

Market Operations Weekly Report - Week Ended 5 April 2026

Overview

New Zealand hydro storage has increased from 100% to 102% of the historic mean for this time of year. Renewable generation was 88% of the weekly generation mix, which is less than the mean of the last 12 months of 92%. Thermal generation has increased to 10%.

This week's insight provides an update on recent Battery Energy Storage Systems (BESS) that have connected to the grid and current BESS projects being delivered.

Security of Supply Energy

National hydro storage has increased to 102% of the seasonal mean at the end of last week. South Island hydro storage increased from 94% to 96% of the historic mean, and North Island storage increased from 180% to 185%.

Capacity

Residuals were healthy with the lowest residual of 918 MW occurring during the morning of Wednesday 1 April.

The N-1-G margins in the NZGB forecast are healthy through to mid May. 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 from 748 GWh to 710 GWh for the week, slightly below the average demand at this time of year over the past three years. The highest demand peak of 5,297 MW occurred at 8:00am on Wednesday 1 April.

Weekly Prices

The average wholesale electricity spot price at Ōtāhuhu last week was \$148/MWh, decreasing from \$179/MWh the week prior. Wholesale prices peaked at \$278/MWh at Invercargill at 2:00am on Monday 30 March.

Generation Mix

Wind generation increased from 7% to 8% of the mix. Hydro generation decreased to 54% of the mix, from 57% the week prior. Thermal generation increased to 10% which is above its yearly average of 9% of the mix. Geothermal increased from 24% to 25% of the mix and solar contributed to 1% of the generation mix.

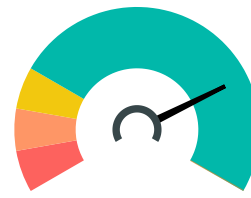
HVDC

HVDC flow last week was predominantly northward with the exception of some brief periods of overnight southward flow. These periods coincided with periods of high wind generation and lower North Island demand. In total, 58 GWh was transferred north and just 18 GWh was transferred south.

Surveys and Engagement

We have opened our Annual System Operator Participant Survey to provide an opportunity for participants to set out their expectations and help us understand how we are performing the System Operator service. If you have not received the survey but would like to have your say, you can complete it [here](#). The survey closes 17 April 2026.

New Zealand Energy Risk

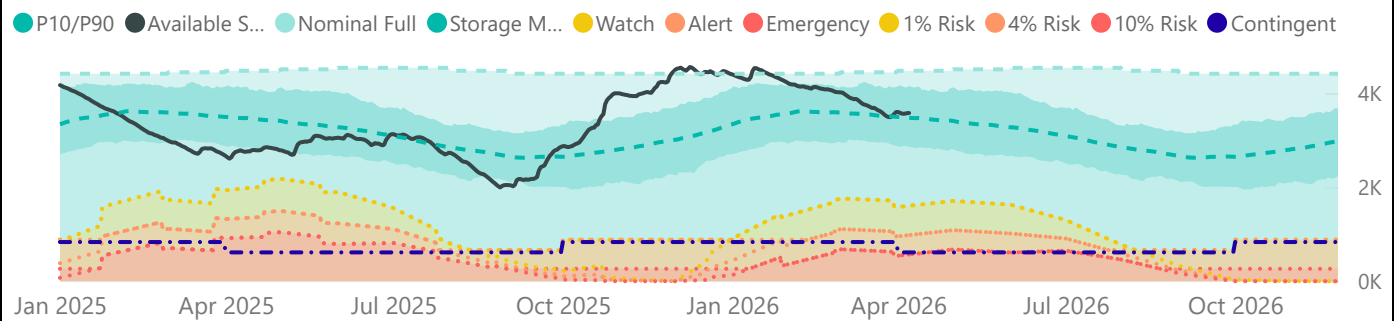


South Island Energy Risk

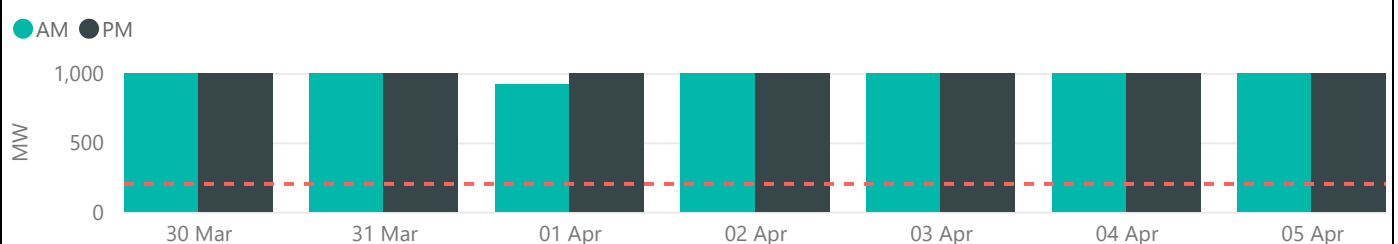


Normal Watch Alert Emergency

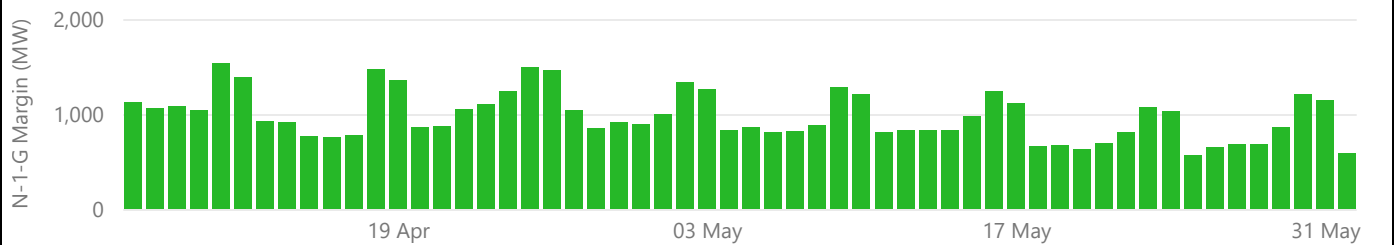
New Zealand Electricity Risk Status Curves (Available GWh)



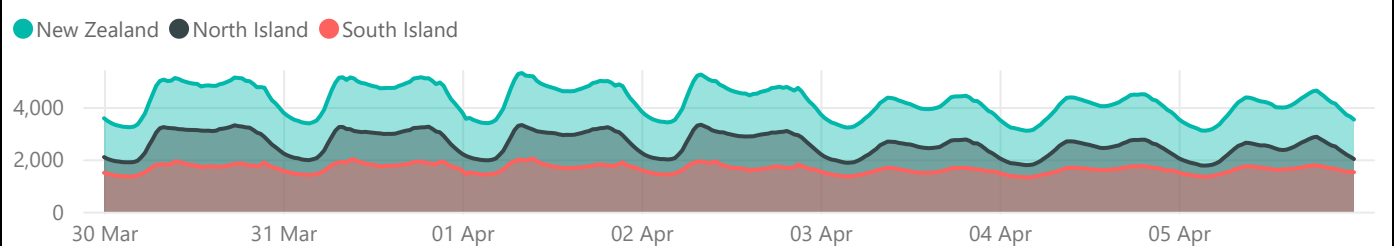
Lowest Residual Points - MW



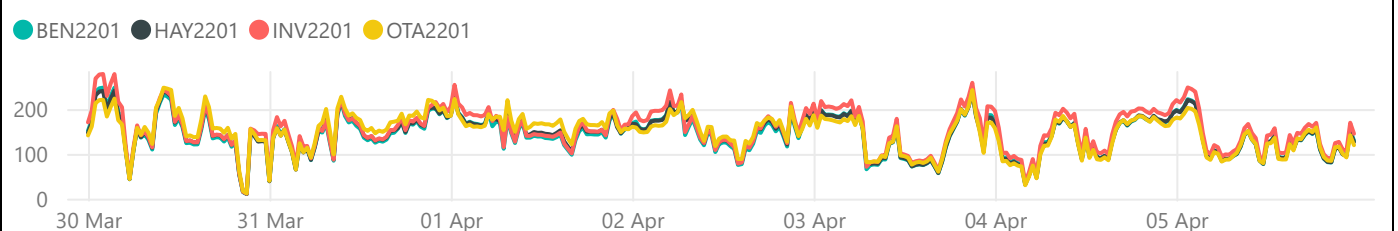
NZGB Look-Ahead (excluding next 7 days)



