed foundational operating arrangements between the transmission system operator (TSO) and distribution system operators (DSOs).

Please send your feedback by email to system.operator@transpower.co.nz by 5pm on Friday 6 November 2026.

New Zealand Energy Risk

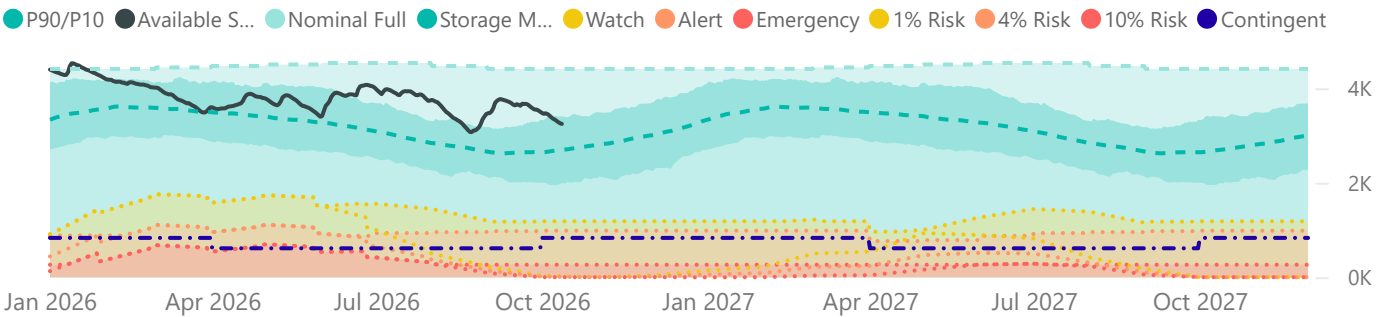


South Island Energy Risk

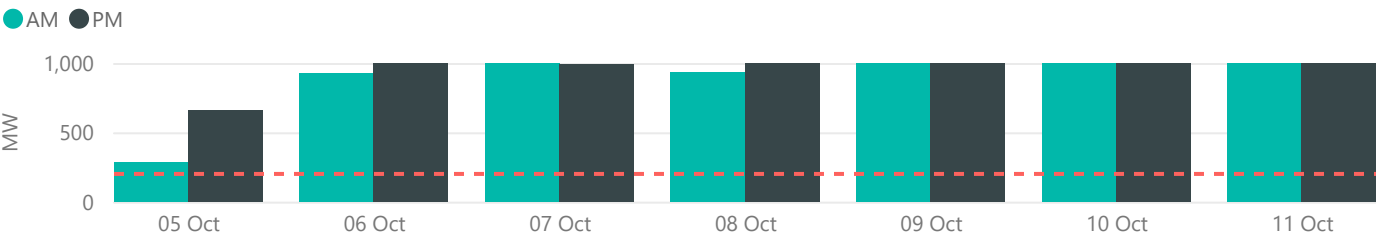


Normal Watch Alert Emergency

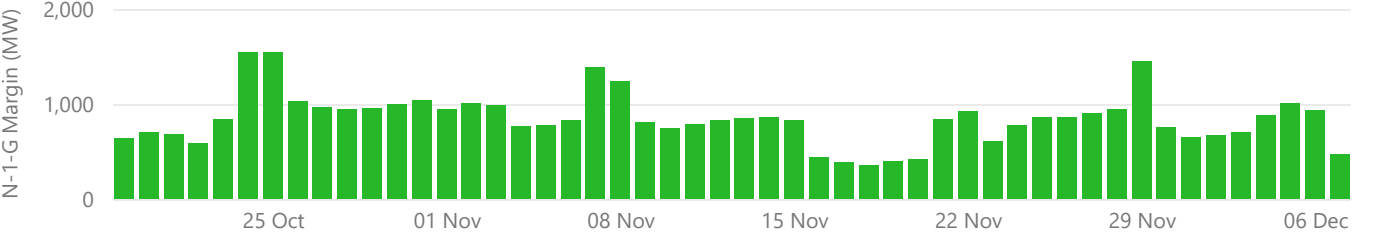
New Zealand Electricity Risk Status Curves (Available GWh)



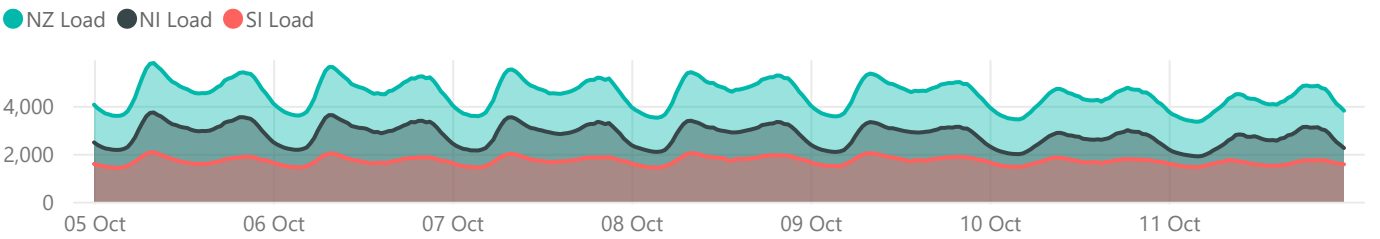
Lowest Residual Points - MW



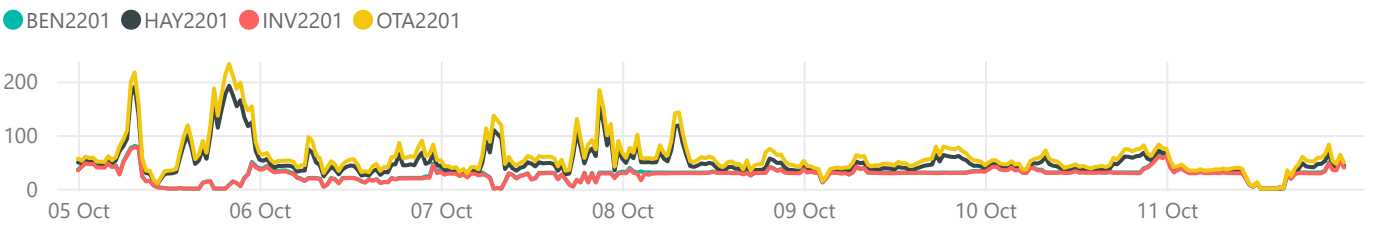
NZGB Look-Ahead (excluding next 7 days)



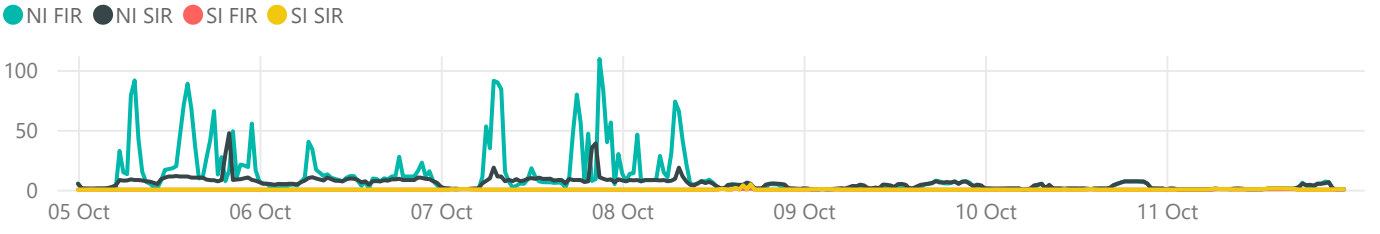
National Demand by Trading period - MW



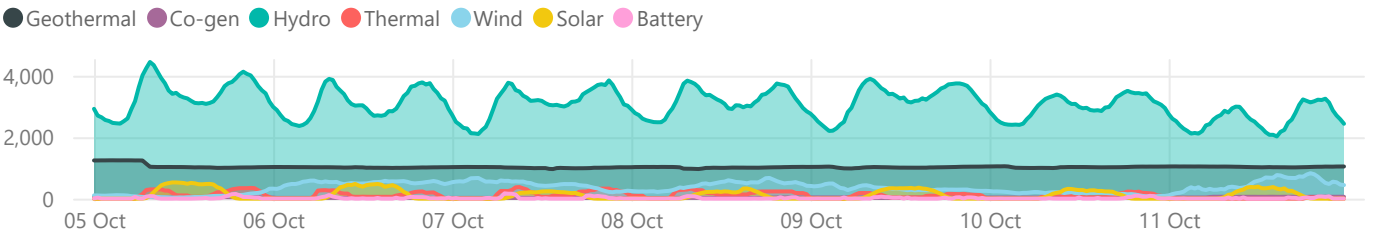
Energy Prices - \$/MWh



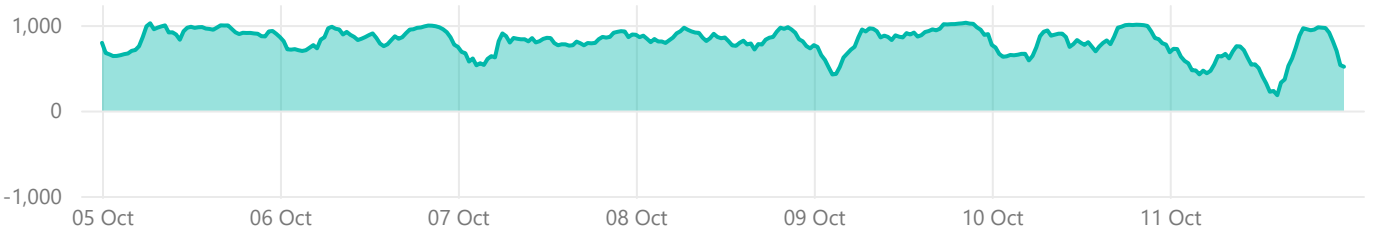
Reserve Prices - \$/MW

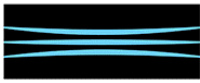


Generation - MW



Net HVDC Transfer - MW (Northward positive)





