



Market Operations Weekly Report - Week Ended 9 August 2026

Overview

Another record breaking week for peak electricity demand with a new high of 7,415 MW on last Thursday morning. This new record is almost 300 MW higher than the previous record set on Monday 27 July 2026.

In this week's insight we discuss these record high demand peaks and give an overview of the Low Residual Customer Advice Notices (CANs) and the industry response.

Security of Supply

National hydro storage decreased from 132% to 125% of the historic mean last week. South Island storage decreased from 135% to 130% and North Island storage decreased from 105% to 87%. Inflows have been lower than average for this time of year, but total storage remains above the historic mean.

Capacity

Residuals during the middle of last week were low with low wind generation and cold weather leading to record-high demand. The lowest residual of 81 MW occurred during the morning of Thursday 06 August.

The N-1-G margins in the NZGB forecast show tighter spots continuing as we are now in winter; we recommend the industry watch these closely. 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 increased to 930 GWh last week from 893 GWh the week prior. The highest demand peak occurred at 7:30 am on Thursday 06 August, at a new record-high of 7,415 MW.

Weekly Prices

The average wholesale electricity spot price at Ōtāhuhu last week increased from \$79/MWh the week prior to \$140/MWh. Wholesale prices peaked at \$4,320/MWh at Ōtāhuhu during the 7:30 pm trading period on Tuesday 04 August coinciding with an Under Frequency Event (UFE).

Generation Mix

Wind generation was 8% this week, just below its yearly average of 9%. Hydro generation contributed 63%, above its yearly average of 60%. Thermal generation increased slightly to 4% of the mix. Geothermal generation contributed 22% last week. Battery generation (BESS) contributed a new record 193 MW during the 7:30 am trading period on Thursday 06 August.

HVDC

HVDC flows last week were entirely northward. Overall, 239 GWh was transferred north.

New Zealand Energy Risk

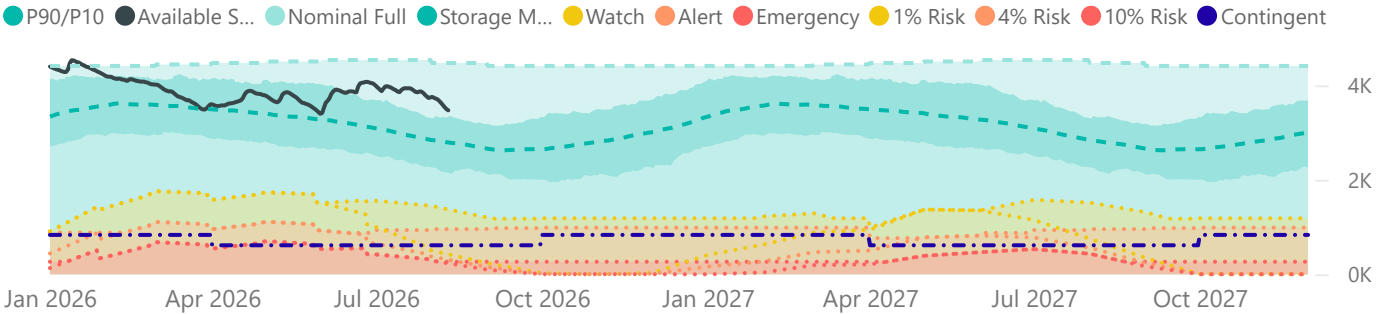


South Island Energy Risk

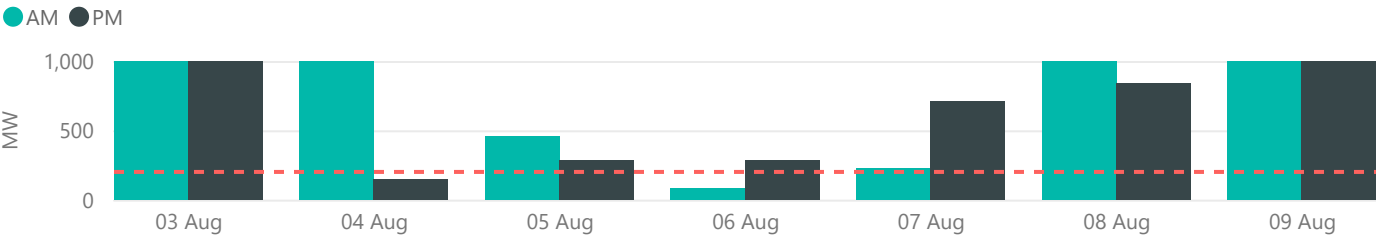


Normal Watch Alert Emergency

New Zealand Electricity Risk Status Curves (Available GWh)



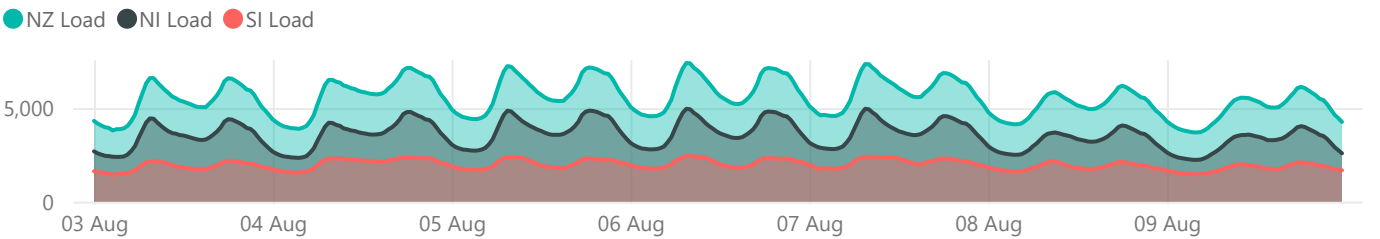
Lowest Residual Points - MW



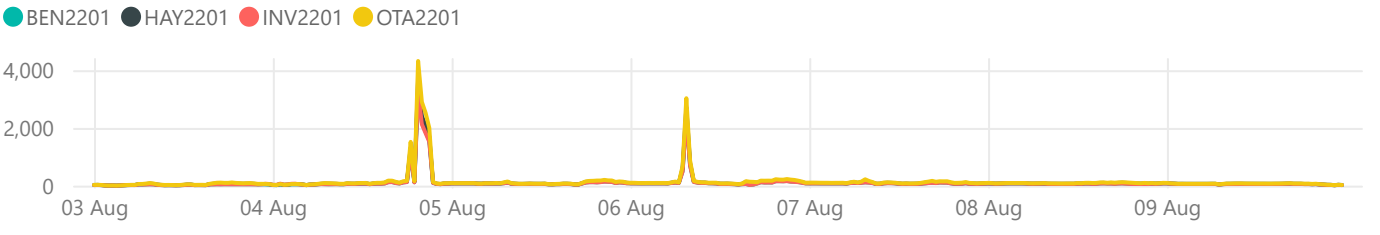
NZGB Look-Ahead (excluding next 7 days)



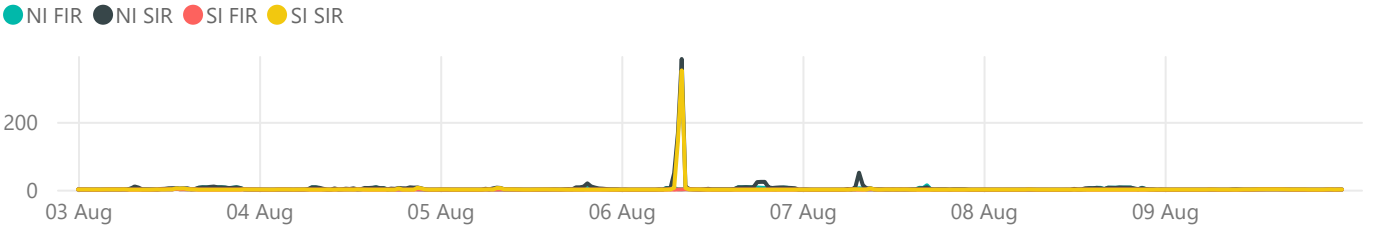
National Demand by Trading period - MW



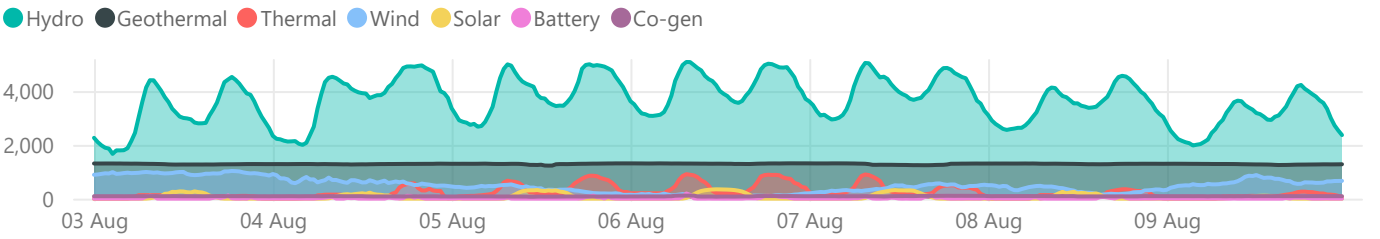
Energy Prices - \$/MWh



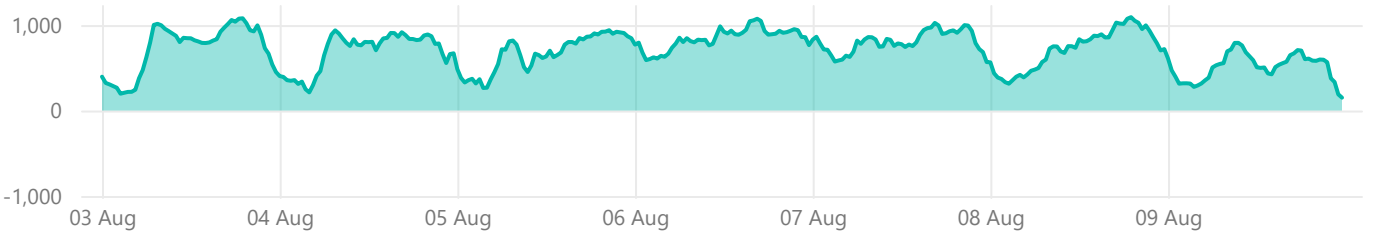
Reserve Prices - \$/MW

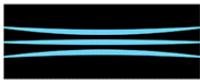


Generation - MW



Net HVDC Transfer - MW (Northward positive)