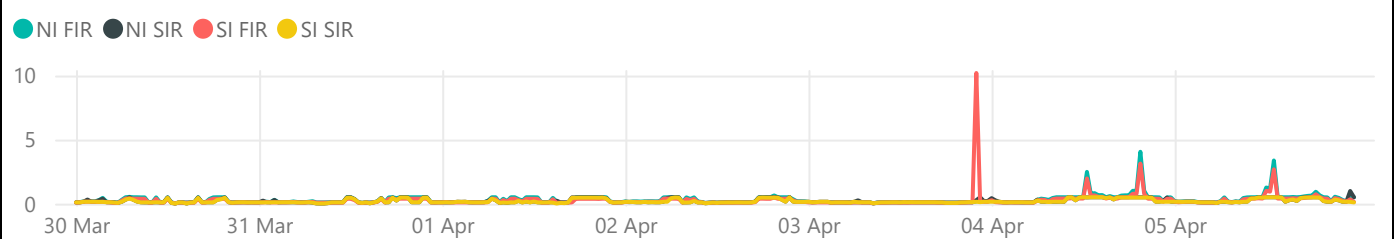
National Demand by Trading period - MW



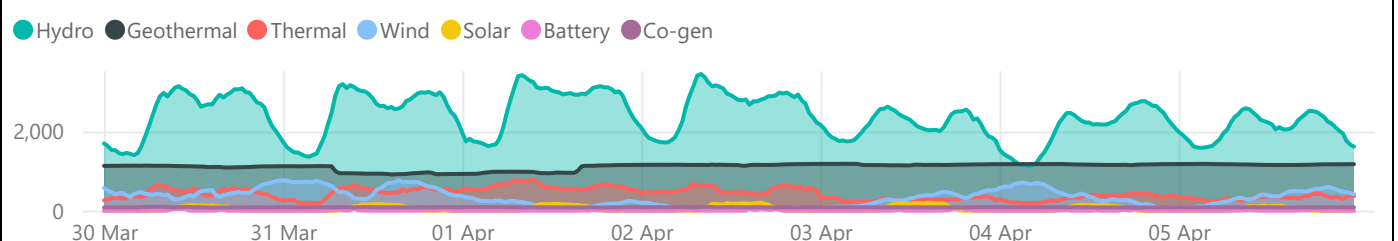
Energy Prices - \$/MWh



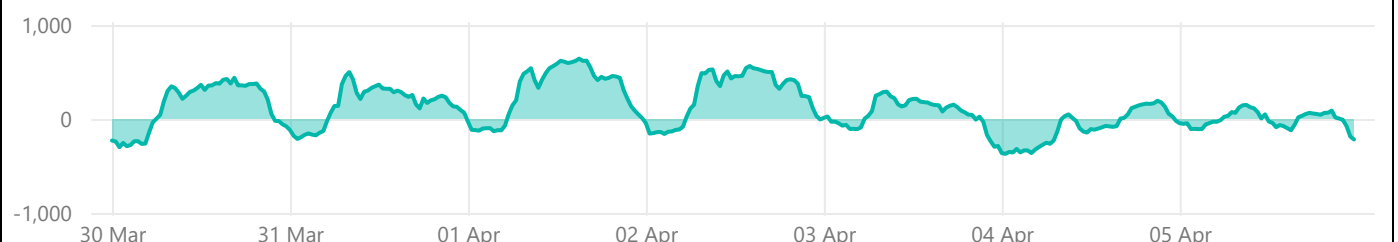
Reserve Prices - \$/MW



Generation - MW



Net HVDC Transfer - MW (Northward positive)



Weekly Insight - Recent and upcoming BESS developments

This week's insight provides an update on recent Battery Energy Storage Systems (BESS) that have commissioned into the electricity market and the pipeline of future BESS projects.

BESS help provide firm and flexible capacity in New Zealand's energy market. They can store excess energy during periods of high wind and/or solar which can be later used to stabilise rapid changes in system conditions, for instance meeting periods of high demand when intermittent generation is low. This also makes them ideal for providing instantaneous reserves into the market.

One of the challenges with BESS is their limited energy storage (hours rather than days, weeks or months) means that offering energy has to be done carefully and co-ordinated with the market to make sure it's used at the best time for the system.

New Zealand's first BESS, WEL Network's 30MW (35 MWh) Rotohiko battery near Huntly, was commissioned in 2023. Since then, more utility-scale BESS have connected to the grid:

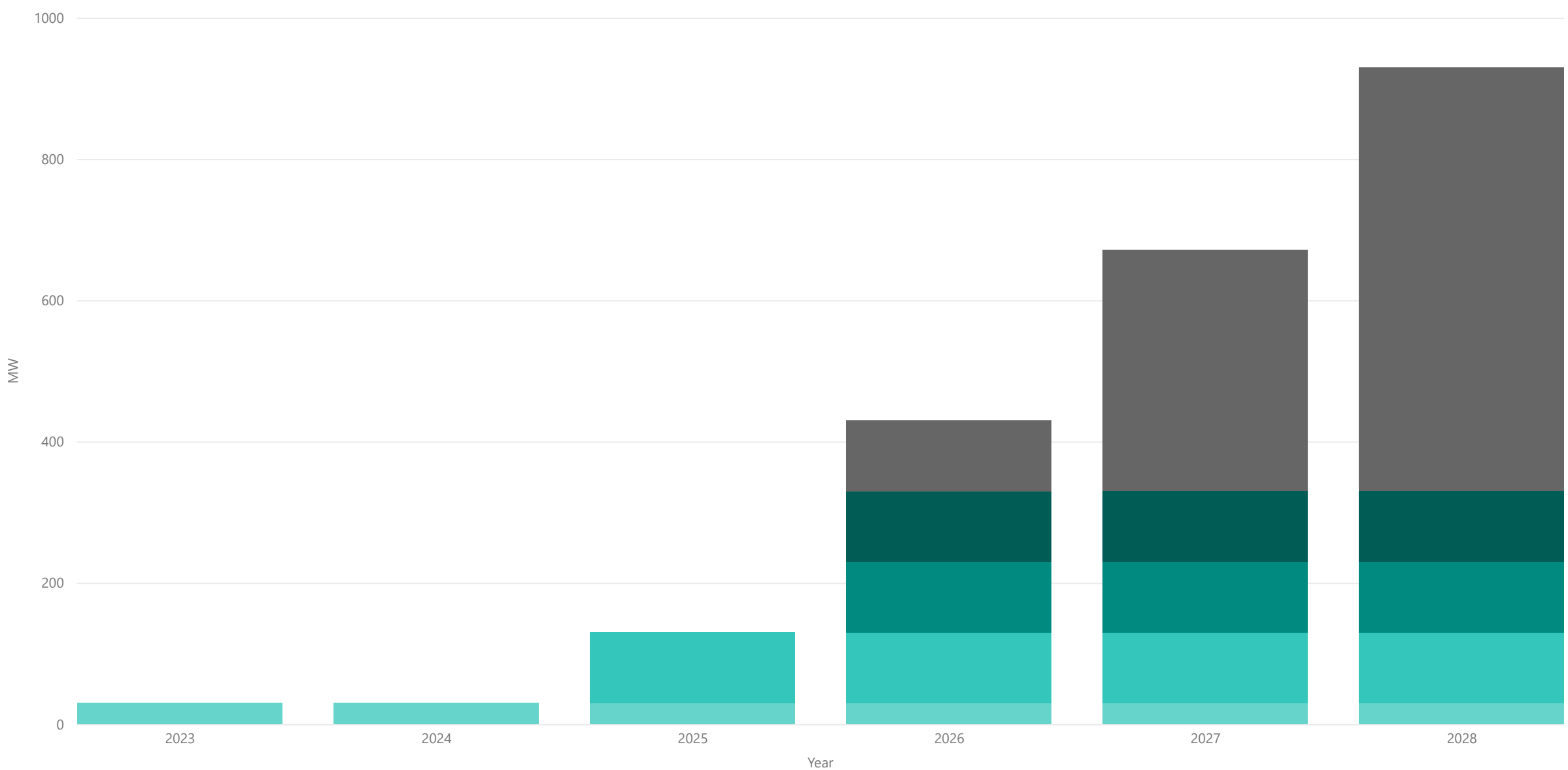
- 100 MW (200 MWh) Ruakākā BESS (2025)
- 100 MW (200 MWh) Glenbrook BESS (2026)
- 100 MW (200 MWh) Huntly BESS (2026)