Weekly Insight - NZGB and security of supply

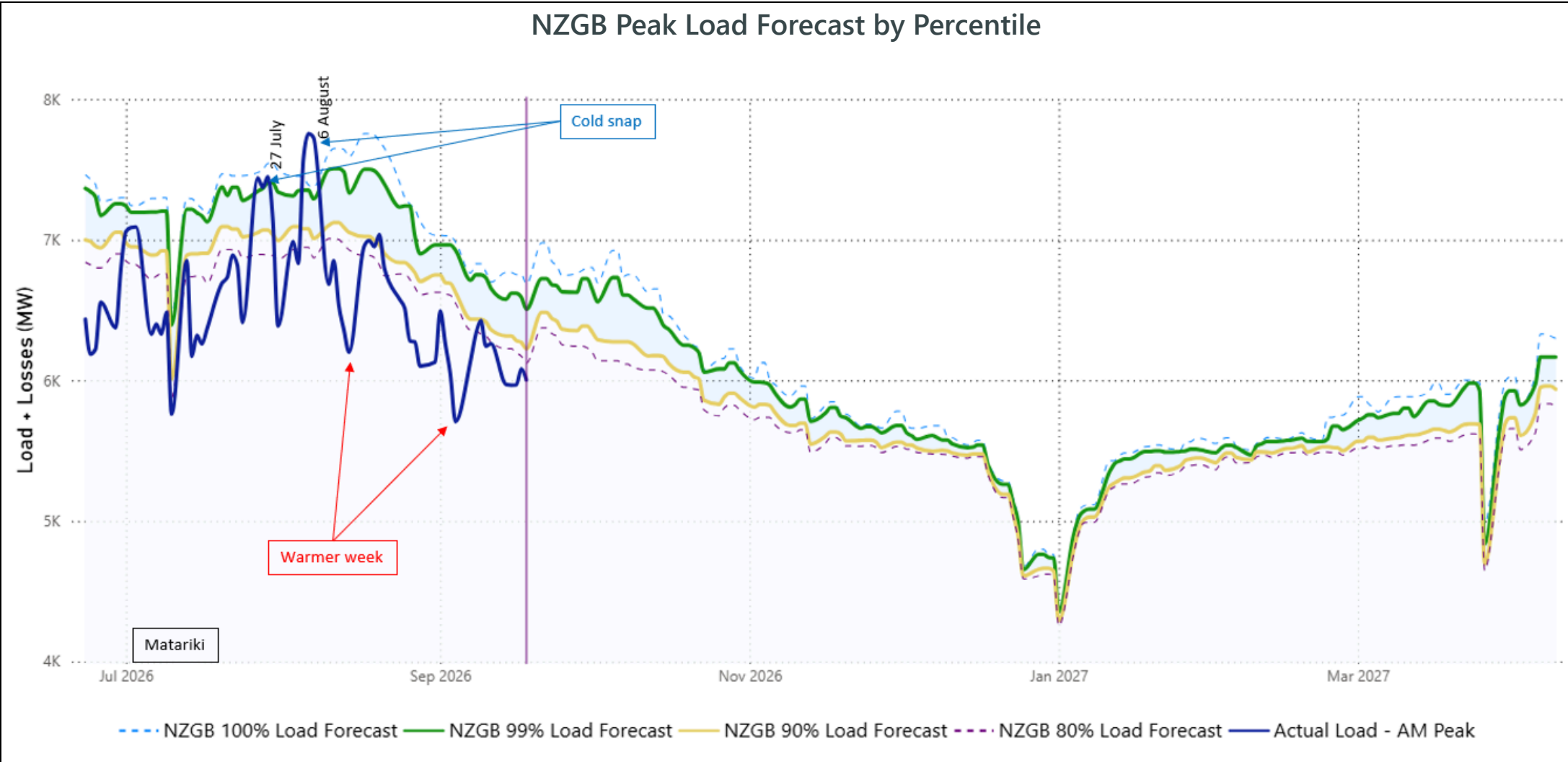
In this week's insight we take a look at how the New Zealand Generation Balance (NZGB) is calculated and why it matters for security of supply.

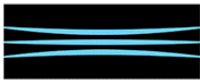
NZGB is a tool used by the System Operator to assess whether there is sufficient generation capacity nationally to meet peak demand and reserve requirements over the next 200 days. NZGB is a critical tool for risk assessment and planning as it helps to identify a tight balance of supply and demand and potential shortfalls. The main NZGB components are the supply and contingency scenarios, available generation capacity, and the load forecast.

The NZGB has two supply scenarios (base and firm) which are used to determine where the risk of generation availability lies. For generation other than intermittent generation and batteries, the base scenario measures best-case generation availability and assumes that all generation not on outage will be available to operate at its peak Maximum Continuous Operation (MCO) value. In contrast, the firm scenario measures the worst-case supply availability scenario. As with the base scenario, it assumes generation not on outage will be available to operate at its MCO value. The firm capacity scenario accounts for generation that is typically always offered in the market at that time of year. Also, it assumes that one Huntly Rankine unit will not be available over winter months and two Huntly Rankine units will not be available over summer months.

The N-1-G contingency scenario means supply will still be sufficient at peak demand if two things were to happen: a large generator or HVDC pole was to unexpectedly become unavailable, AND another large generator failed or became unavailable. Under the more conservative N-1 contingency scenario, supply will only still be sufficient with the loss of one asset. The NZGB also takes account of outages. The available generation capacity removes generation on outage or constrained by a transmission outage as notified by asset owners and the Grid Owner via the Planned Outage Coordination Process (POCP) tool.