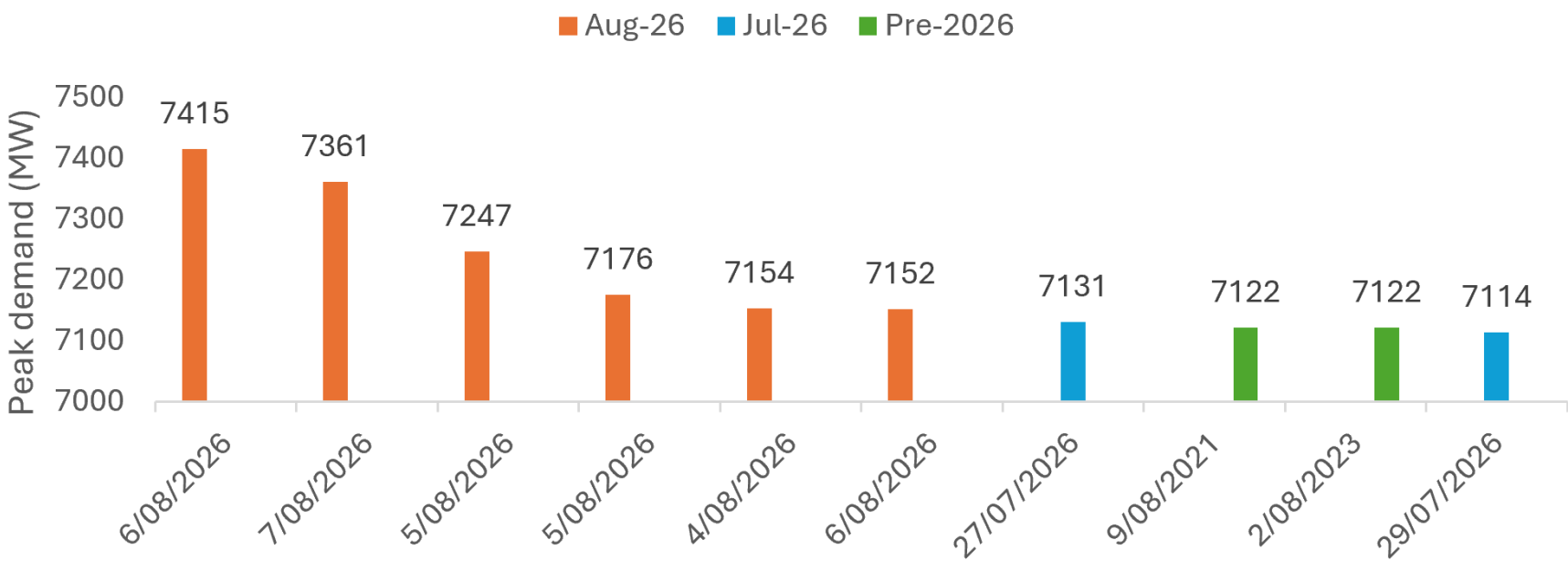


Weekly Insight - Record demand peaks and Low Residual Customer Advice Notices

This week we continue with an overview of the Customer Advice Notices (CANs), residuals, and the industry's response surrounding record high demand peaks over the last two weeks.

[Last week's insight](#) discussed the CANs sent out to address low residuals as demand reached record and near-record highs. During this last week, peak electricity demand reached a new record-high of 7,415 MW at 7:30 AM on Thursday 6 August. Eight of the ten highest demand peaks the NZ power system has seen occurred in the last fortnight and six were last week alone. The three highest were morning peaks with the following three occurring in the evening. The Thursday morning peak was an increase of 4% (almost 300 MW) from the historical highest demand peaks that occurred in 2021 and 2023.

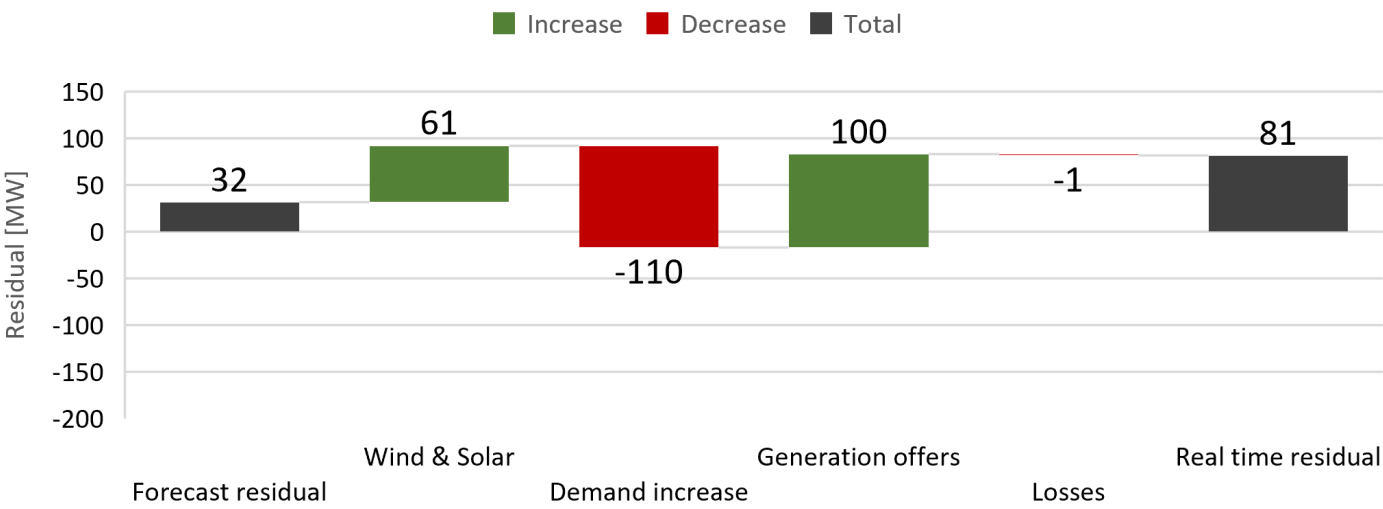
Top 10 peaks in NZ electricity load



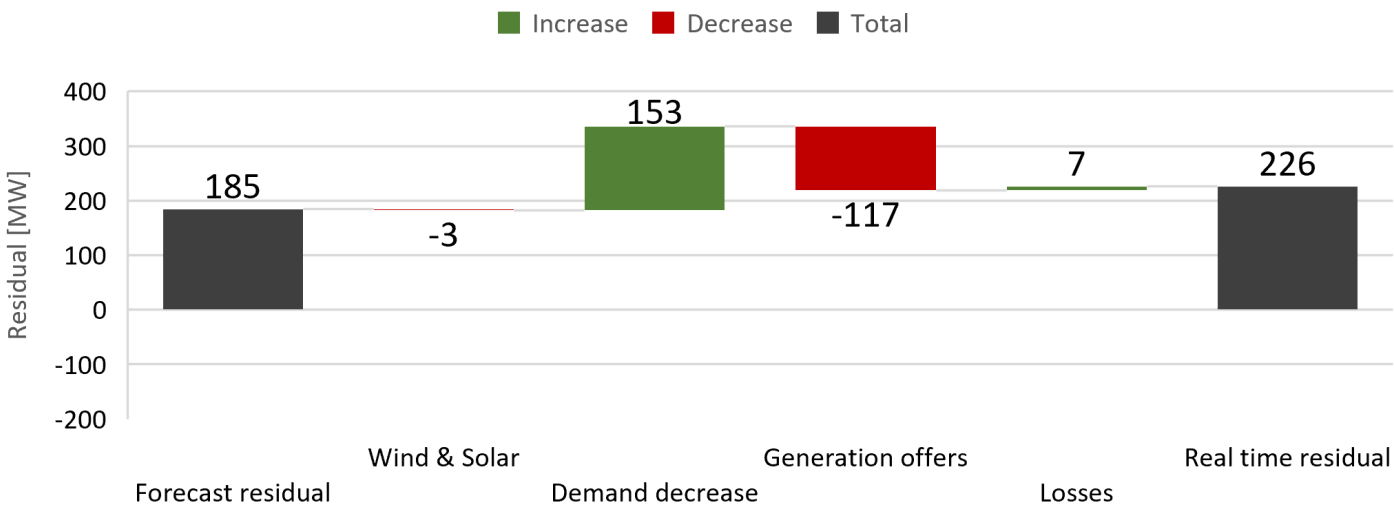
The four highest peaks were signalled ahead of time by CANs for potential short fall or low residual situations. Our practice is to issue a Potential Low Residual CAN based on the Week-ahead Dispatch Schedule (WDS), which provides an early signal of potential supply-demand tightness and gives participants time to prepare. As system conditions become clearer and more accurate schedules are available, we may issue a Low Residual Situation CAN. These are based on the current Non-response Schedules (NRS) which cover a 36-hour ahead timeframe to reflect the most up-to-date conditions. We [published two Low Residual Situation CANs](#) for two peaks last week: Thursday 06 August AM and Friday 07 August AM.

The waterfall charts below show how changes in wind and solar generation, demand, or other generation offers affected the residuals between the Low Residual Situation CAN notice and real-time.