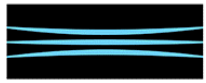
The chart below shows the expected installed BESS capacity reaching 930 MW in 2028 based on the current installed BESS capacity and six BESS projects in the delivery stage. We note that delays and changes remain possible, so this indicates the potential increase in BESS capacity if projects are commissioned in line with current expectations. Projects in the earlier application and investigation stages have been excluded from this chart as the projects do not have an expected commissioning date.

For further context on how BESS integration can influence market outcomes, see our [previous market insight](#) on the impact of the 100 MW (200 MWh) Ruakākā BESS entering the wholesale electricity market in late July 2025. More information on our latest grid connections is available [here](#).

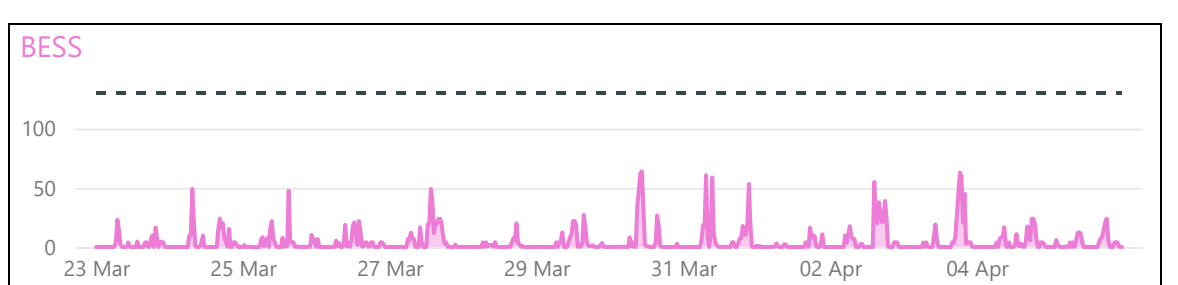
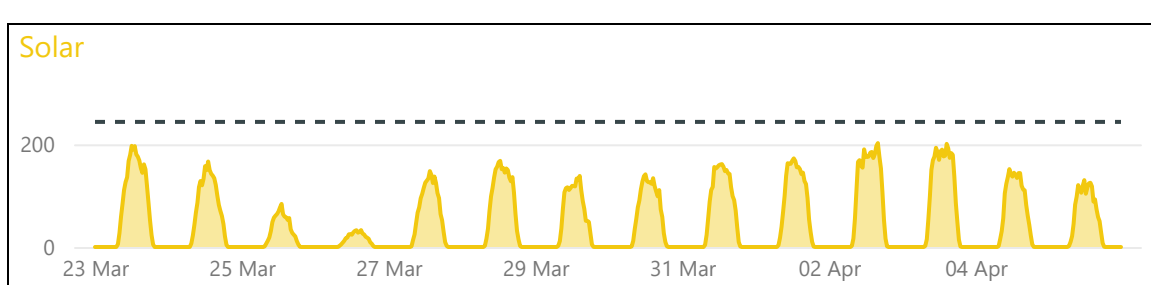
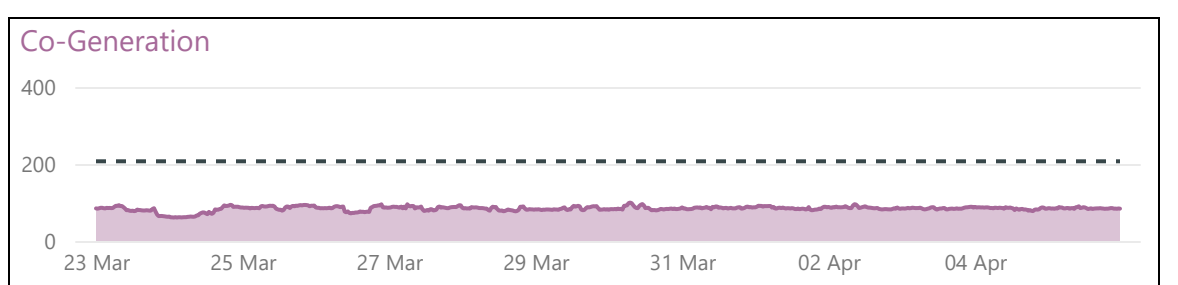
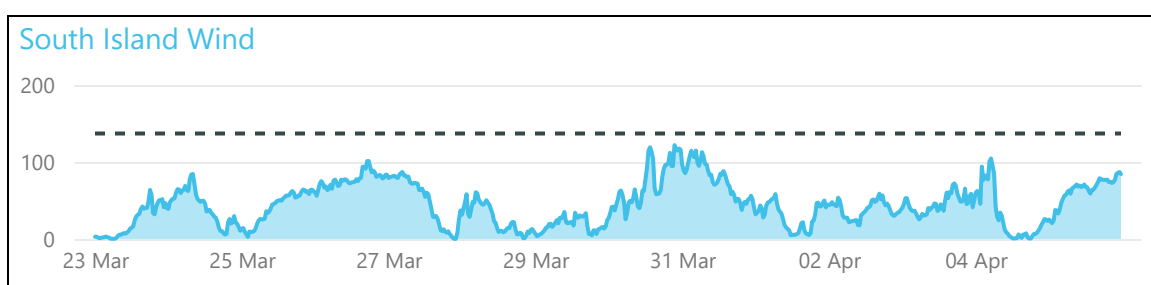
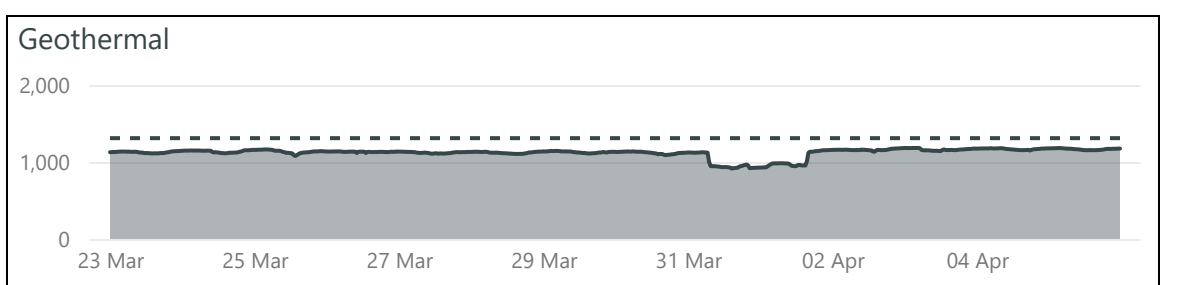
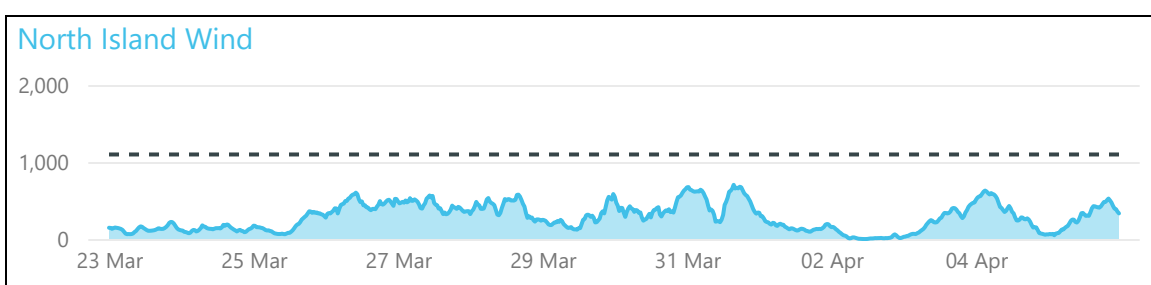