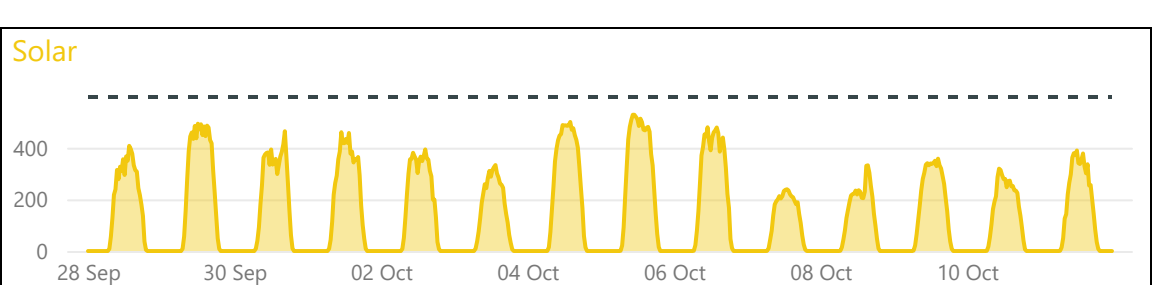
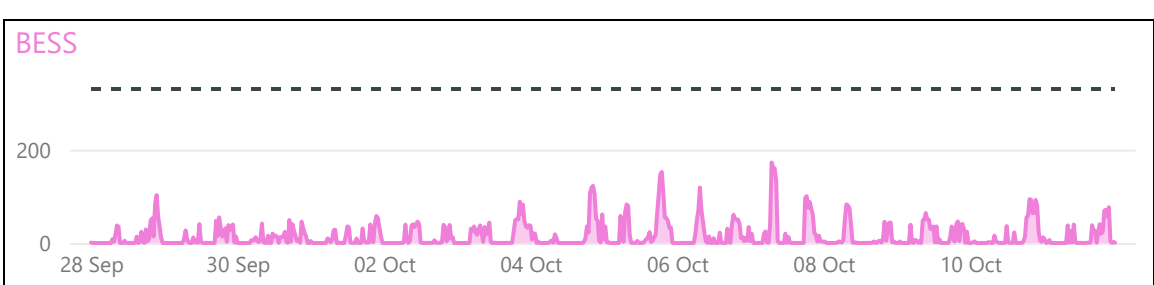
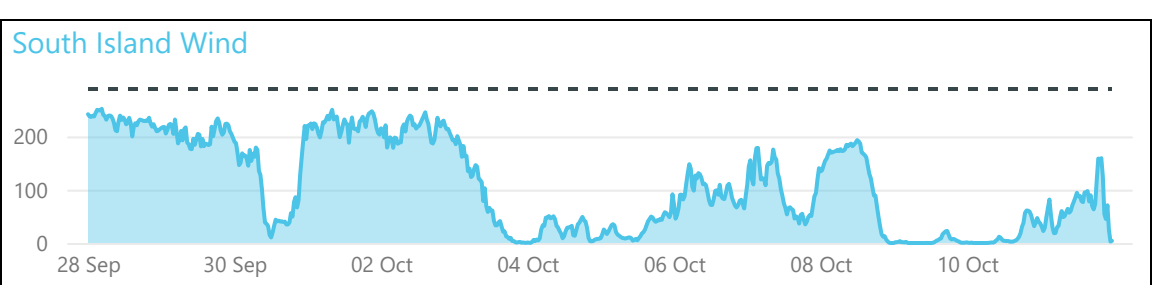
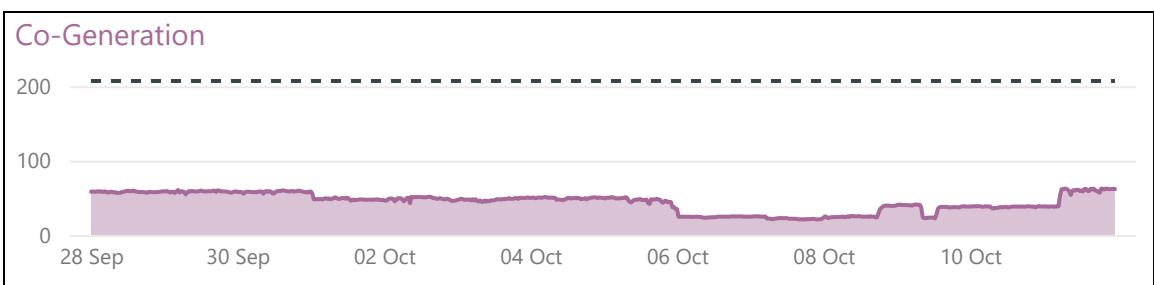
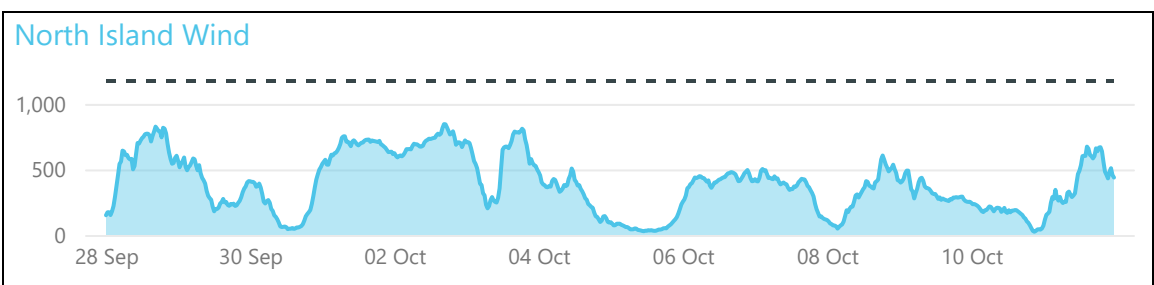
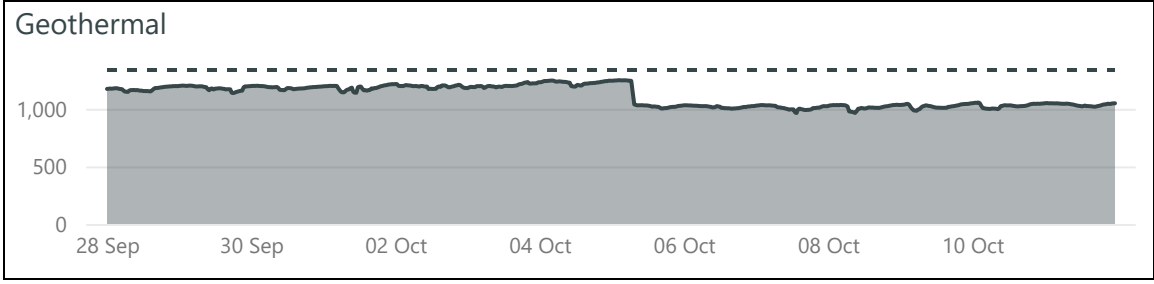
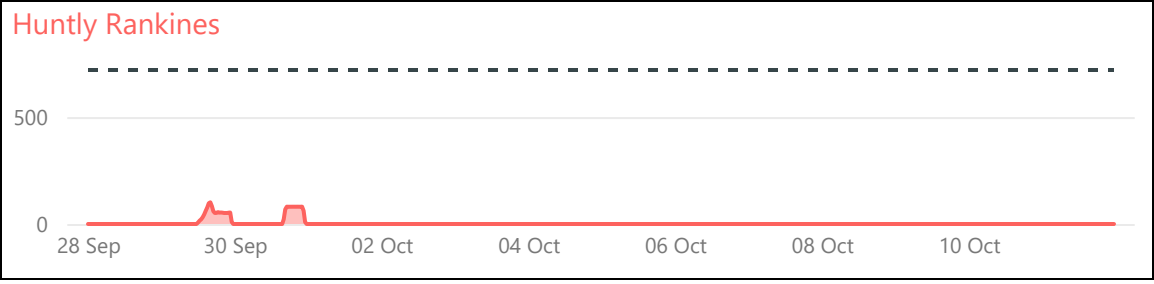
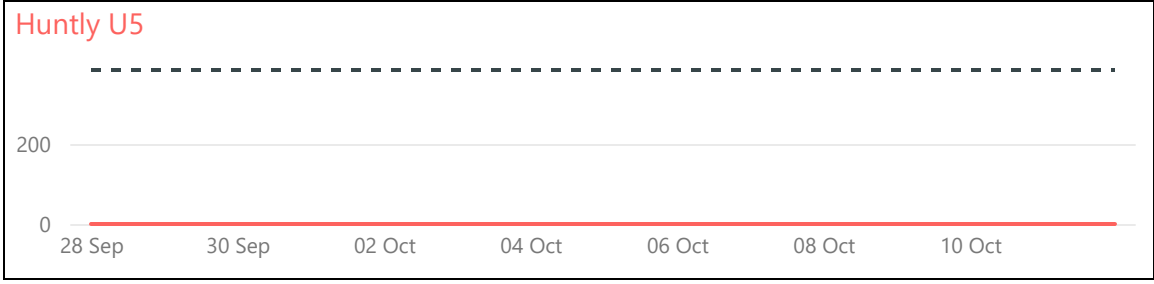
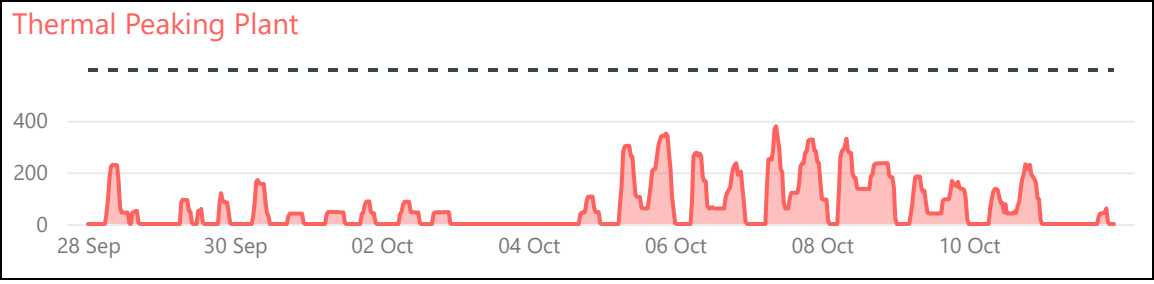
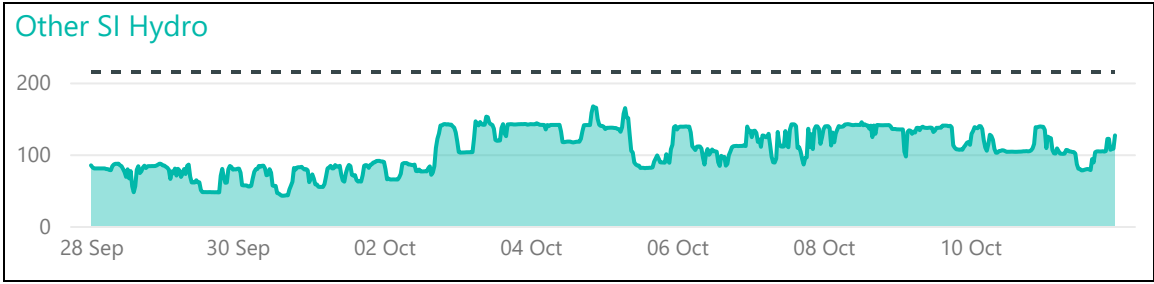
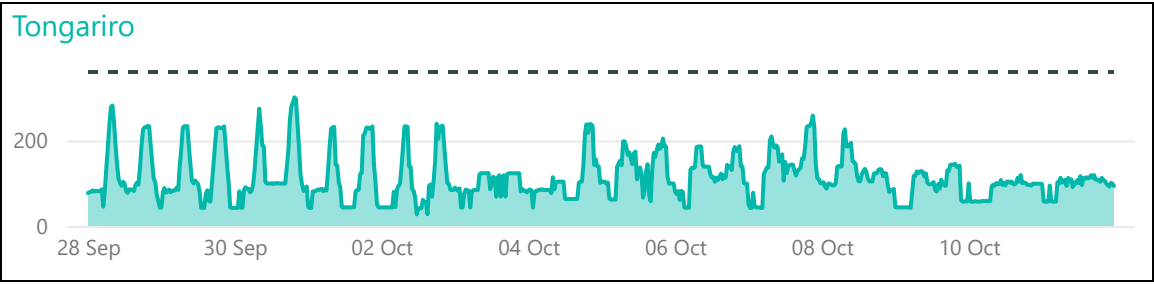
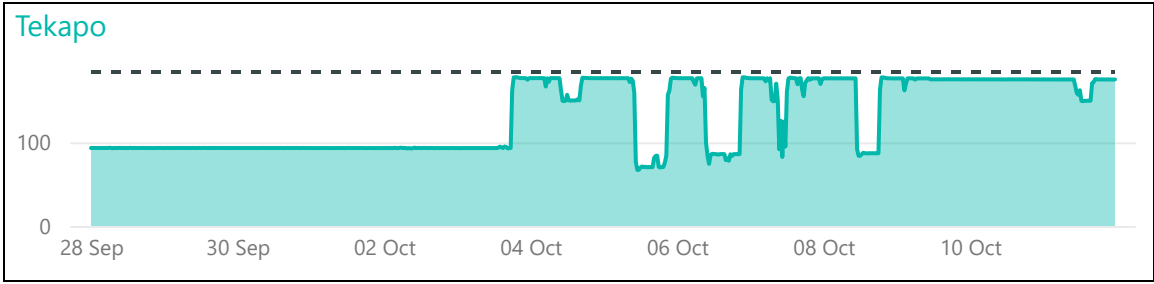
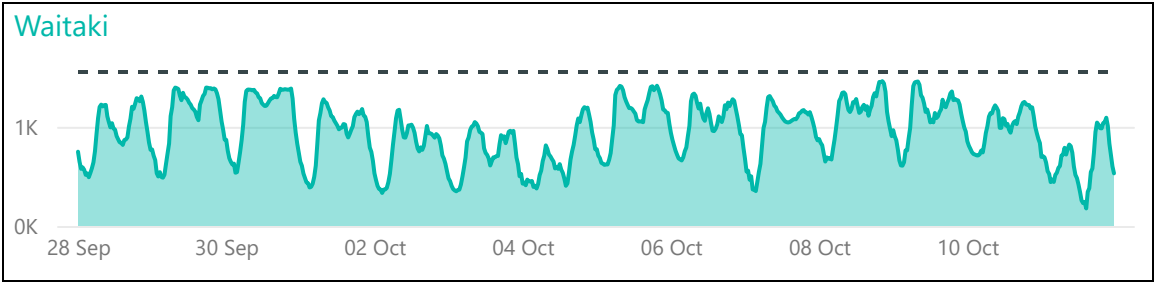
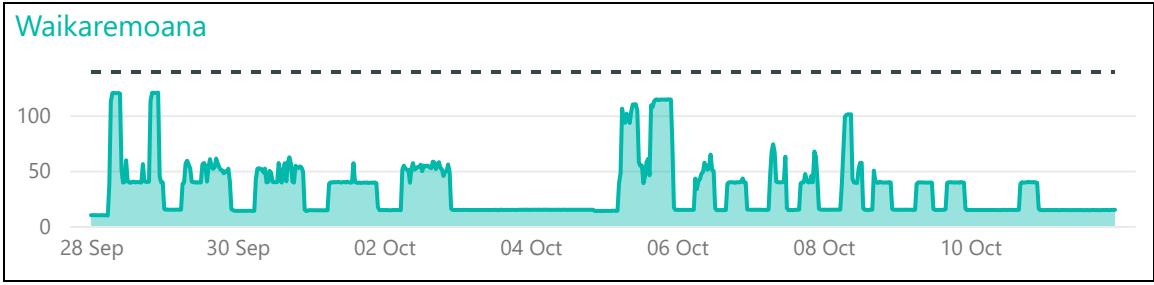
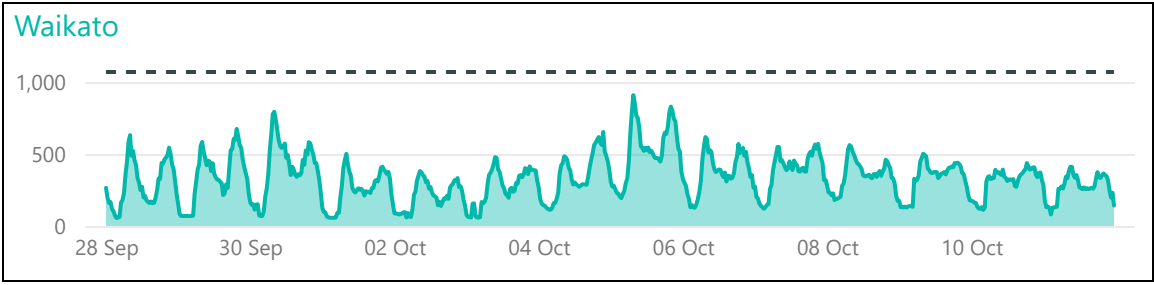
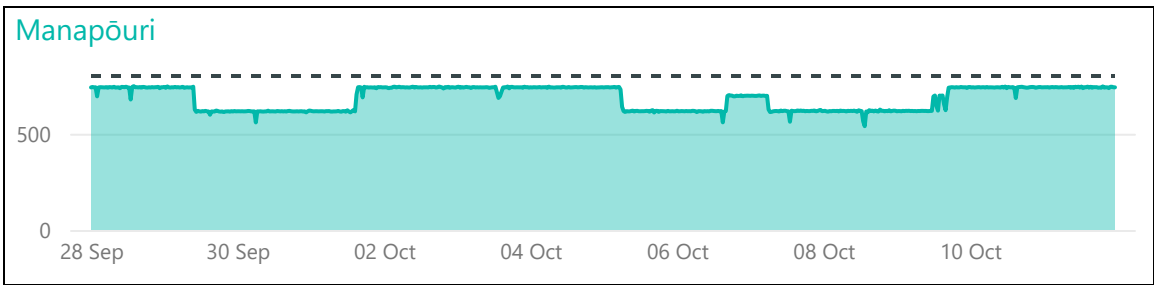
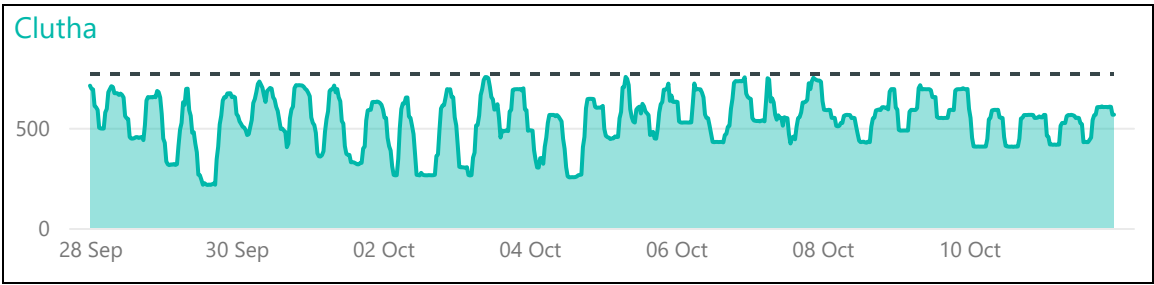
The inputs and methodologies go into the final adjustment after considering the load forecast. The System Operator's load forecast supplier, Yes Energy, provides a weather-based percentile forecast that is used as the base risk in NZGB. The NZGB forecast considers the 80th, 90th, 99th and 100th percentiles, but uses the 90th percentile as its baseline. The 90th percentile weather risk forecast combined with the base generation scenario is used as the trigger for NZGB assessments and CANs. These CANs are to coordinate the industry's response to tight electricity supply situations in the medium term. Although these percentiles seem high and reasonably unlikely, the evolving power system and New Zealand's changeable weather means we need to be prepared for these scenarios unfolding. We managed exactly these types of events in the weeks of 6 August 2026 and 27 July 2026. For more information, see the [latest NZGB report](#).