Forecast vs real time residual, morning peak 06 August 2026

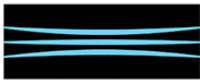


Forecast vs real time residual, morning peak 07 August 2026

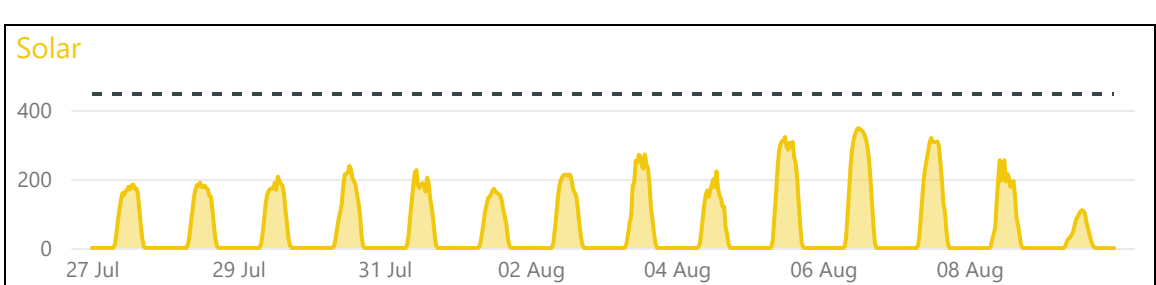
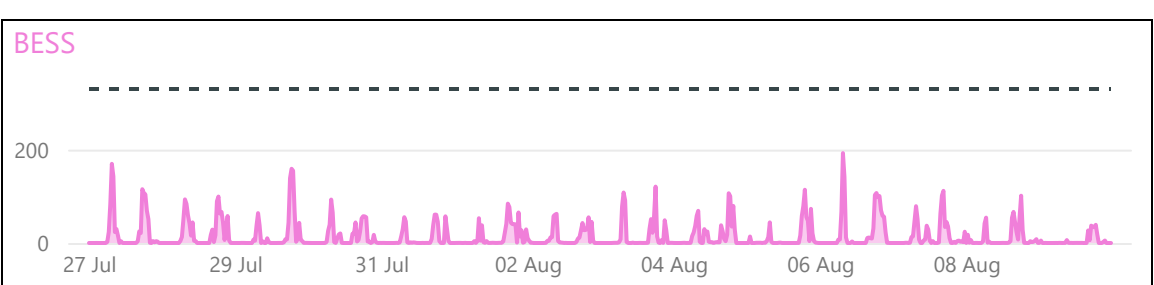
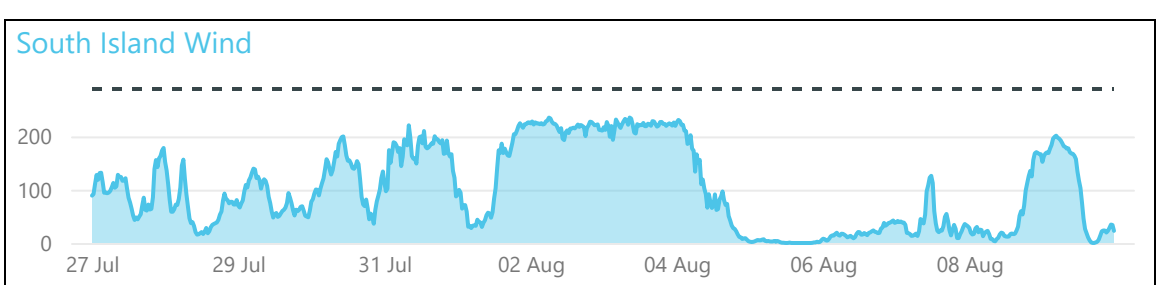
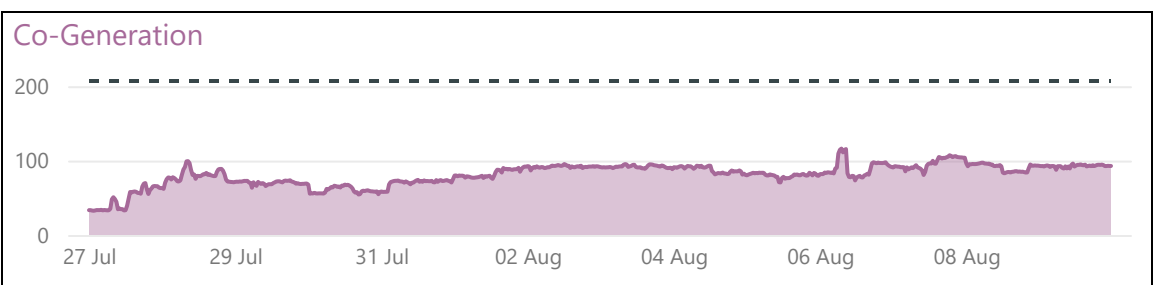
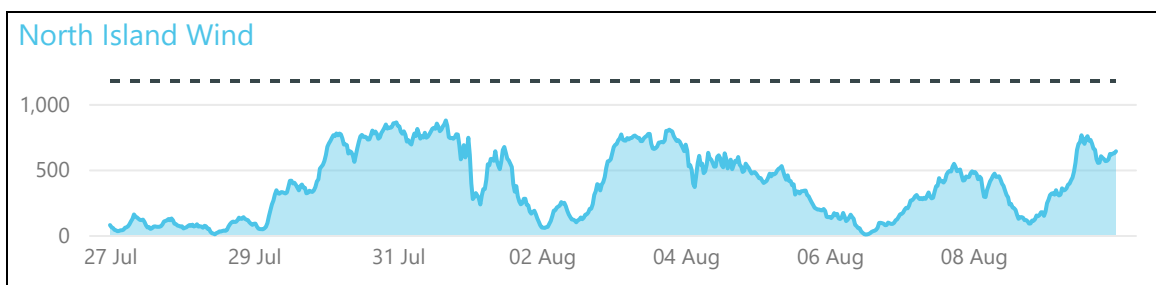
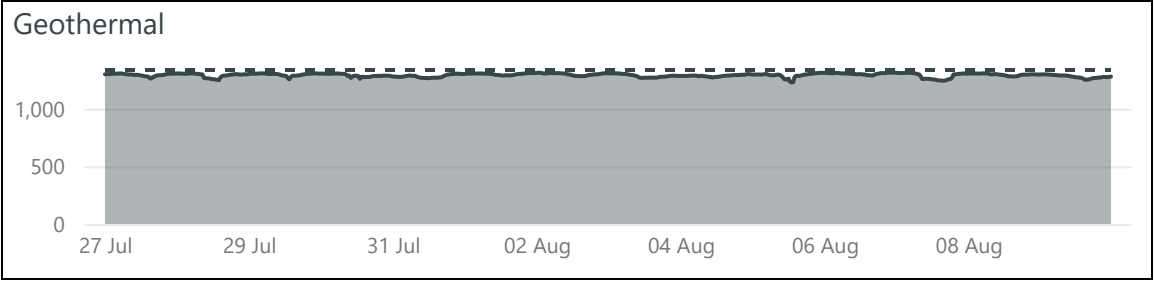
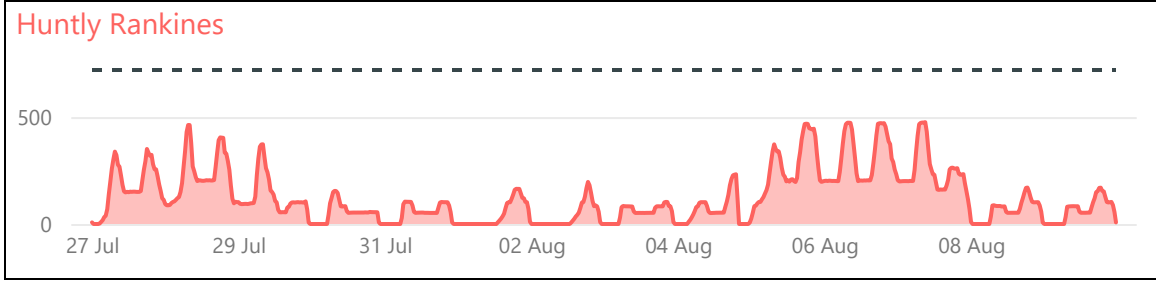
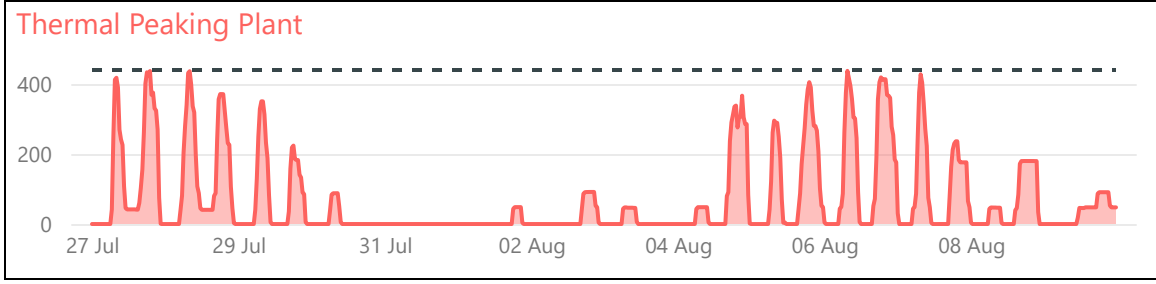
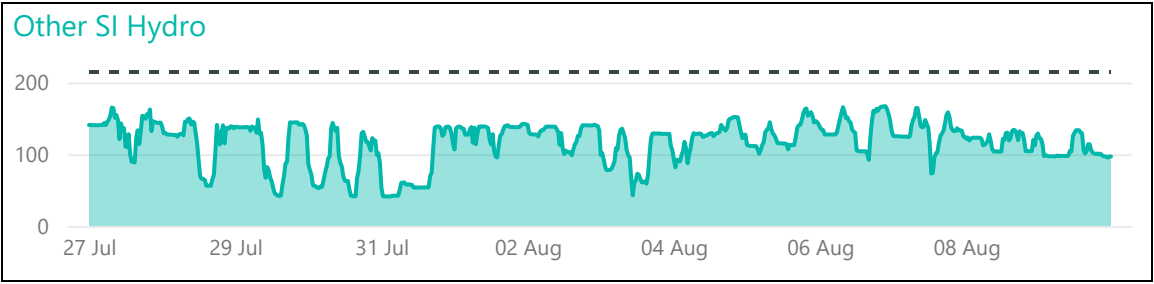
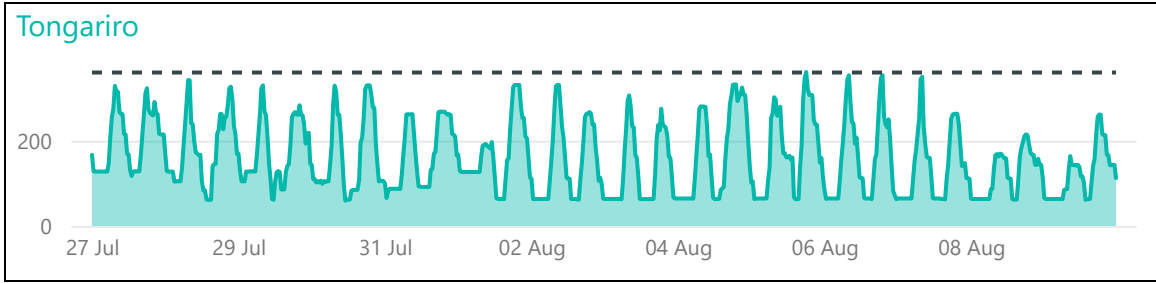
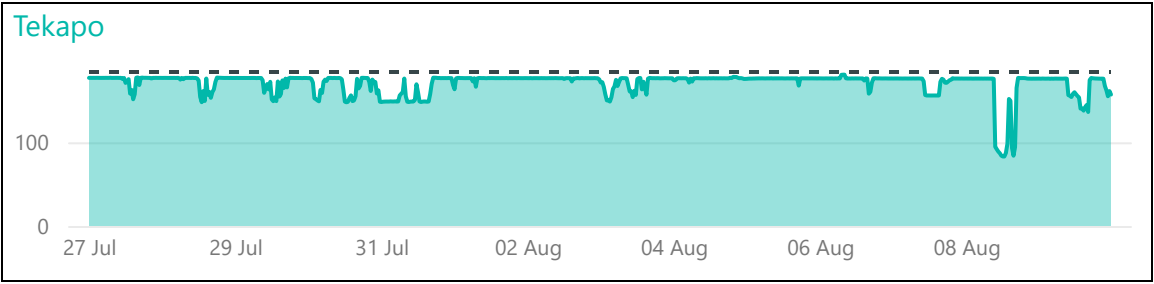
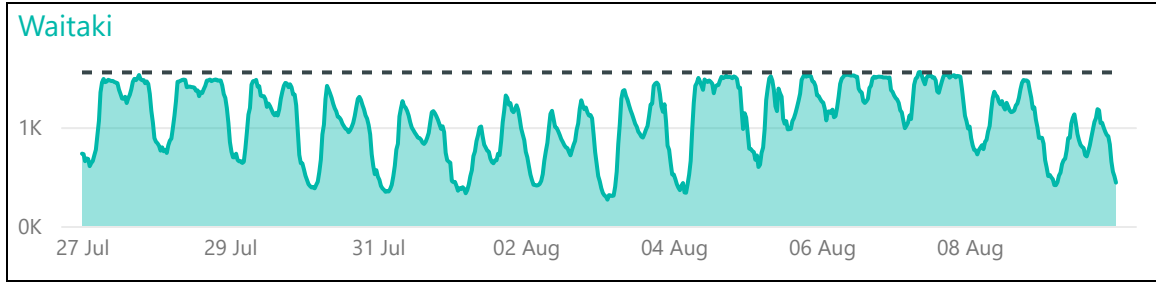
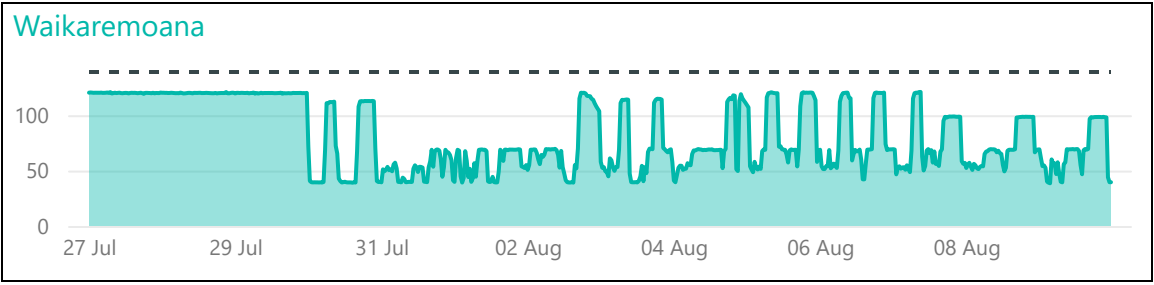
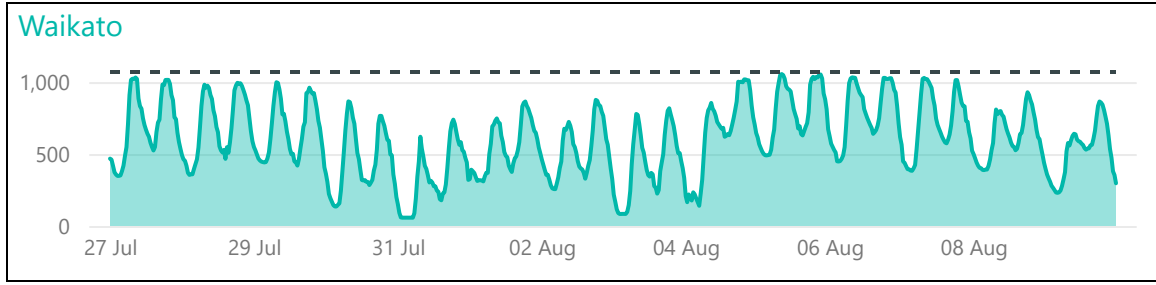
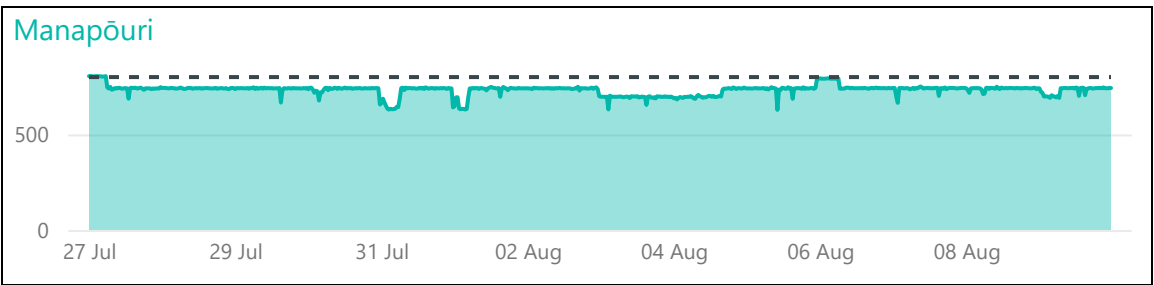
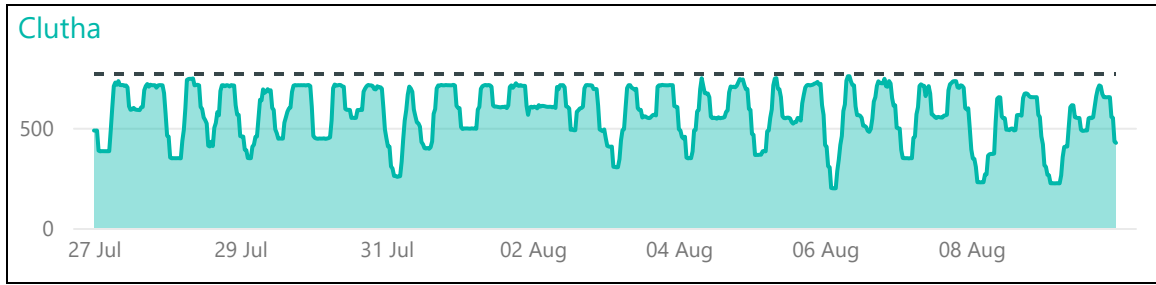