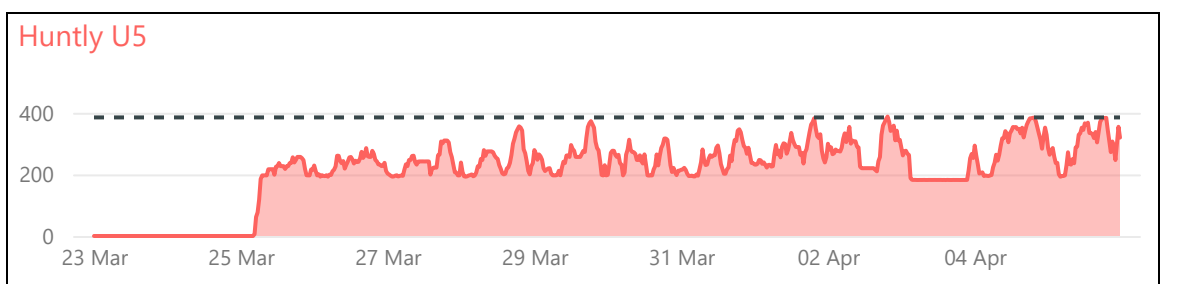
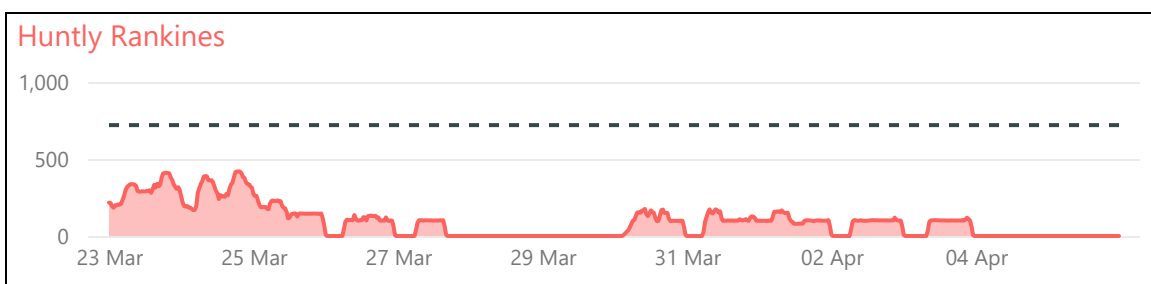
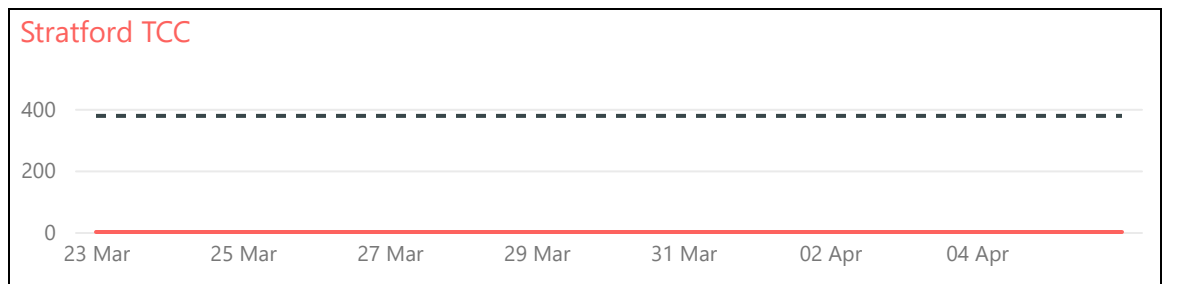
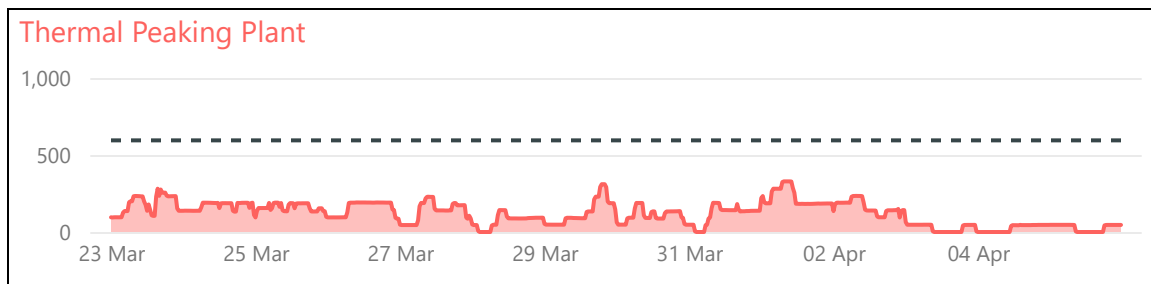
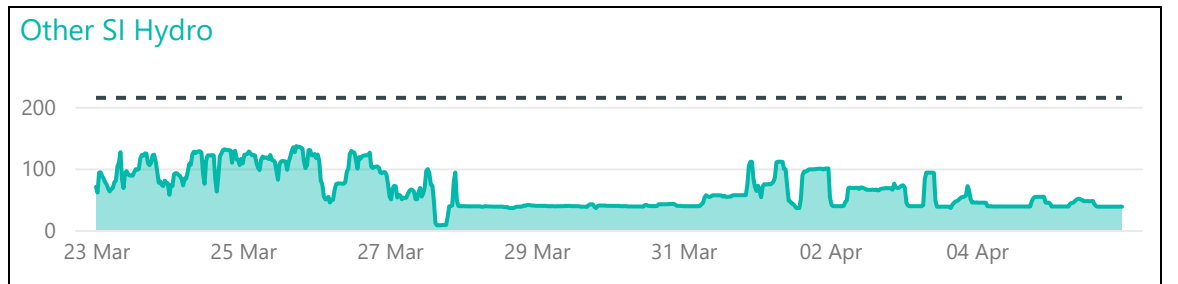
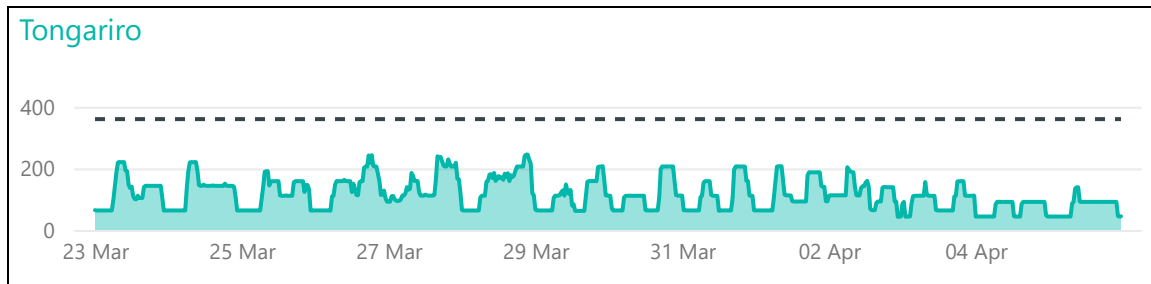
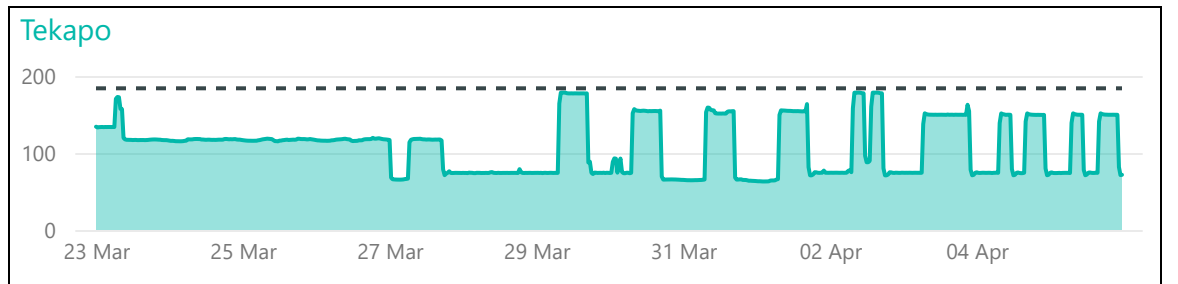
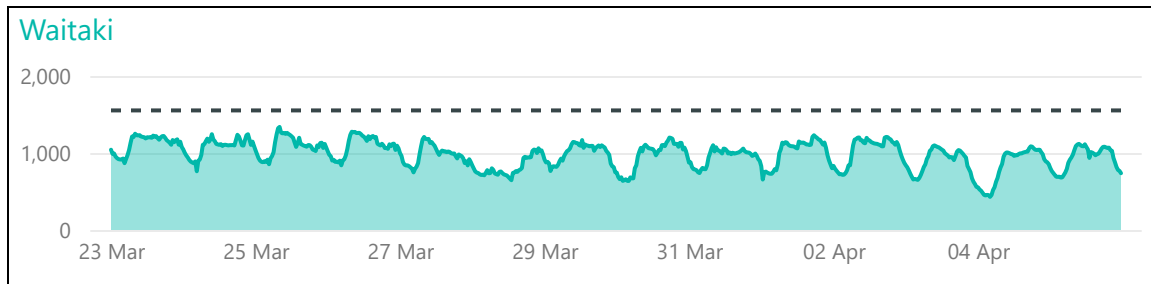
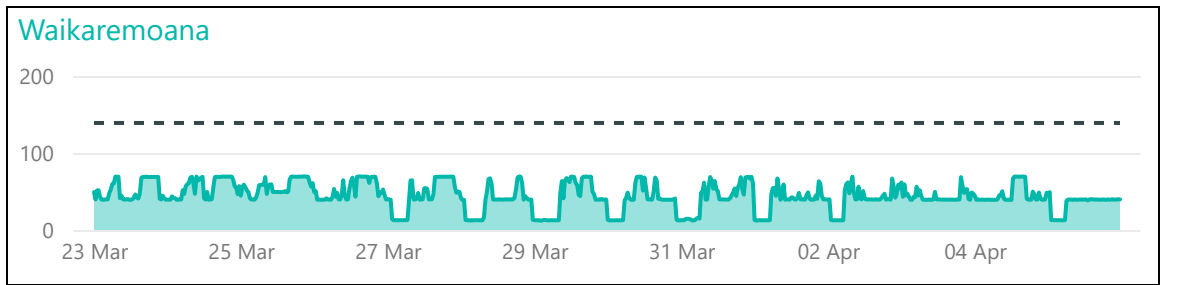
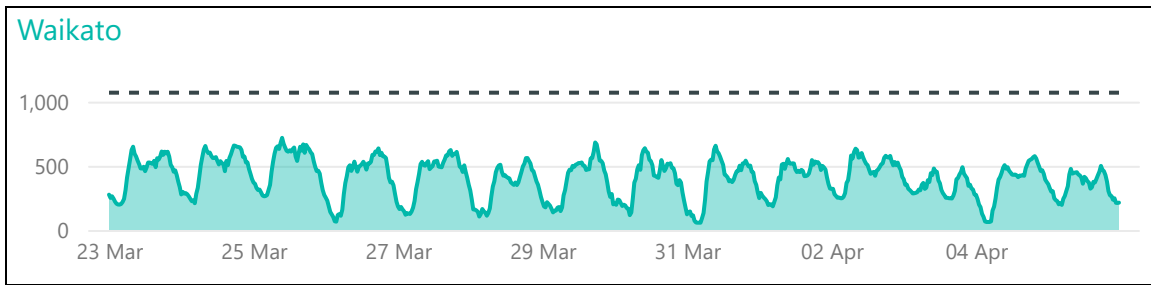
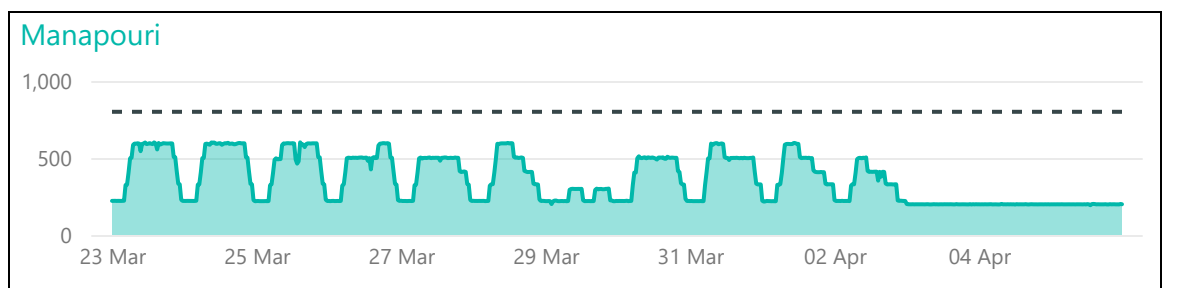
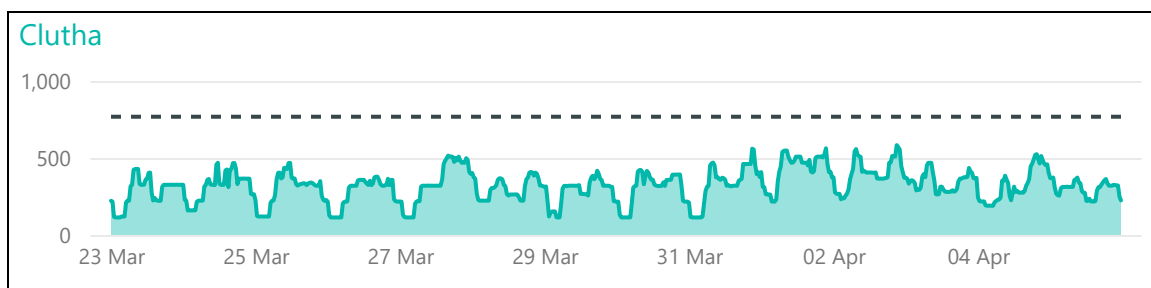
Expected Installed BESS Capacity