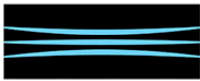




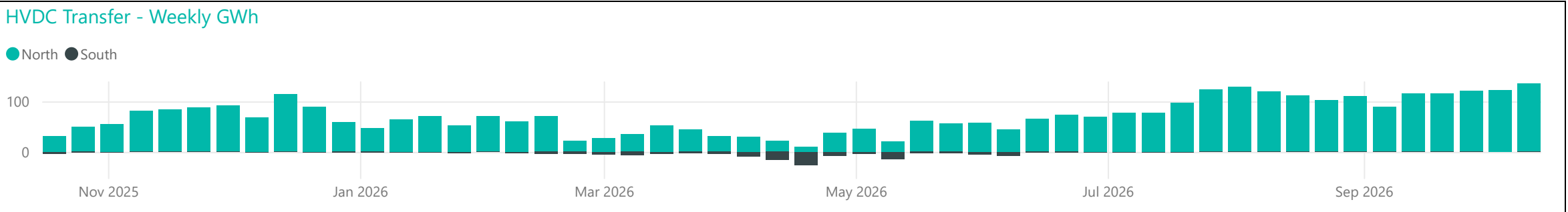
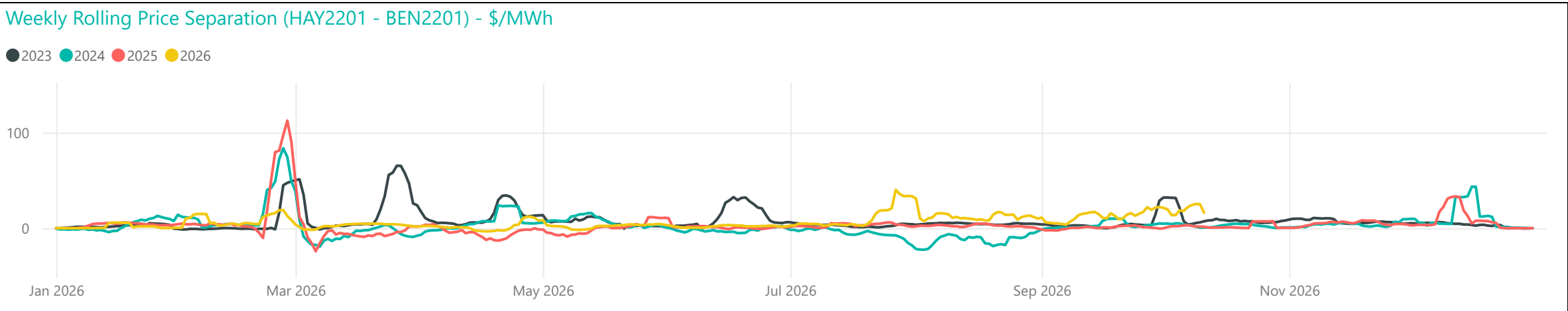
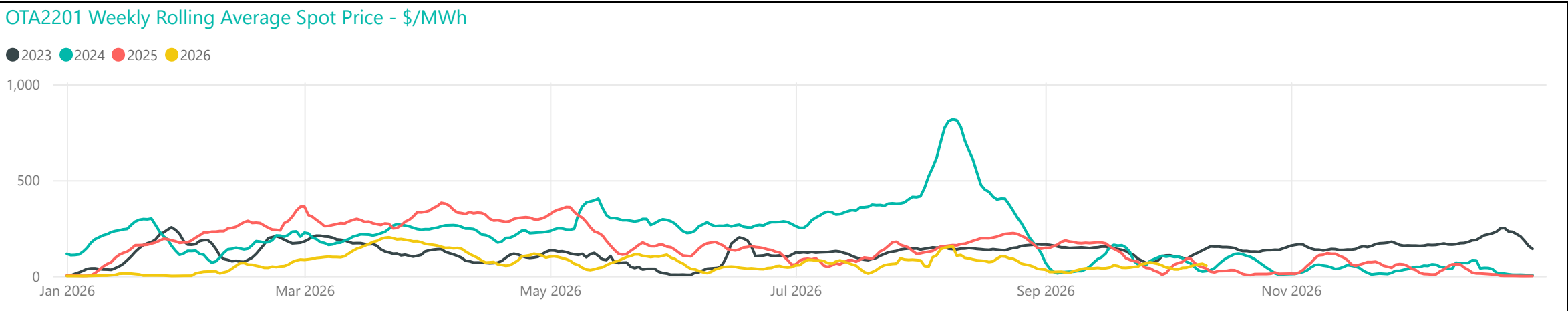
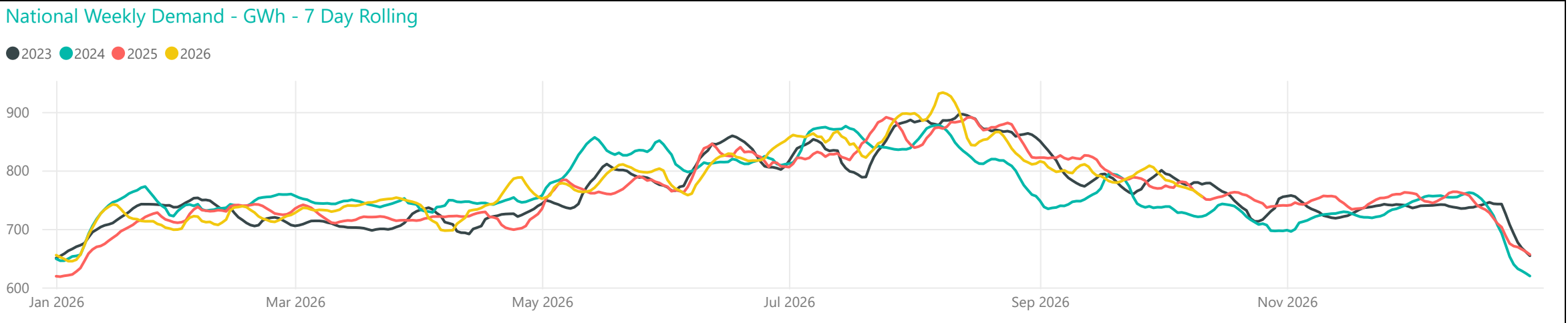
Generation Breakdown - Last Two Weeks