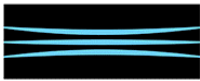
A combination of participant actions helped manage the Thursday morning peak. Difference bids ranged from 63 MW to 161 MW over the peak period, while generators, distributors, and industrial customers also reduced demand or increased on-site generation in response to system conditions.

Thank you to all participants across the industry who reduced demand or increased on-site generation on Thursday morning to help meet the peak demand.

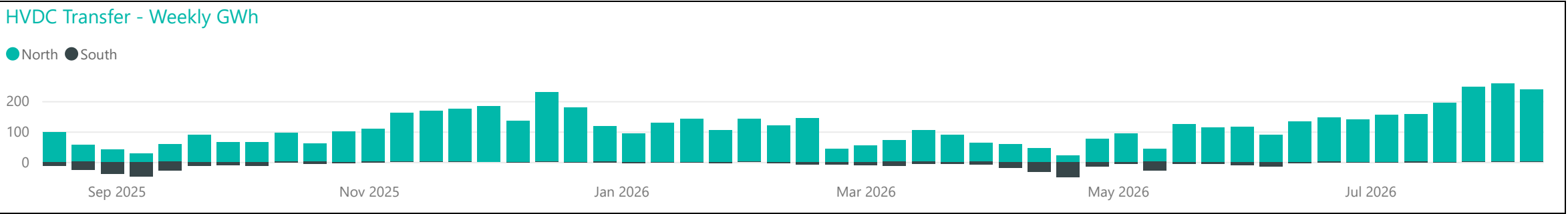
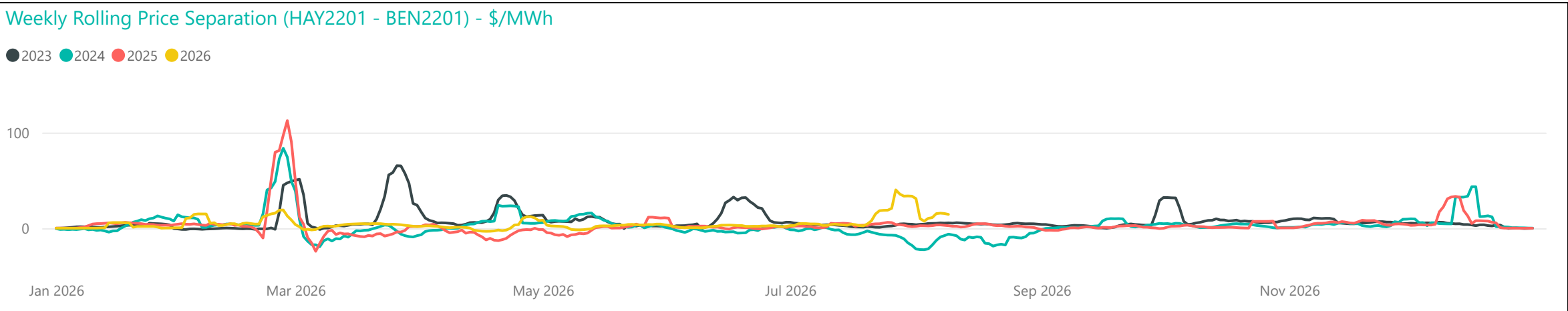
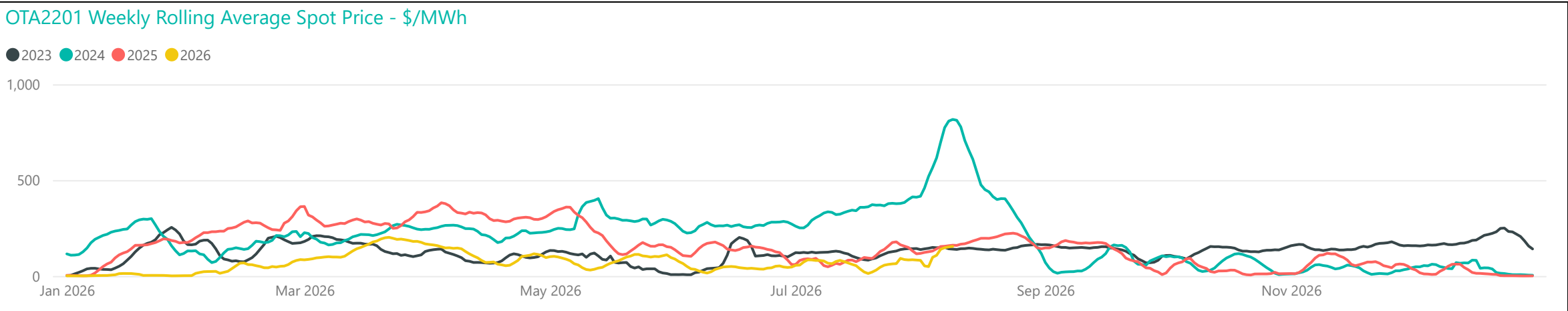
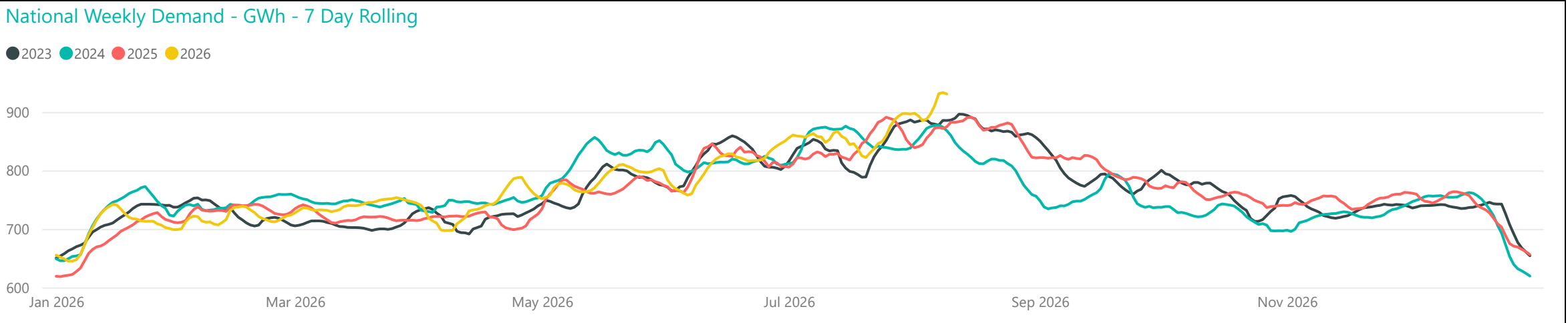