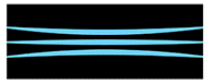
BESS ● Rotohiko ● Ruakākā ● Glenbrook ● Huntly ● Delivery phase as of March 2026



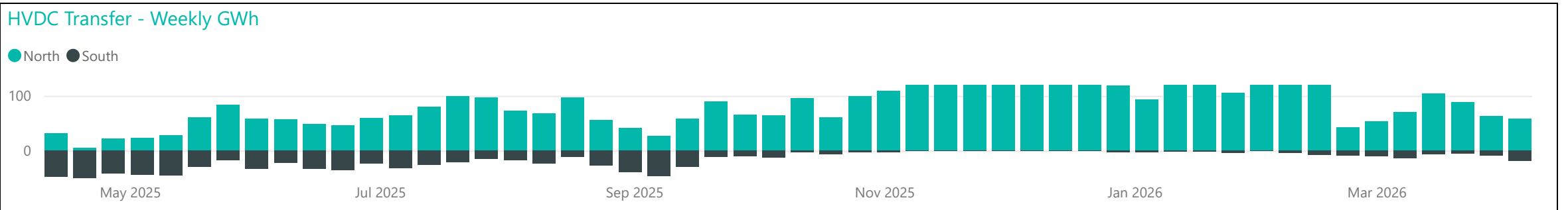
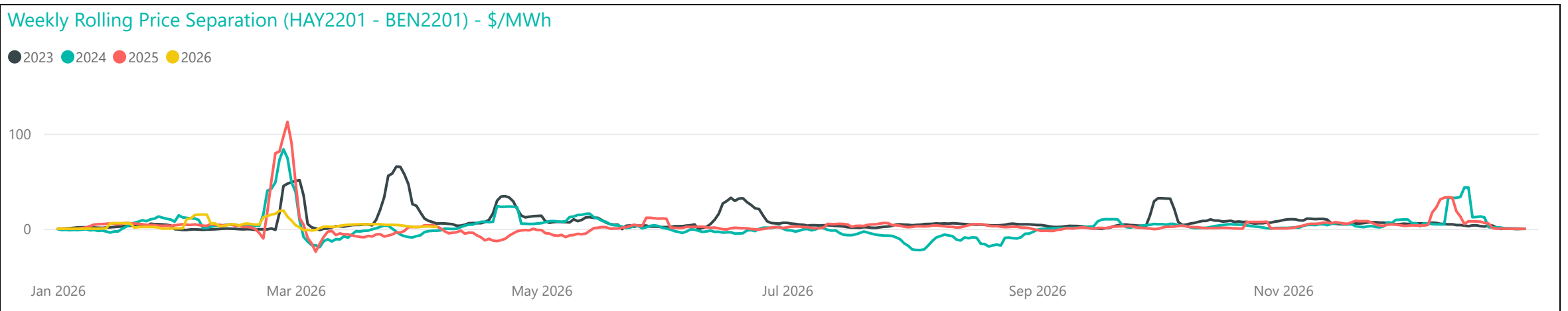
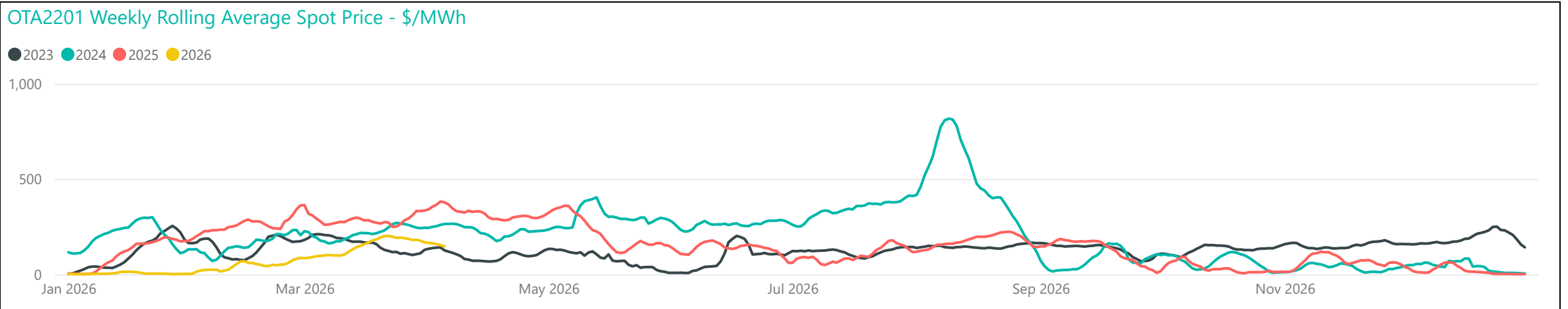
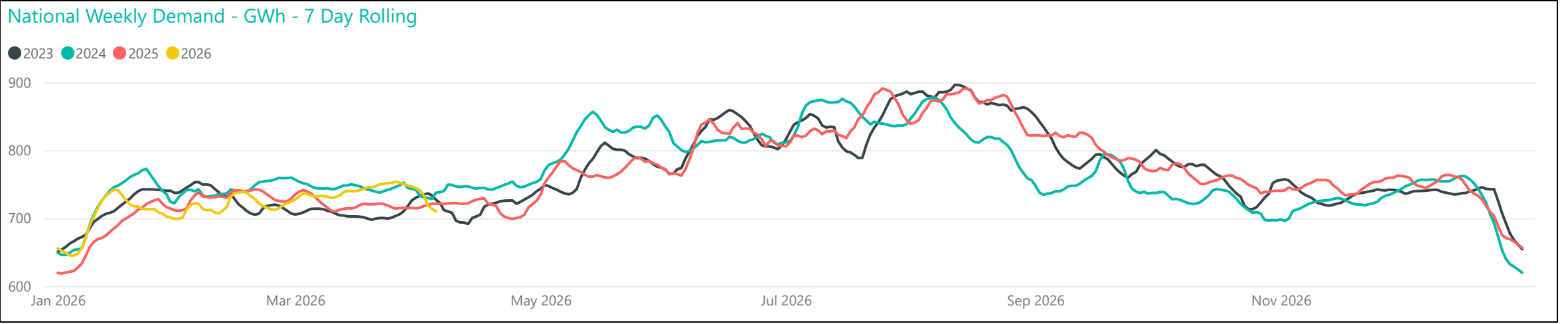


Generation Breakdown - Last Two Weeks *Measured in MW and displayed at trading period level for last 14 days*