Measured in MW and displayed at trading period level for last 14 days

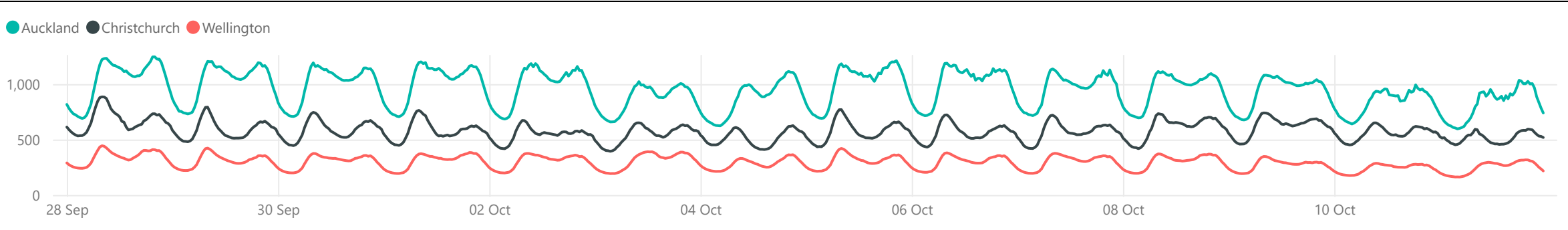




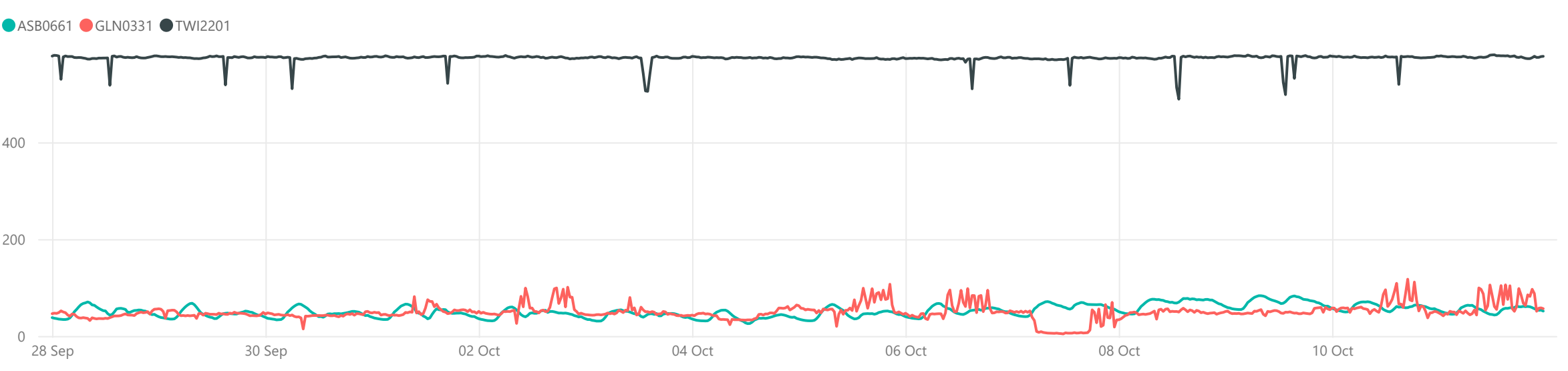
Weekly Profiles



Conforming Load Profiles - Last Two Weeks *Measured in MW shown by region*

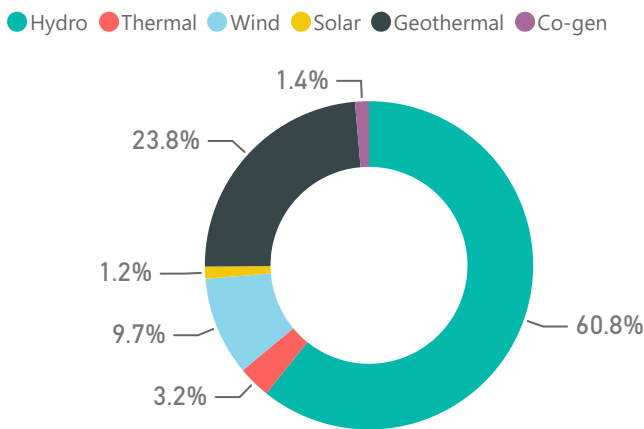


Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*

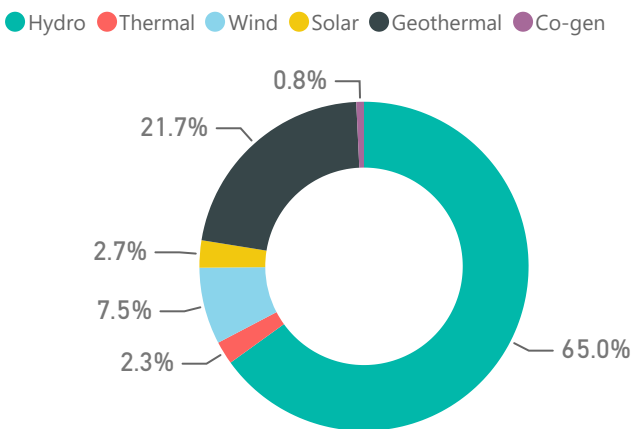


Generation Mix

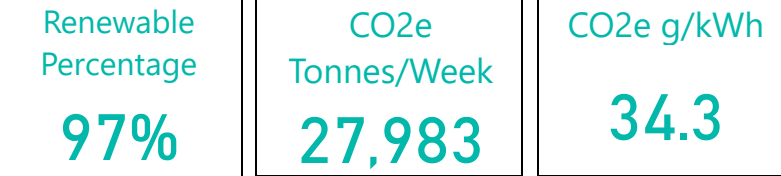
Last 52 Weeks Generation Mix - Weekly GWh