Generation Breakdown - Last Two Weeks *Measured in MW and displayed at trading period level for last 14 days*

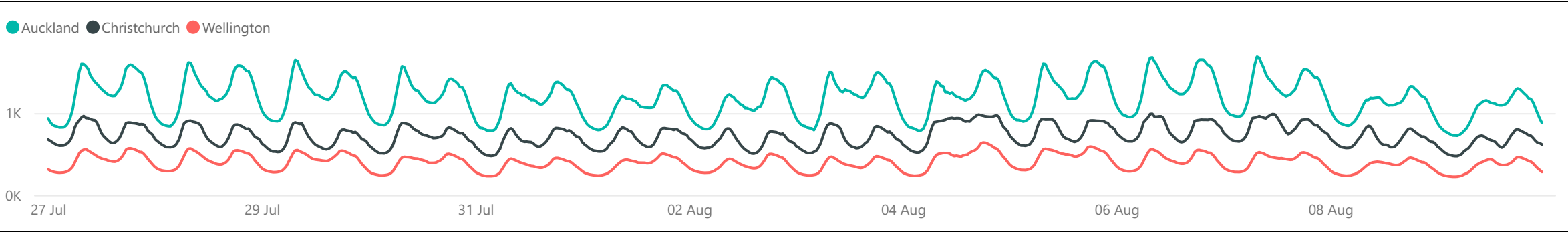




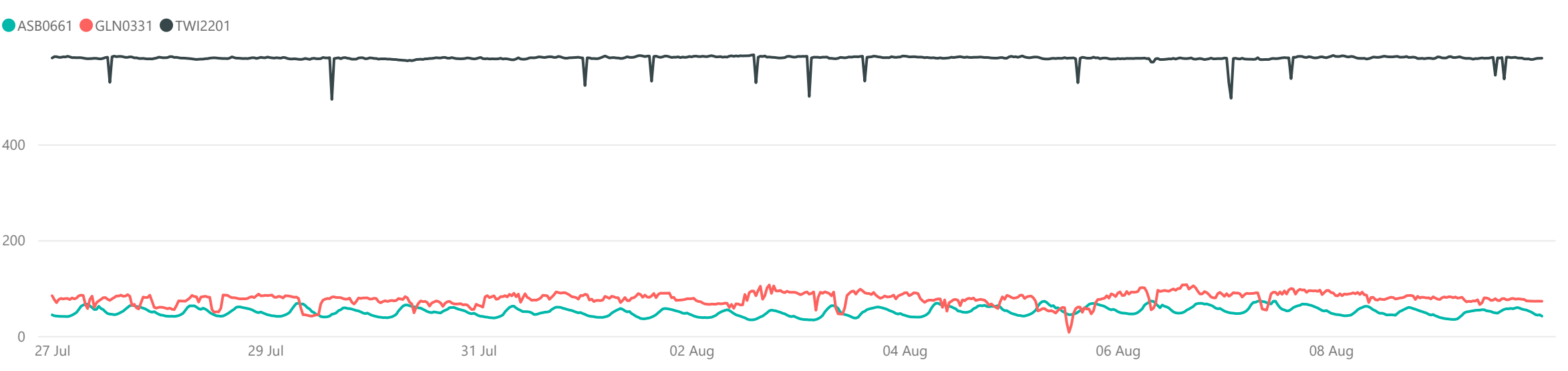
Weekly Profiles



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

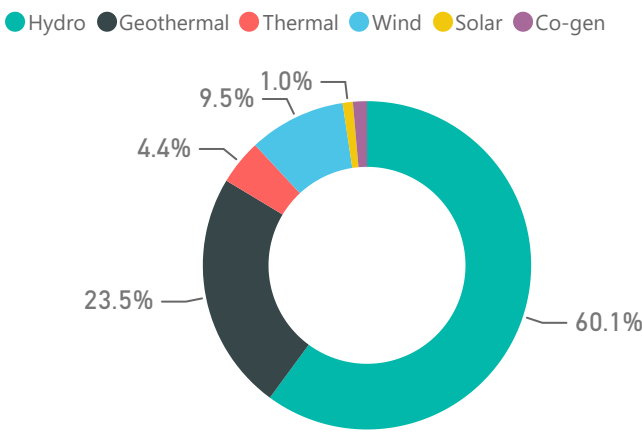


Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*

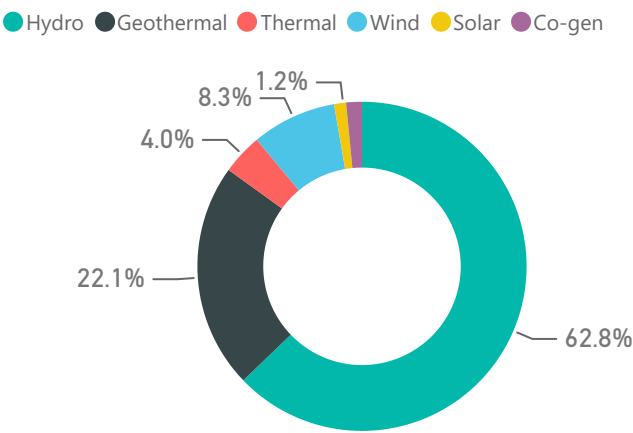


Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



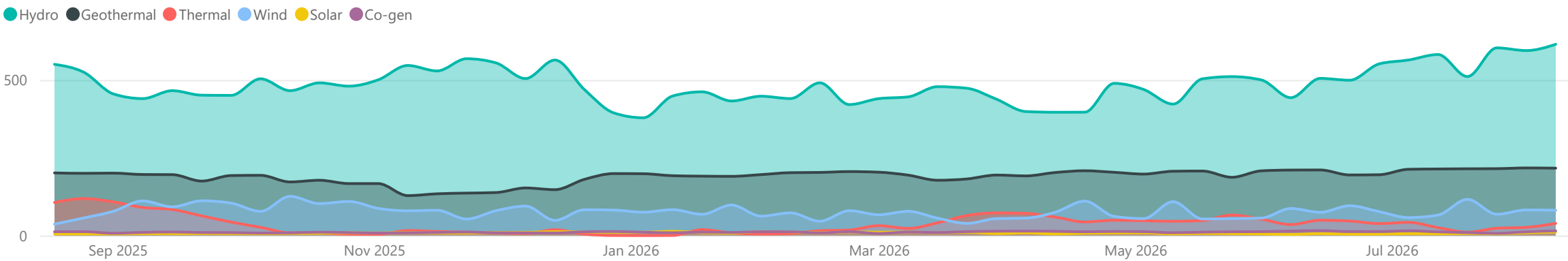
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
94%	51,936	50.8

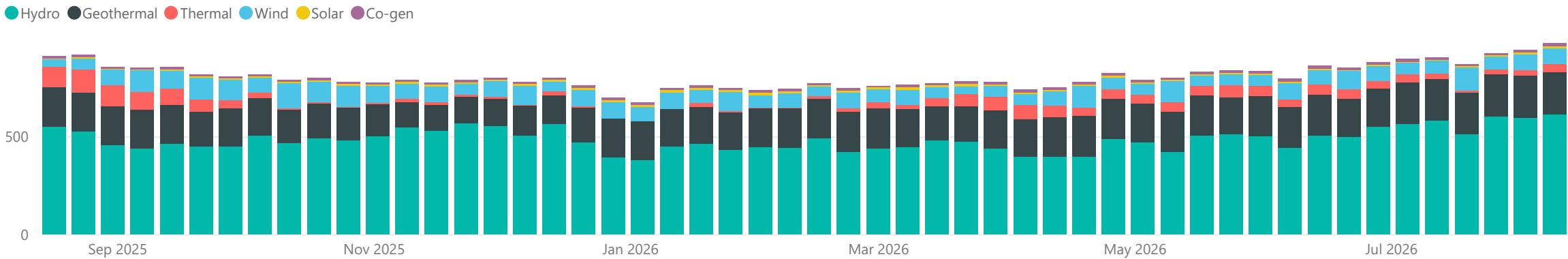
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
94%	38,542	46.8