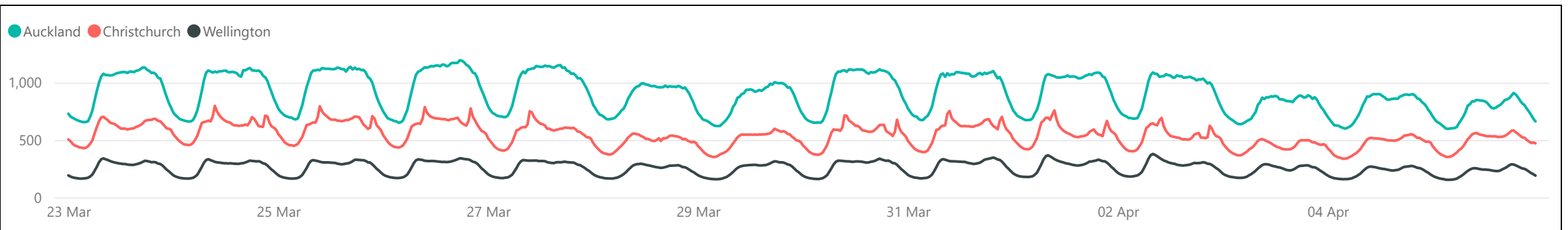




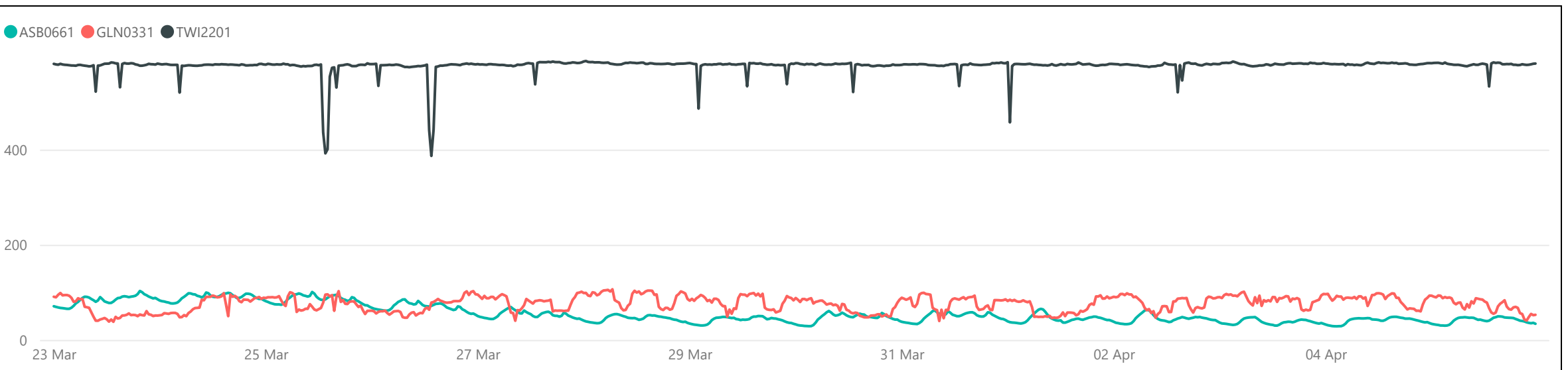
Weekly Profiles



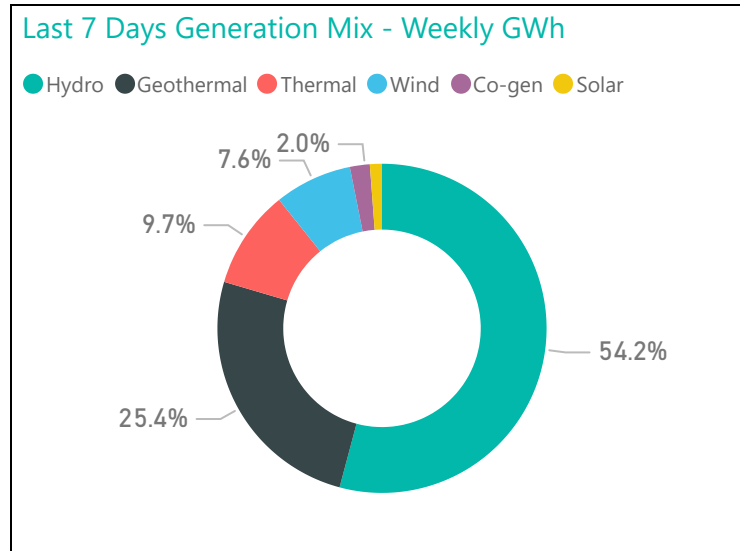
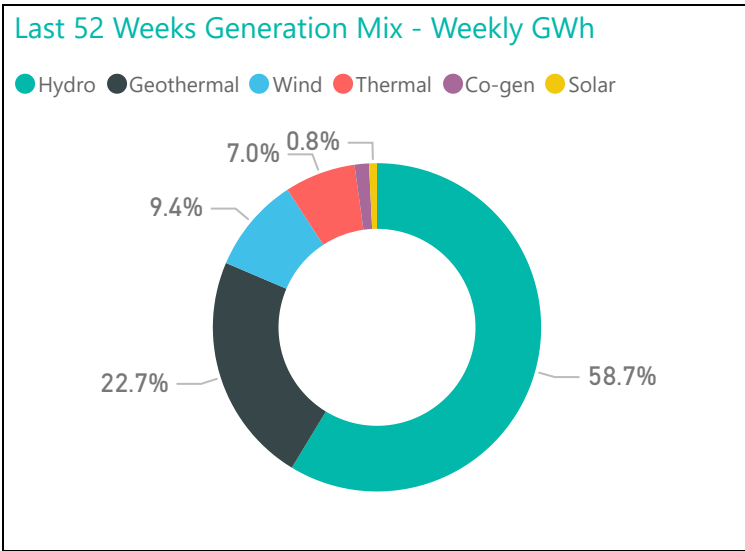
Conforming Load Profiles - Last Two Weeks *Measured in MW shown by region*