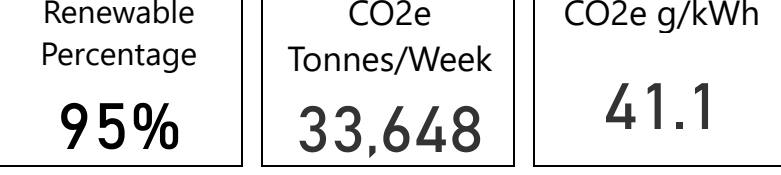
Last 7 Days Generation Mix - Weekly GWh



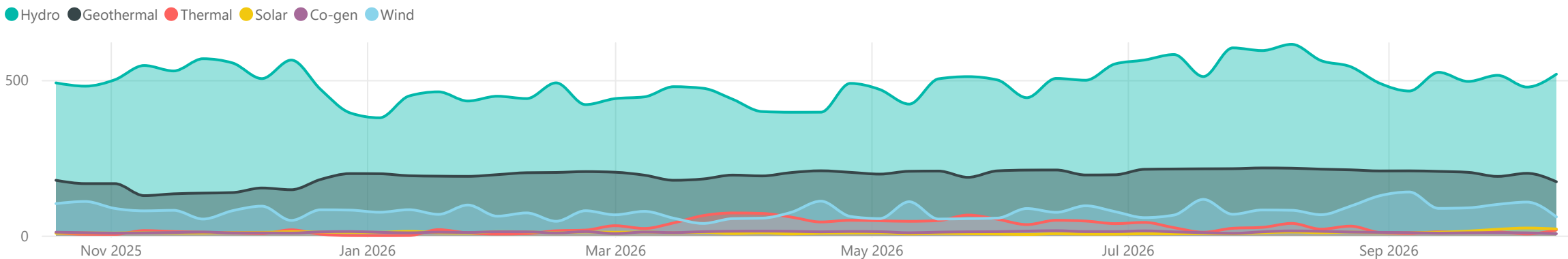
Average Metrics Last 7 Days



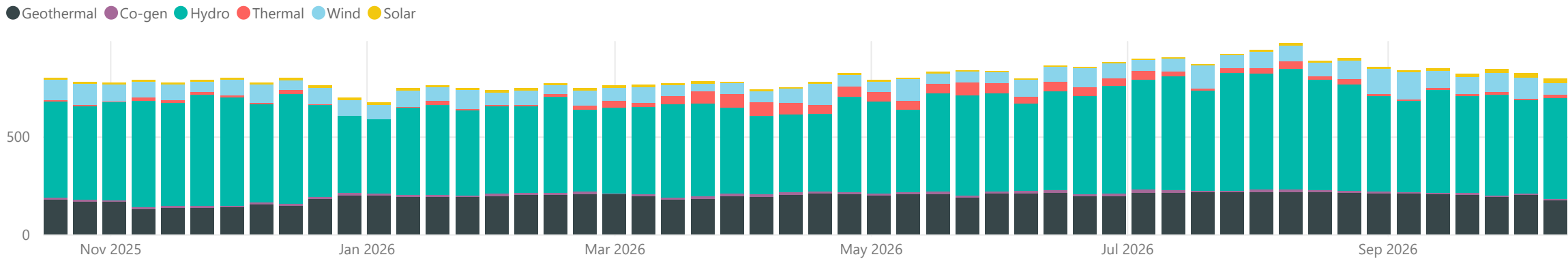
Average Metrics Last 52 Weeks



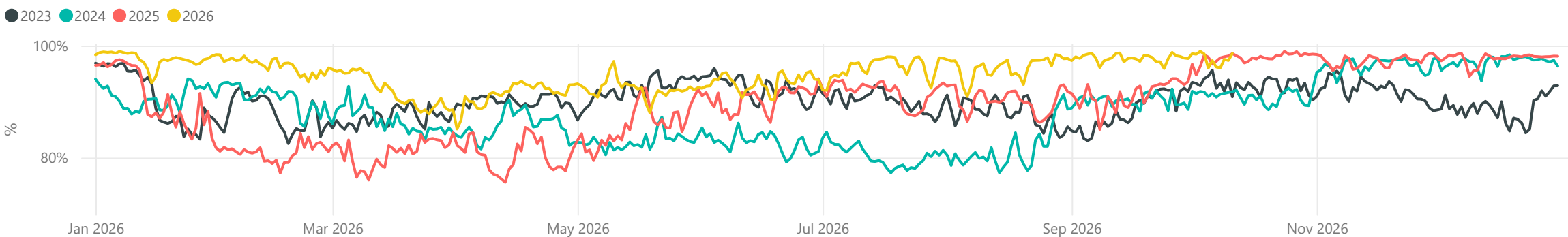
Weekly Generation Mix - GWh



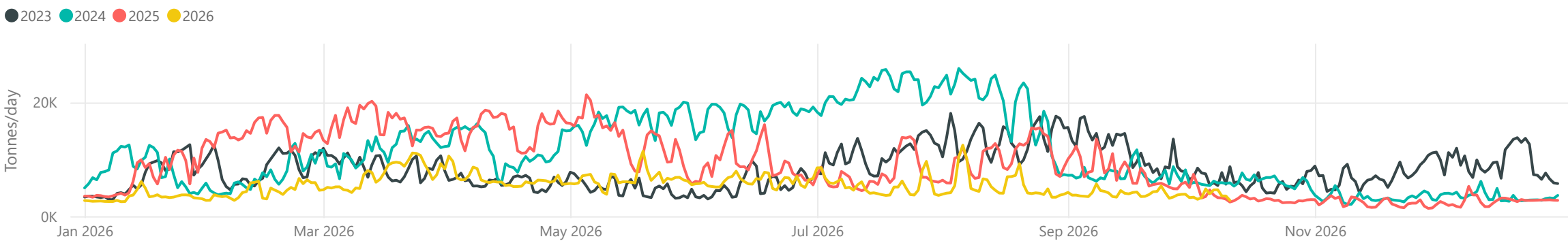
Weekly Generation Mix - GWh



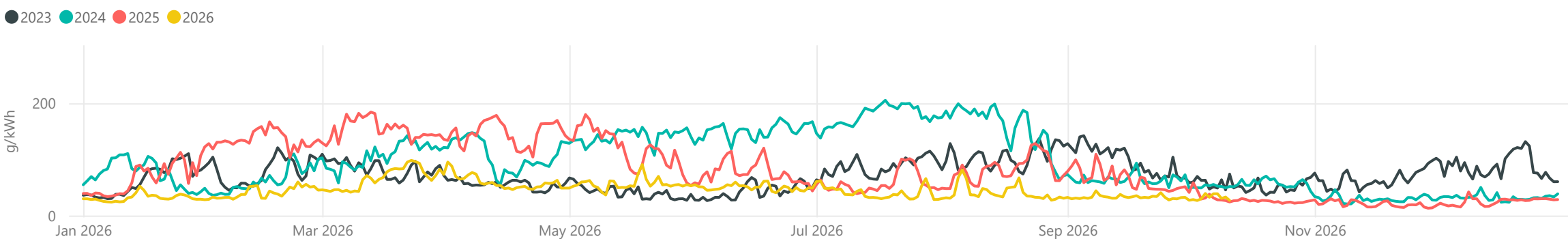
NZ Renewable Percentage

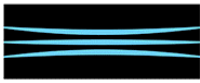


CO2 Tonnes/Day

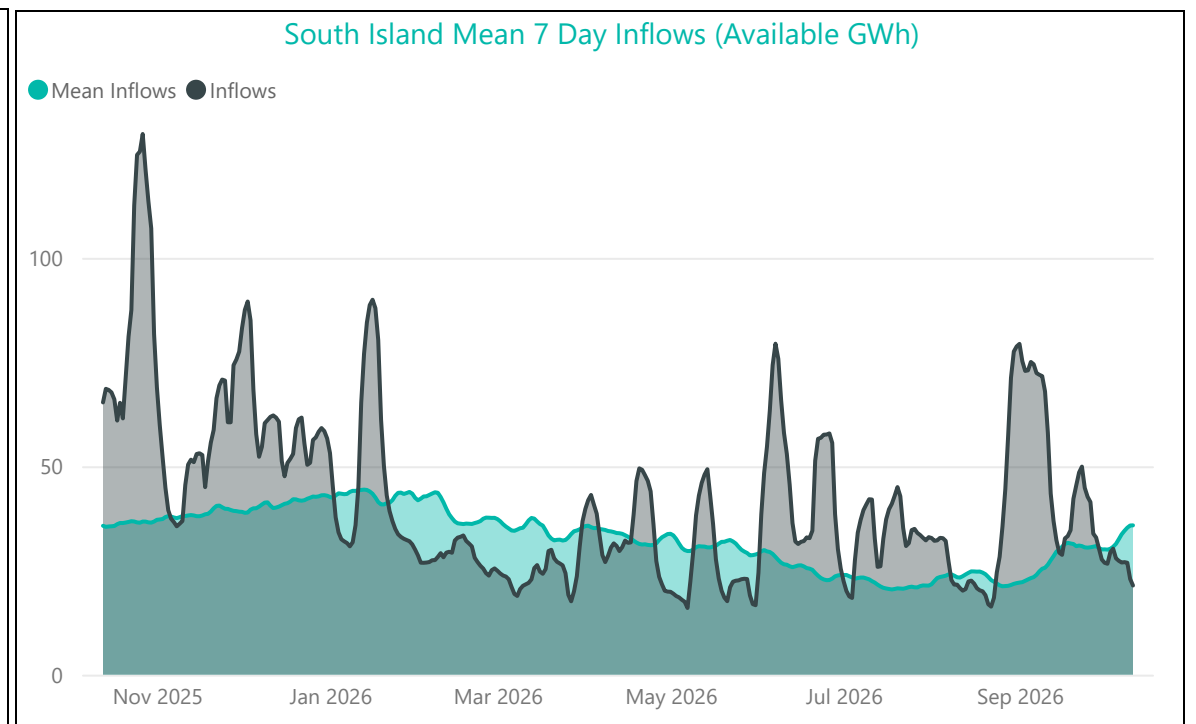
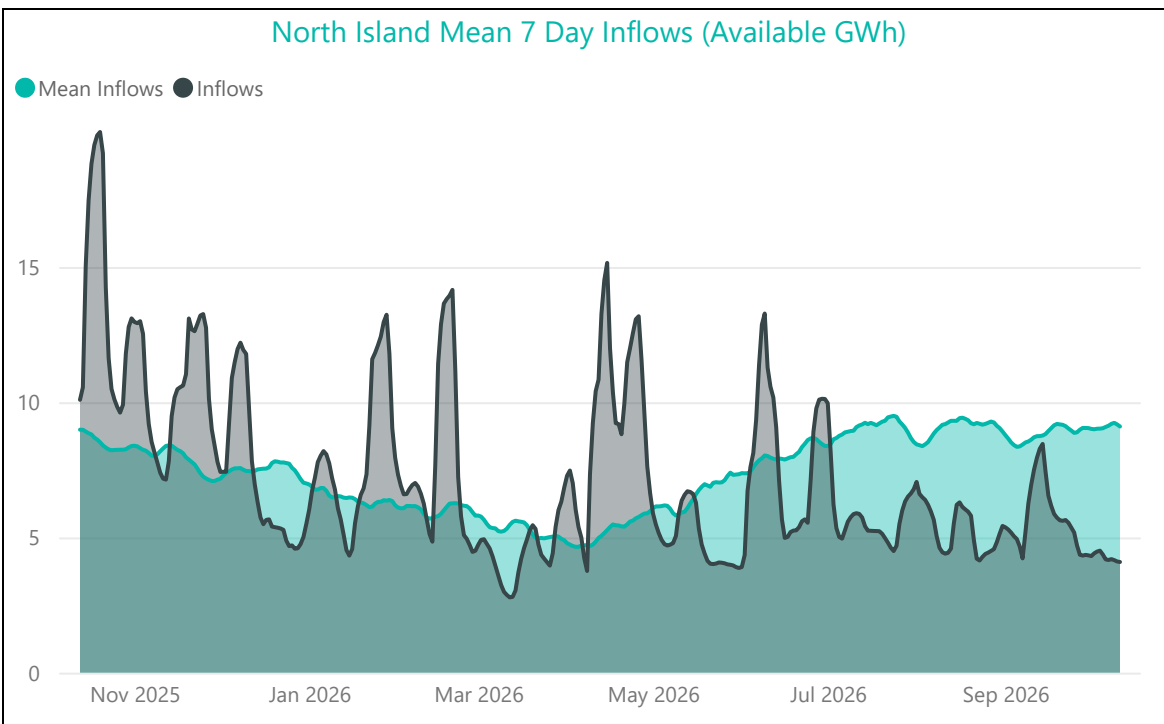
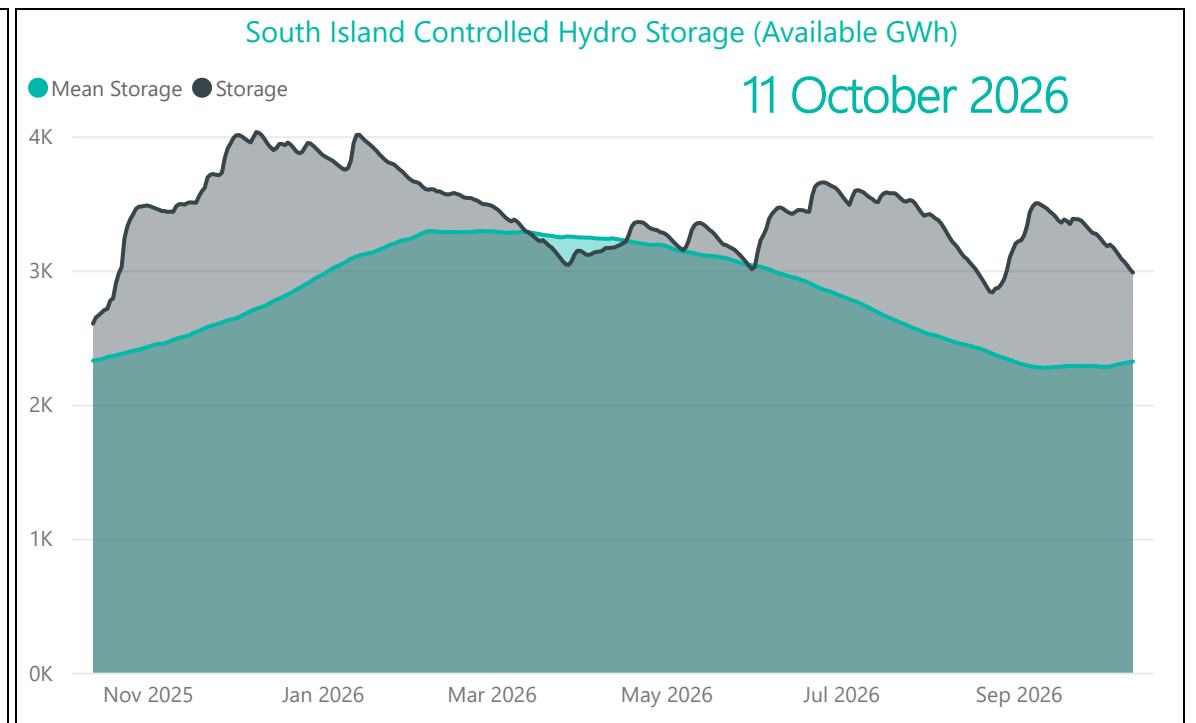
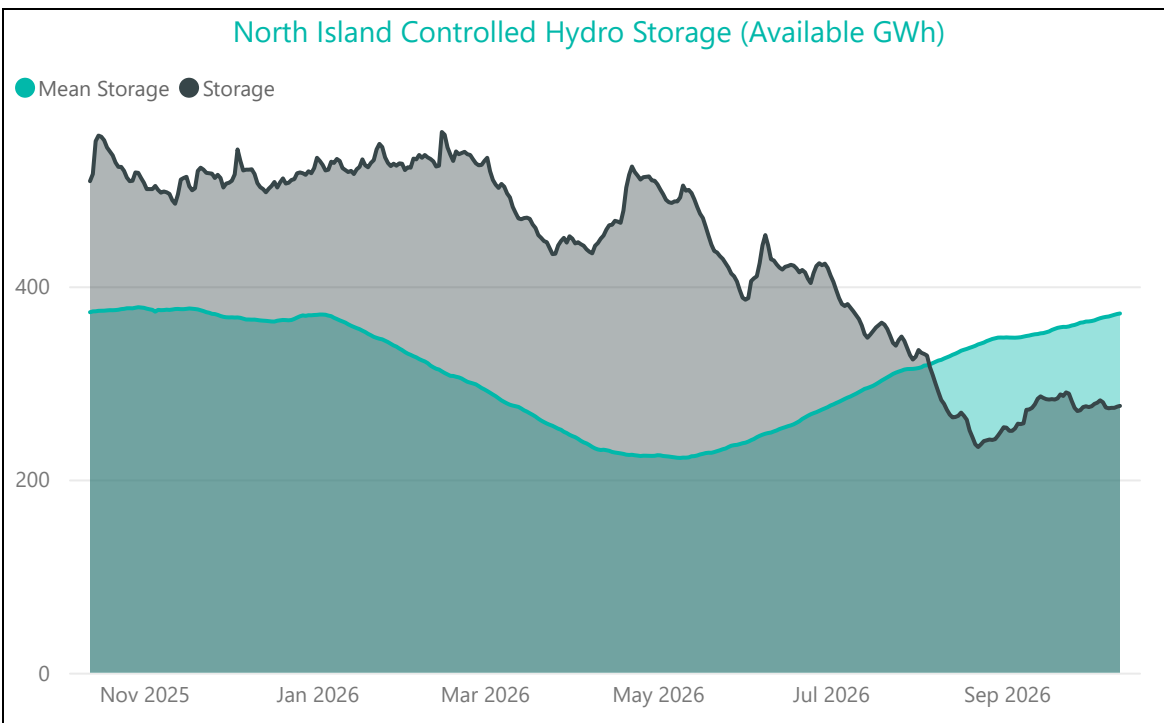
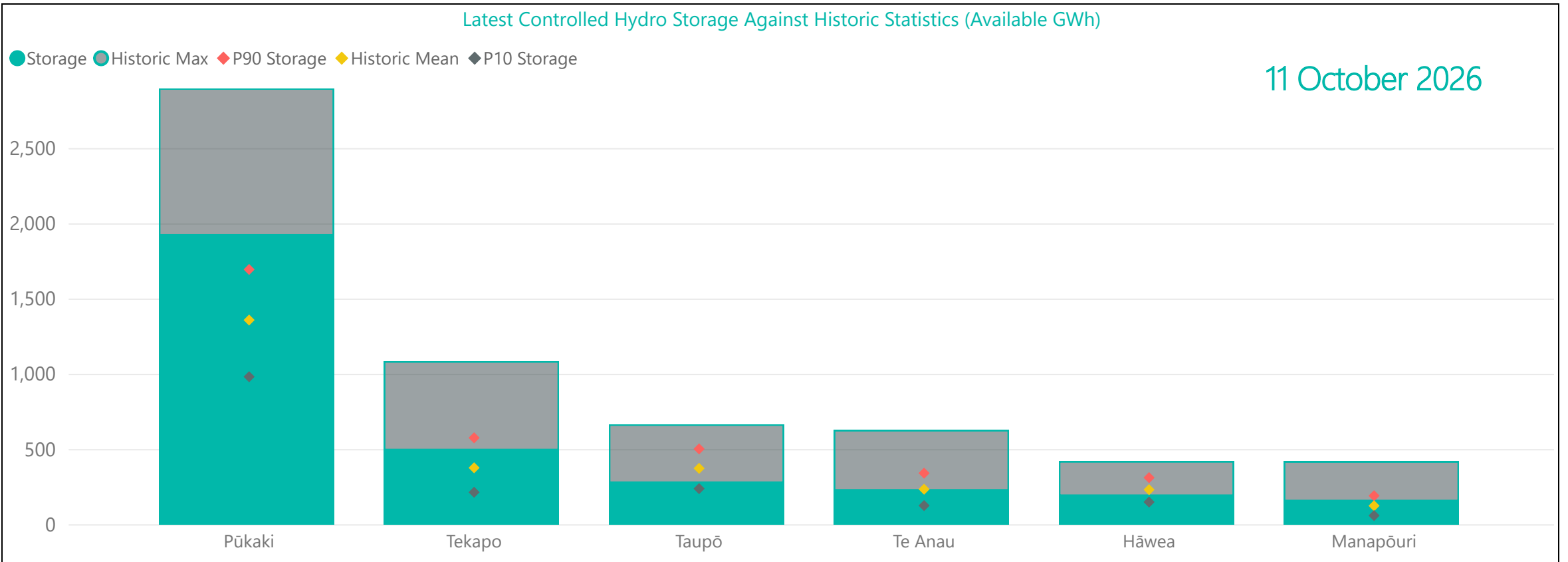