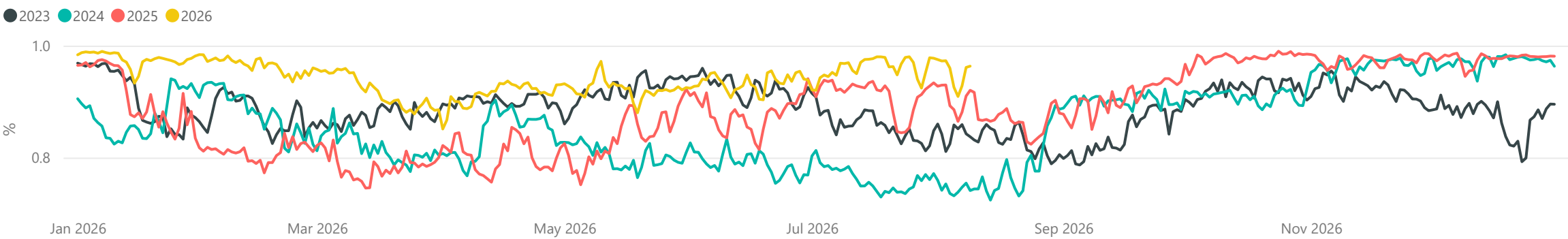
Weekly Generation Mix - GWh



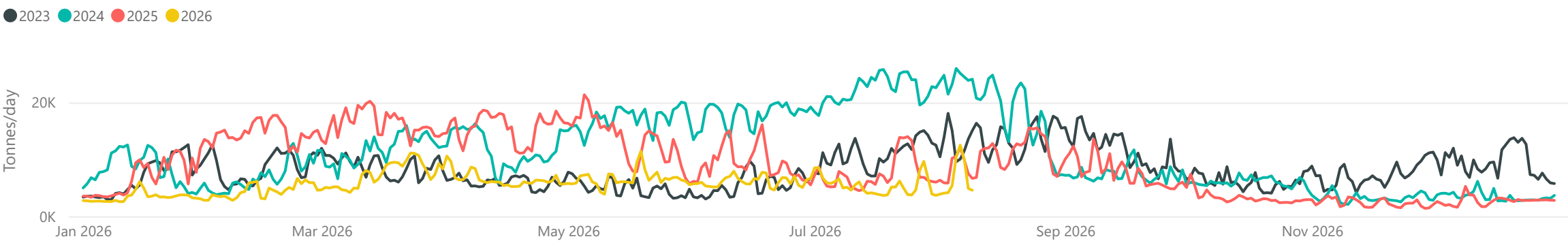
Weekly Generation Mix - GWh



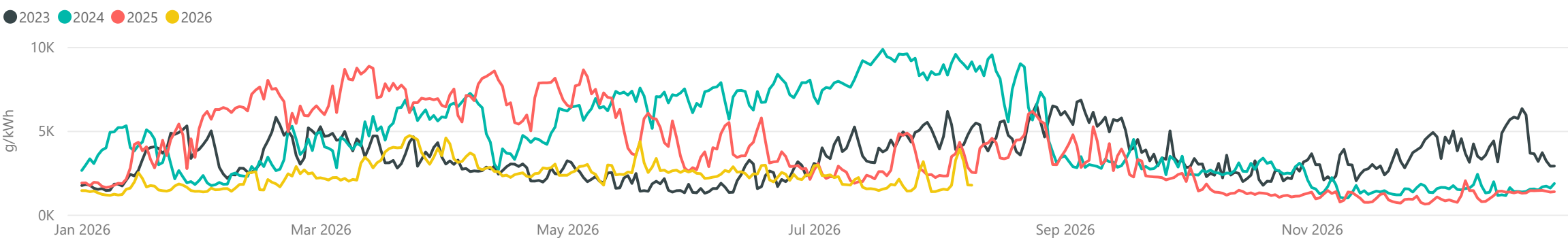
NZ Renewable Percentage

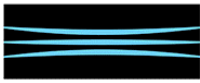


CO2 Tonnes/Day

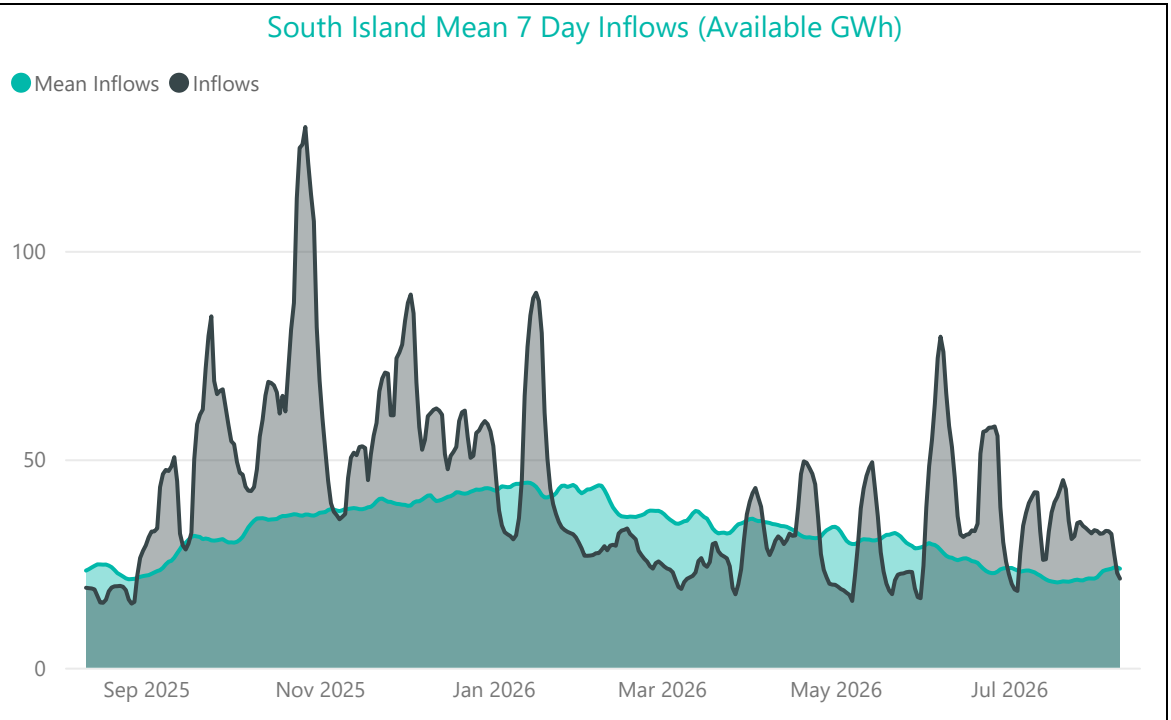
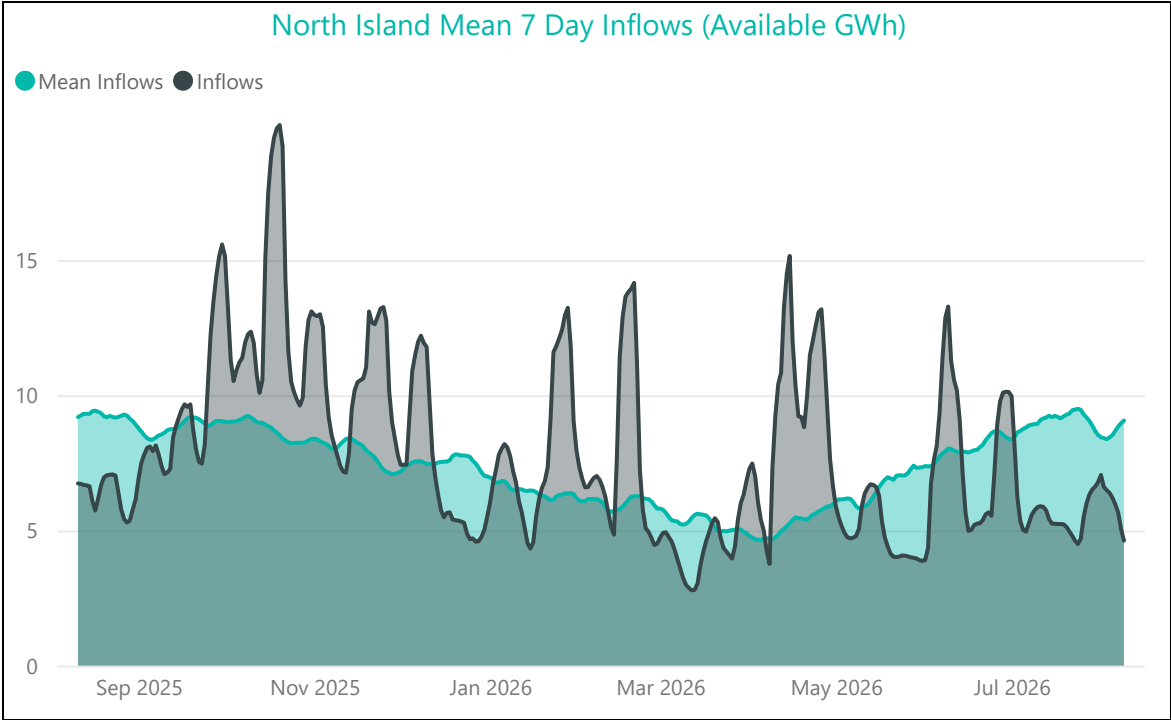
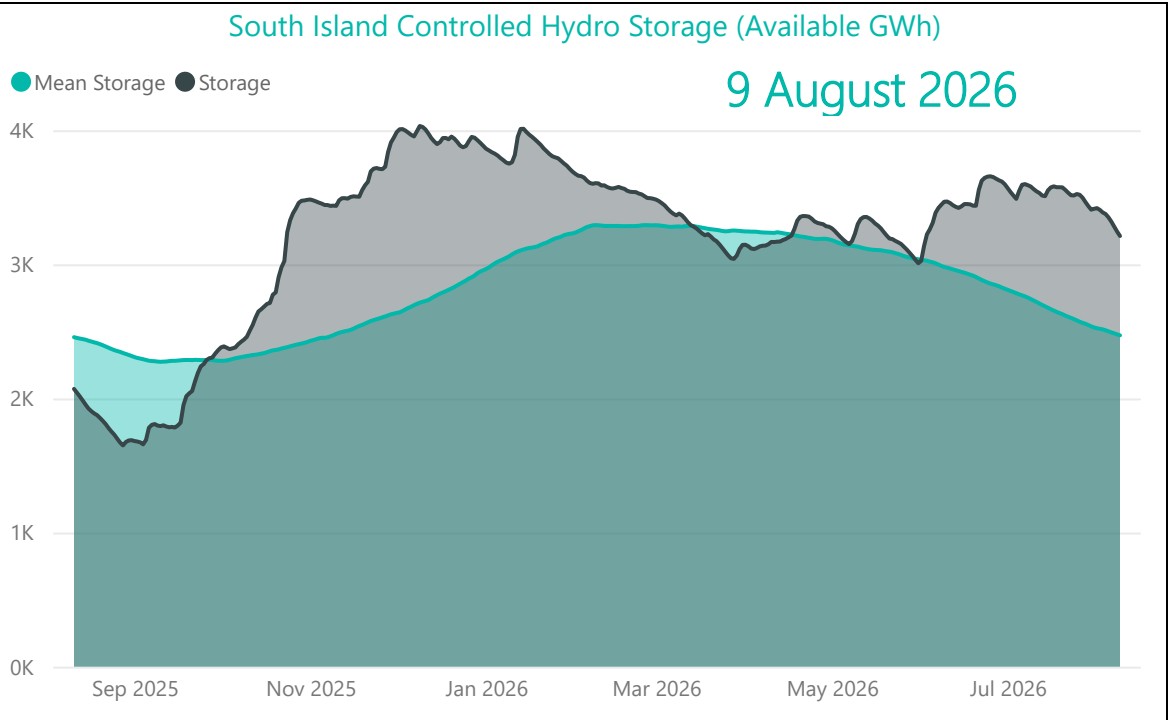
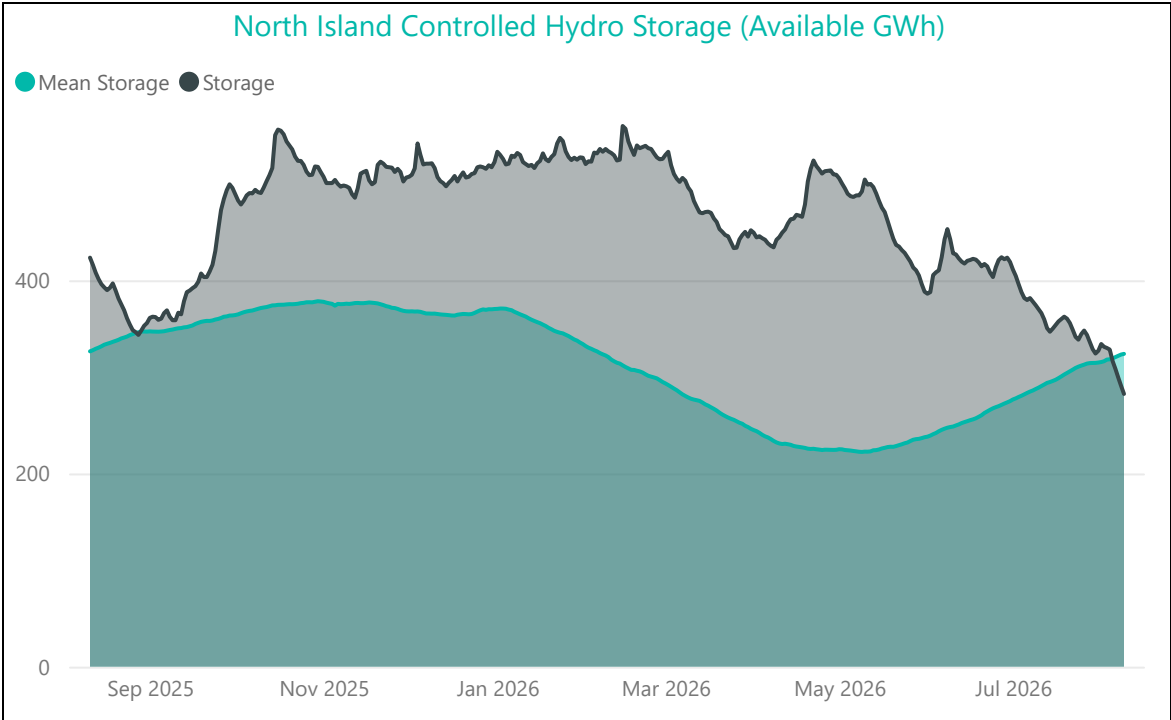
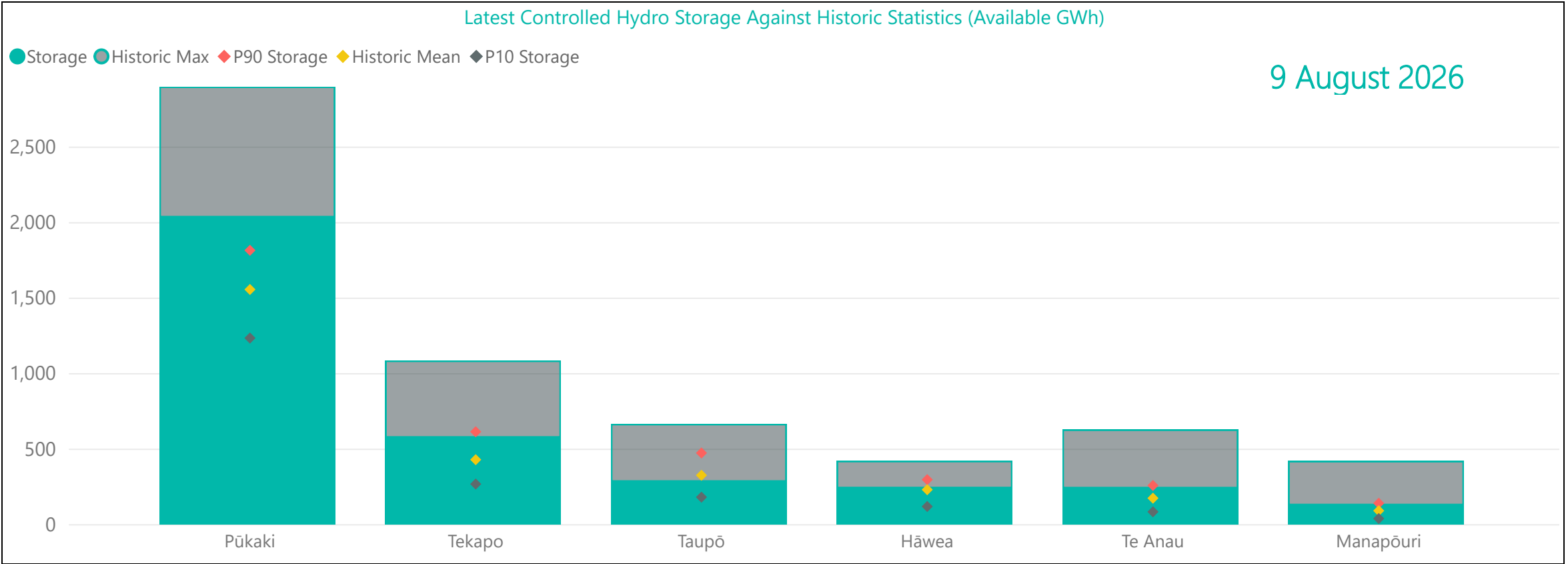


CO2 g/kWh





Hydro Storage



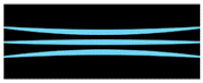
For further information on security of supply and Transpower's responsibilities as the System Operator, refer to our webpage here: <https://www.transpower.co.nz/system-operator/security-supply>.

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](#).

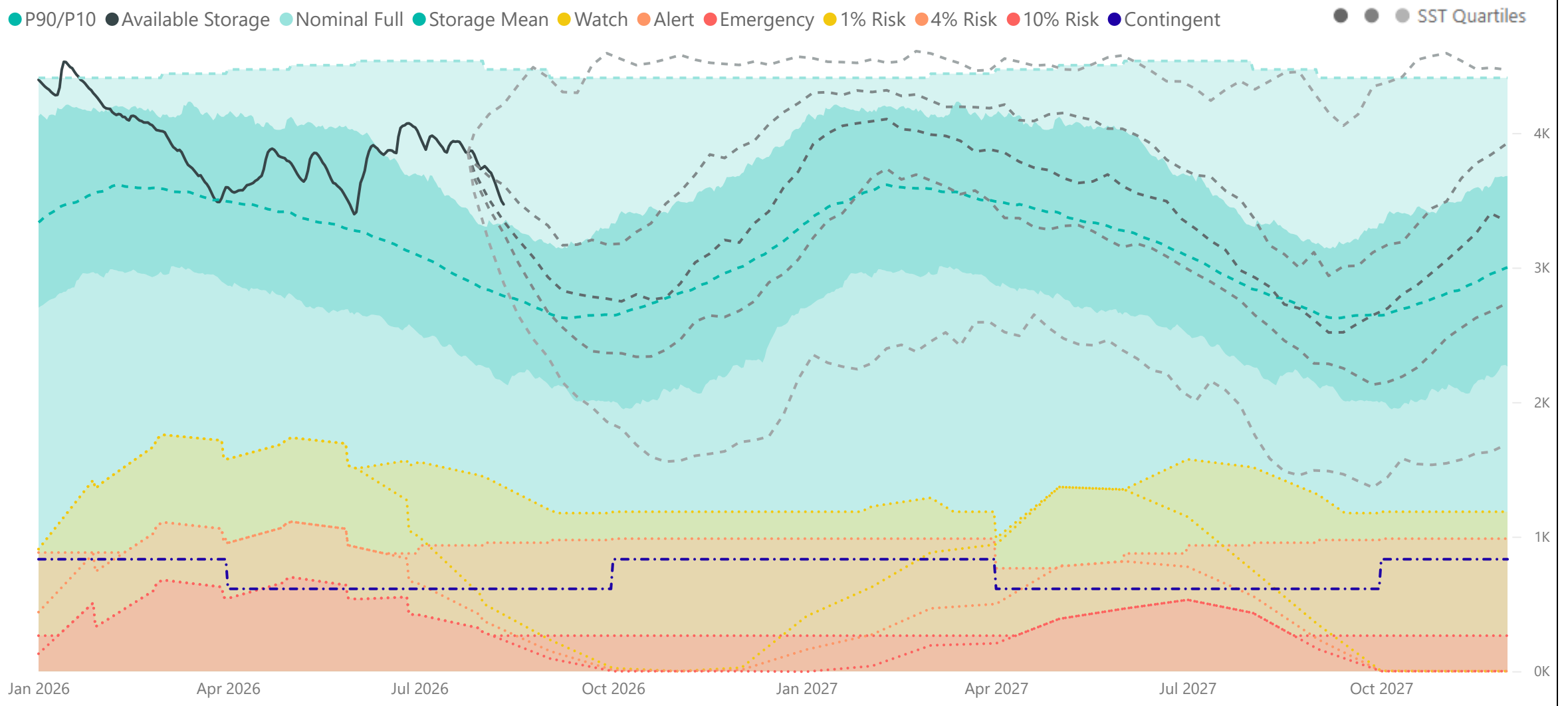
Electricity risk curves have been developed for the purposes of reflecting the risk of extended energy shortages in a straightforward way, using a standardised set of assumptions.