Average CO2 g/kWh





Hydro Storage



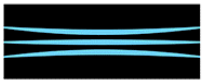
For further information on security of supply and Transpower's responsibilities as the System Operator, refer to our webpage here: <https://www.transpower.co.nz/system-operator/security-supply>.

For any inquiries related to security of supply contact market.operations@transpower.co.nz

Hydro data used in this report is sourced from [NZX Hydro](https://www.nzx.co.nz/hydro).

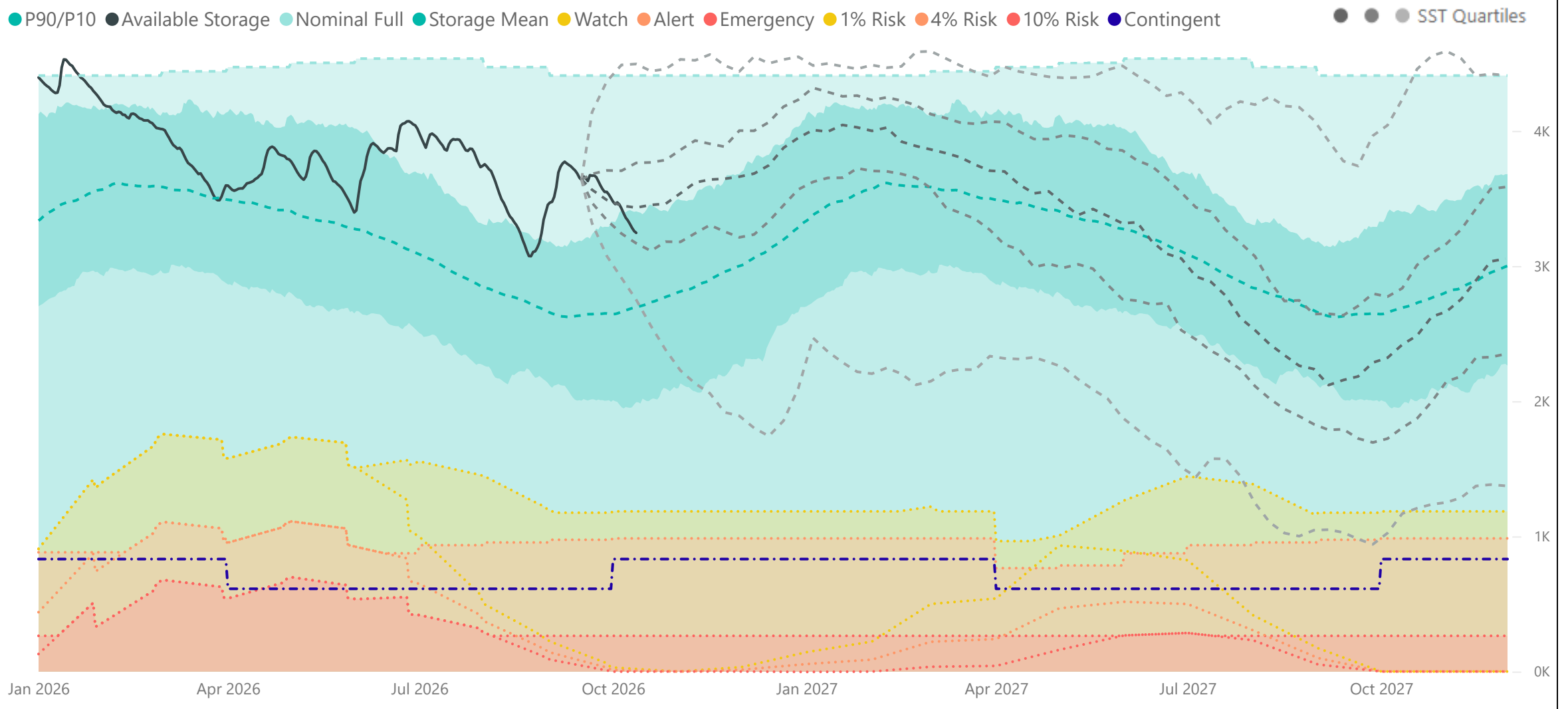
Electricity risk curves have been developed for the purposes of reflecting the risk of extended energy shortages in a straightforward way, using a standardised set of assumptions.

Further information on the methodology of modelling electricity risk curves may be found here: <https://www.transpower.co.nz/system-operator/security-supply/hydro-risk-curves-explanation>