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>

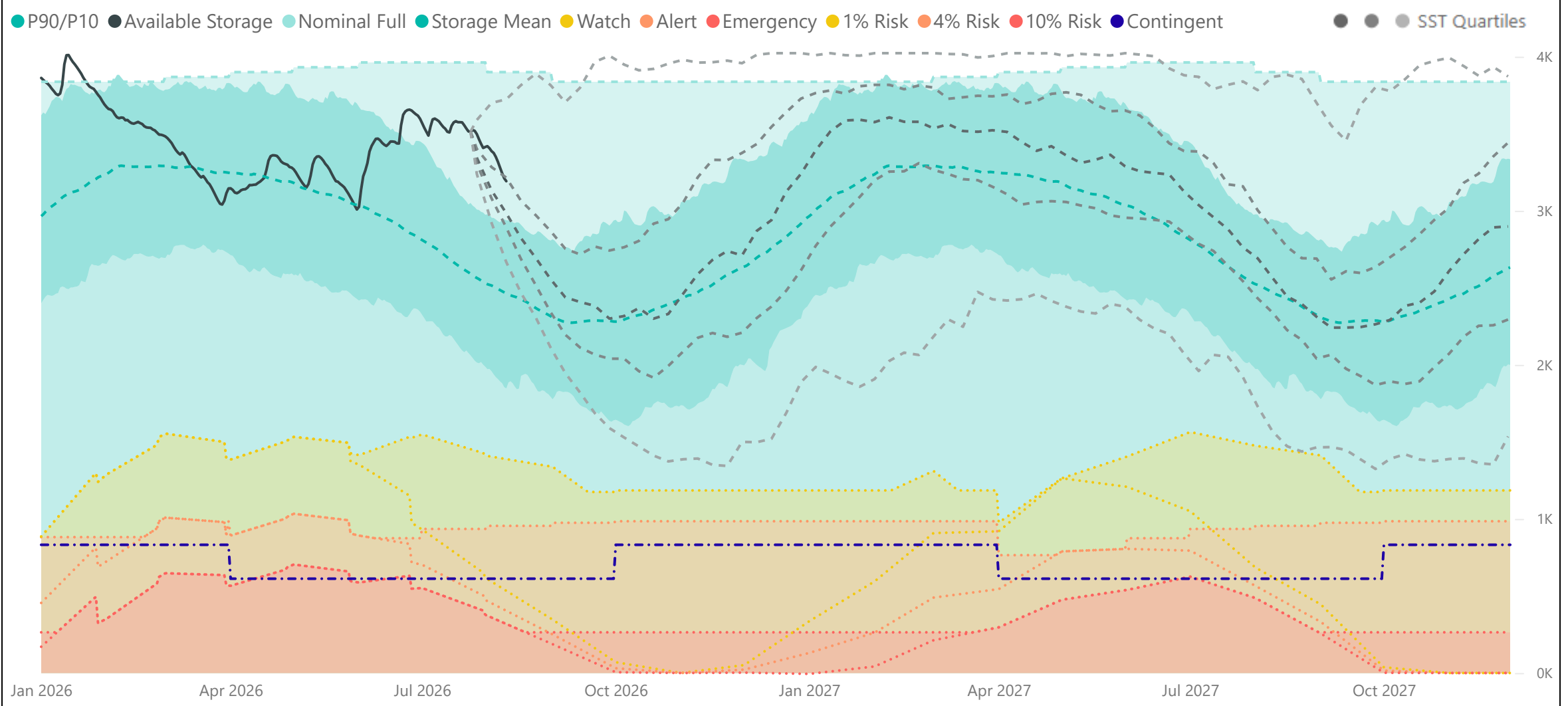


Electricity Risk Curves

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

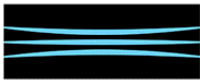
Emergency Curve - The maximum of the 10 percent risk curve and the floor and buffer

Official Conservation Campaign Start - The Emergency Curve

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

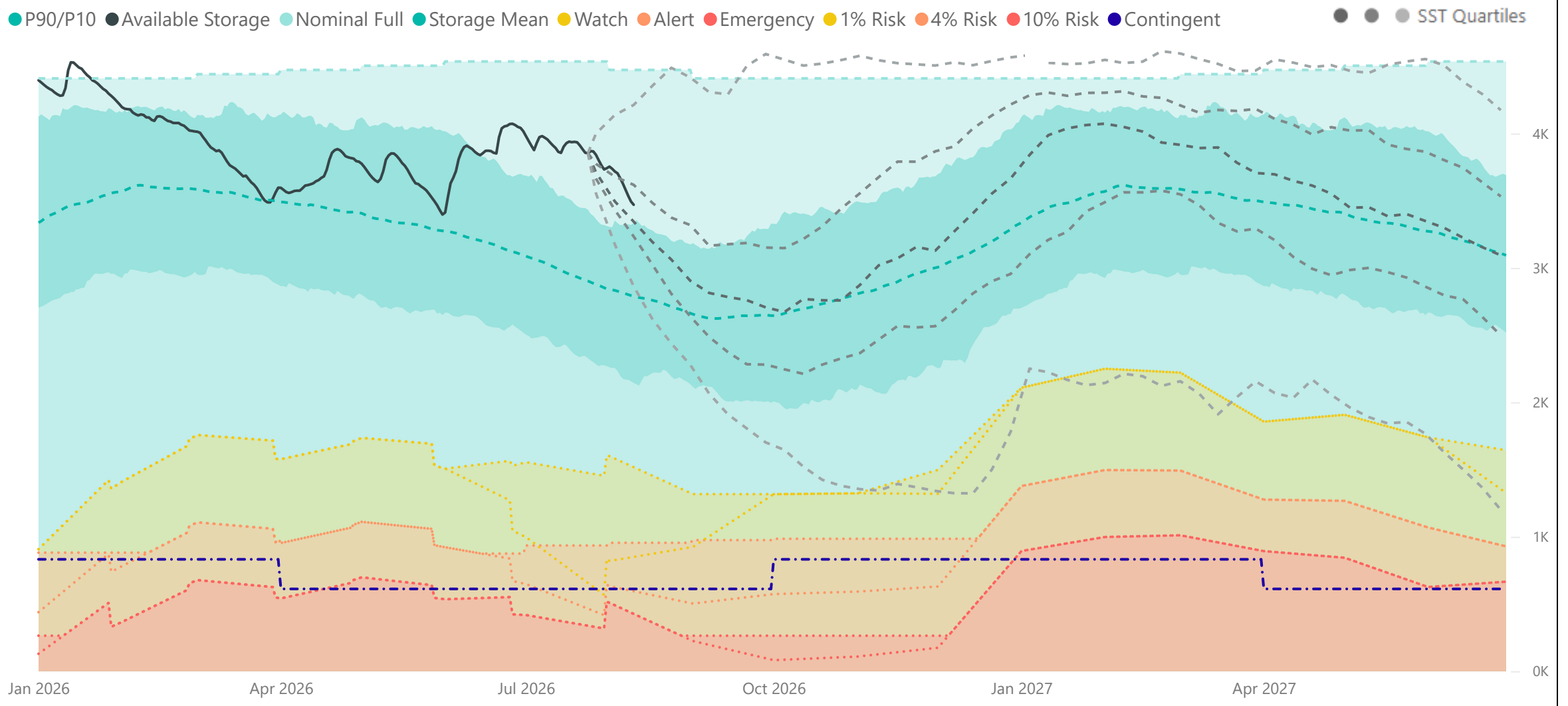
Note: The floor is equal to the amount of contingent hydro storage that is linked to the specific electricity risk curve, plus the amount of contingent hydro storage linked to electricity risk curves representing higher levels of risk of future shortage, if any, and the buffer as specified in the SOSFIP.

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).

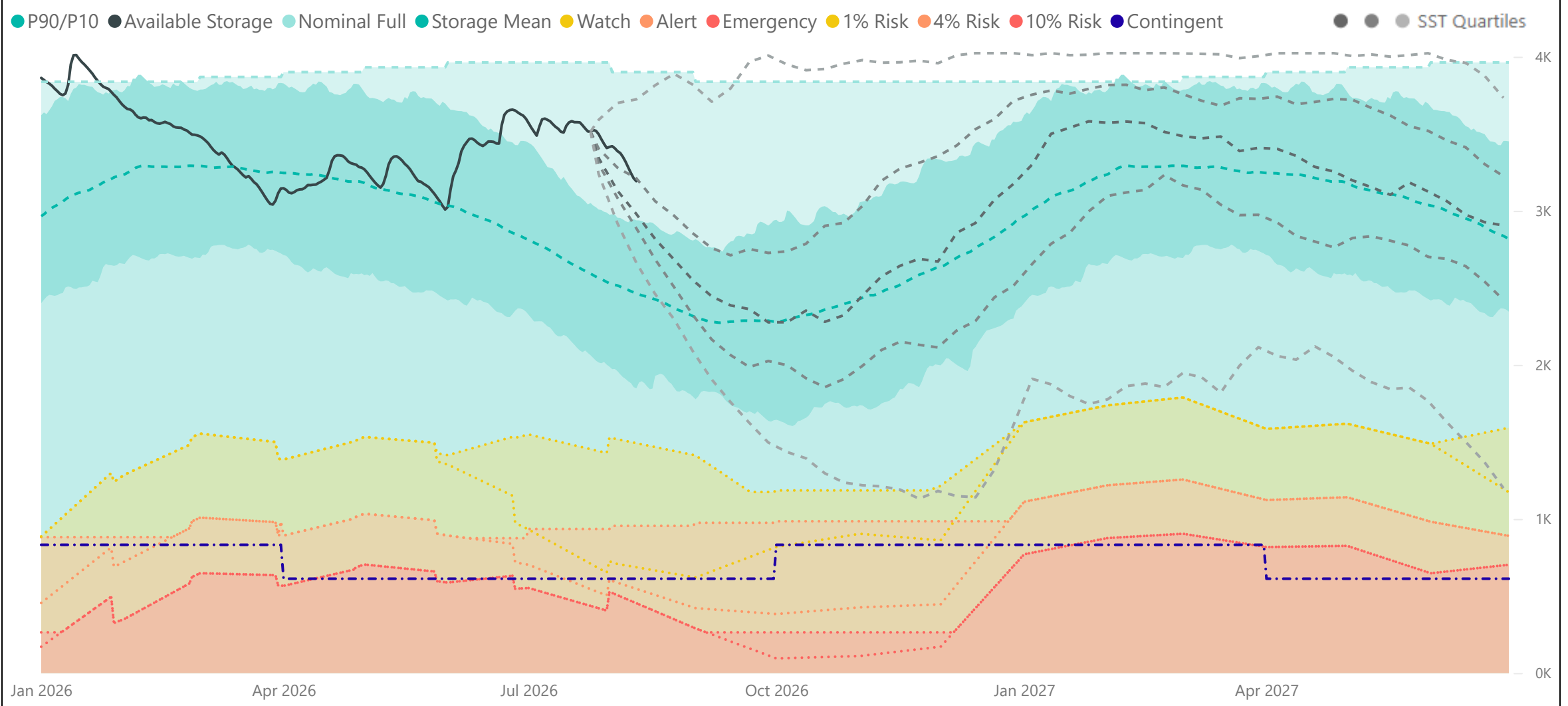


Electricity Risk Curves - Contracted Fuel Case

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.

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).