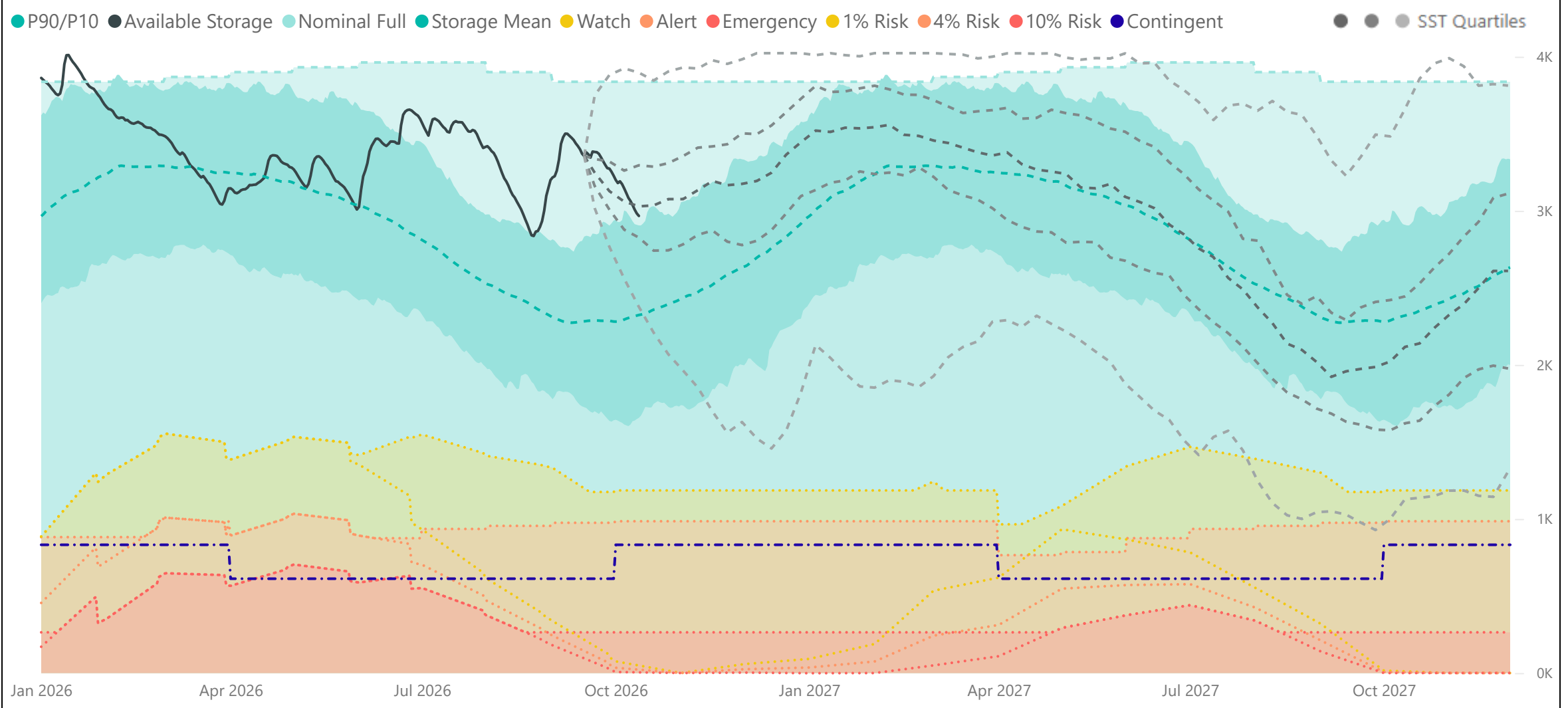


Electricity Risk Curves

New Zealand Electricity Risk Status Curves (Available GWh)



South Island Electricity Risk Status Curves (Available GWh)



Electricity Risk Curve Explanation:

Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop

Alert Curve - The maximum of the four percent risk curve and the floor and buffer

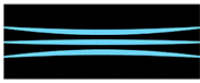
Emergency Curve - The maximum of the 10 percent risk curve and the floor and buffer

Official Conservation Campaign Start - The Emergency Curve

Official Conservation Campaign Stop - The maximum of the eight percent risk curve and the floor and buffer

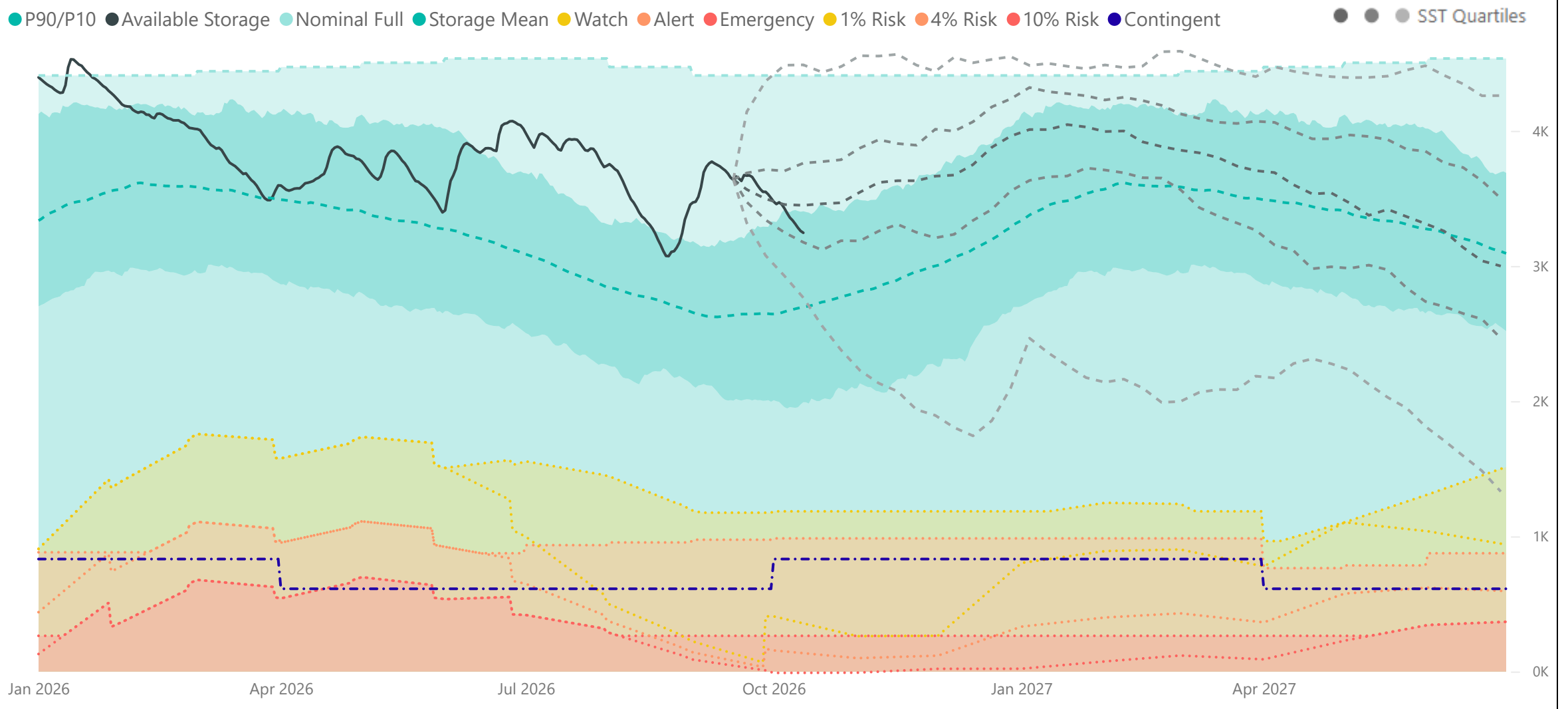
Note: The floor is equal to the amount of contingent hydro storage that is linked to the specific electricity risk curve, plus the amount of contingent hydro storage linked to electricity risk curves representing higher levels of risk of future shortage, if any, and the buffer as specified in the SOSFIP.

The dashed grey lines represent the minimum, lower quartile, median, upper quartile and the maximum range of the simulated storage trajectories (SSTs). These will be updated with each Electricity Risk Curve update (monthly).

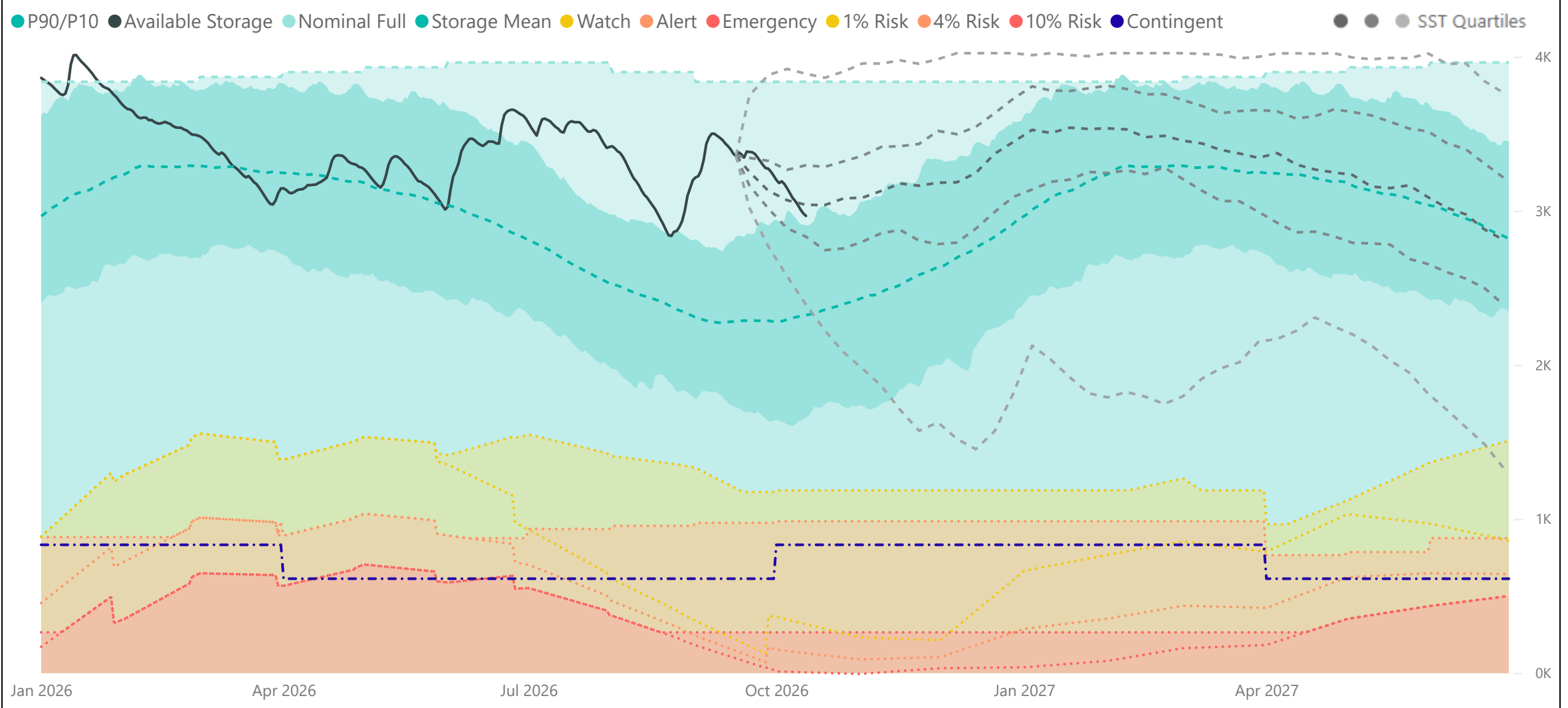


Electricity Risk Curves - Contracted Fuel Case

Contracted Fuel Case - New Zealand Electricity Risk Status Curves (Available GWh)



Contracted Fuel Case - South Island Electricity Risk Status Curves (Available GWh)



Electricity Risk Curve Explanation:

Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop

Alert Curve - The maximum of the four percent risk curve and the floor and buffer

Emergency Curve - The maximum of the 10 percent risk curve and the floor and buffer

Note: The floor is equal to the amount of contingent hydro storage that is linked to the specific electricity risk curve, plus the amount of contingent hydro storage linked to electricity risk curves representing higher levels of risk of future shortage, if any, and the buffer as specified in the SOSFIP.

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