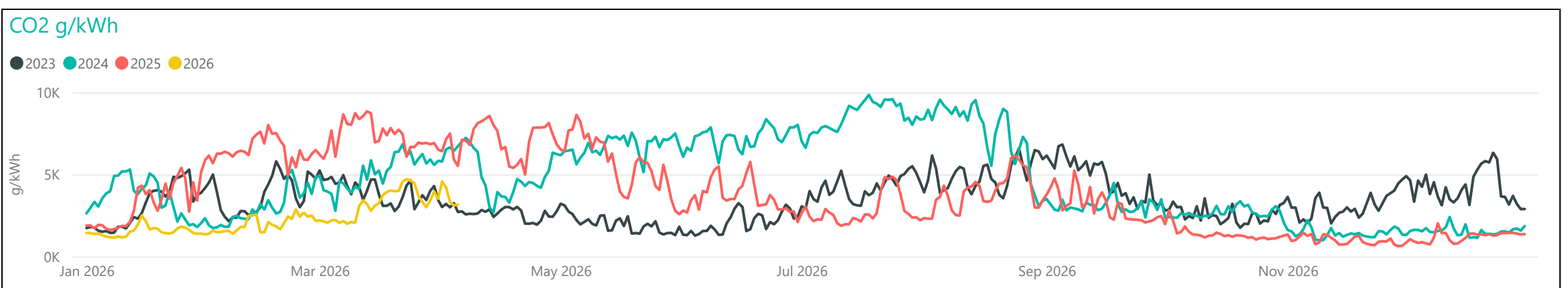
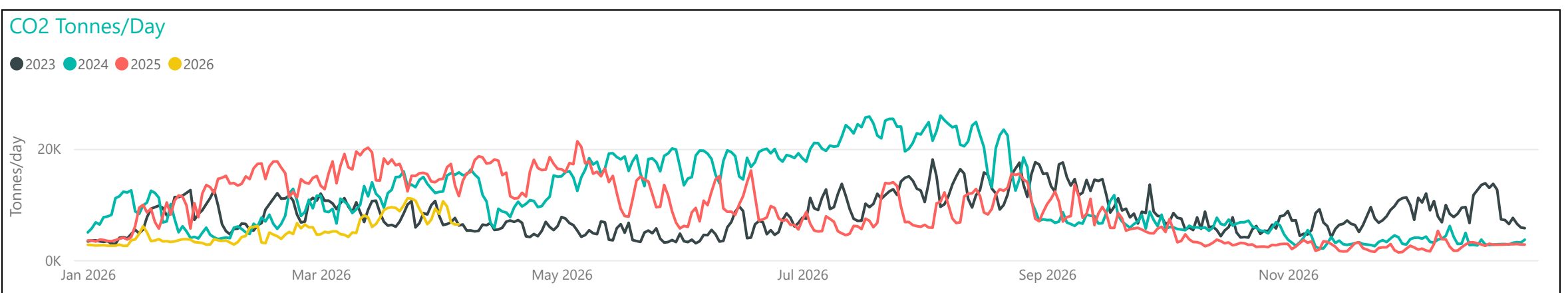
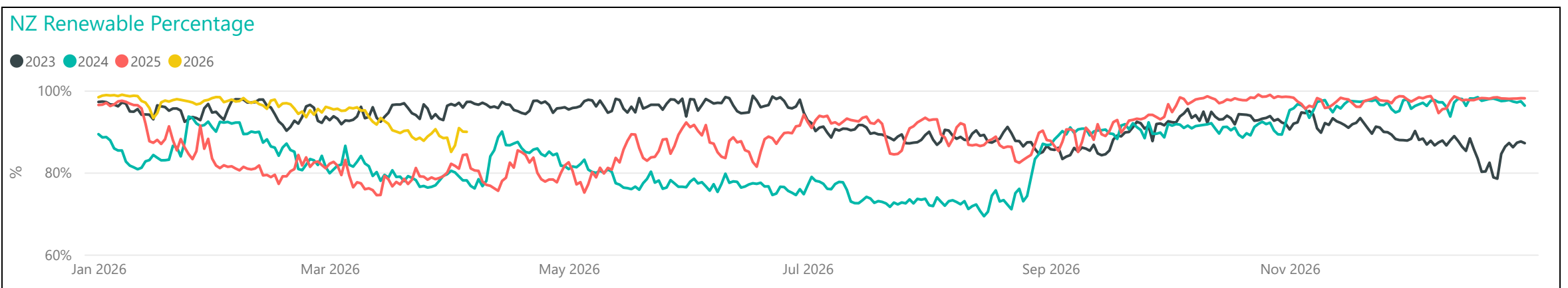
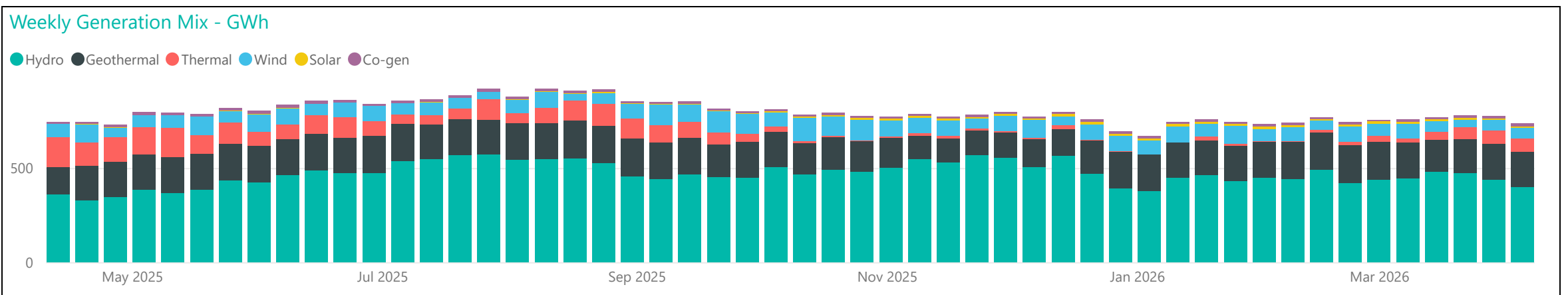
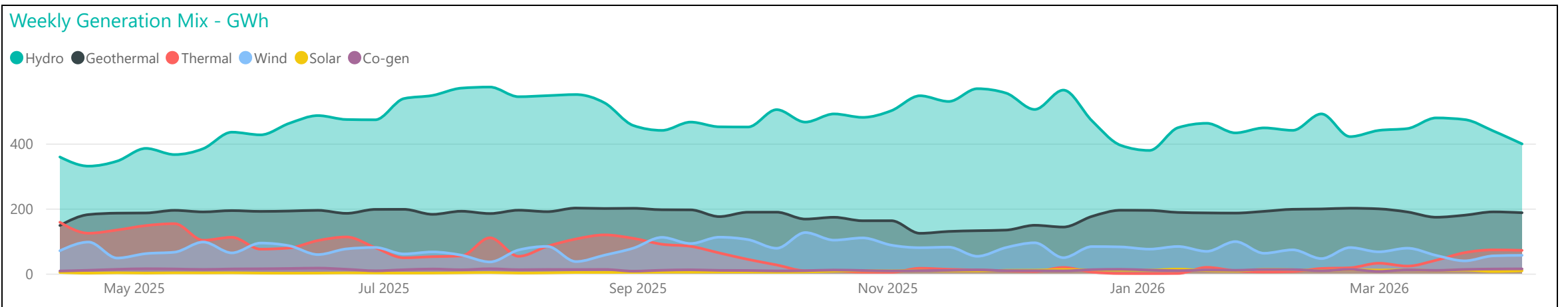
Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*



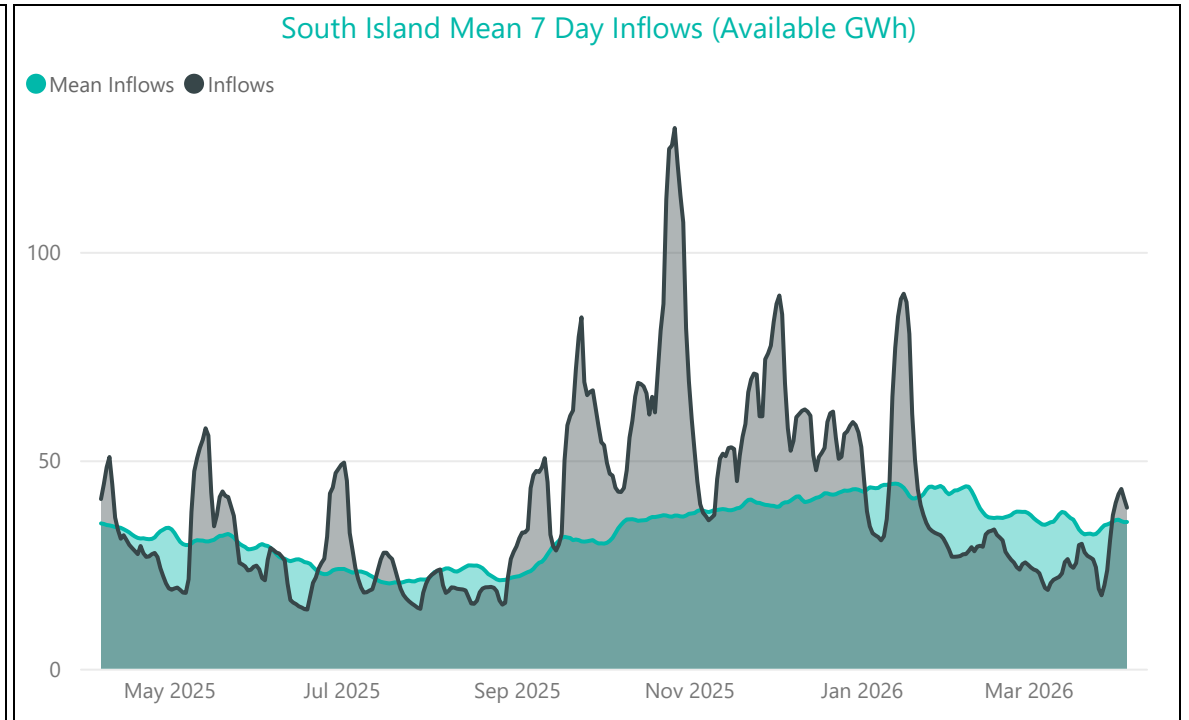
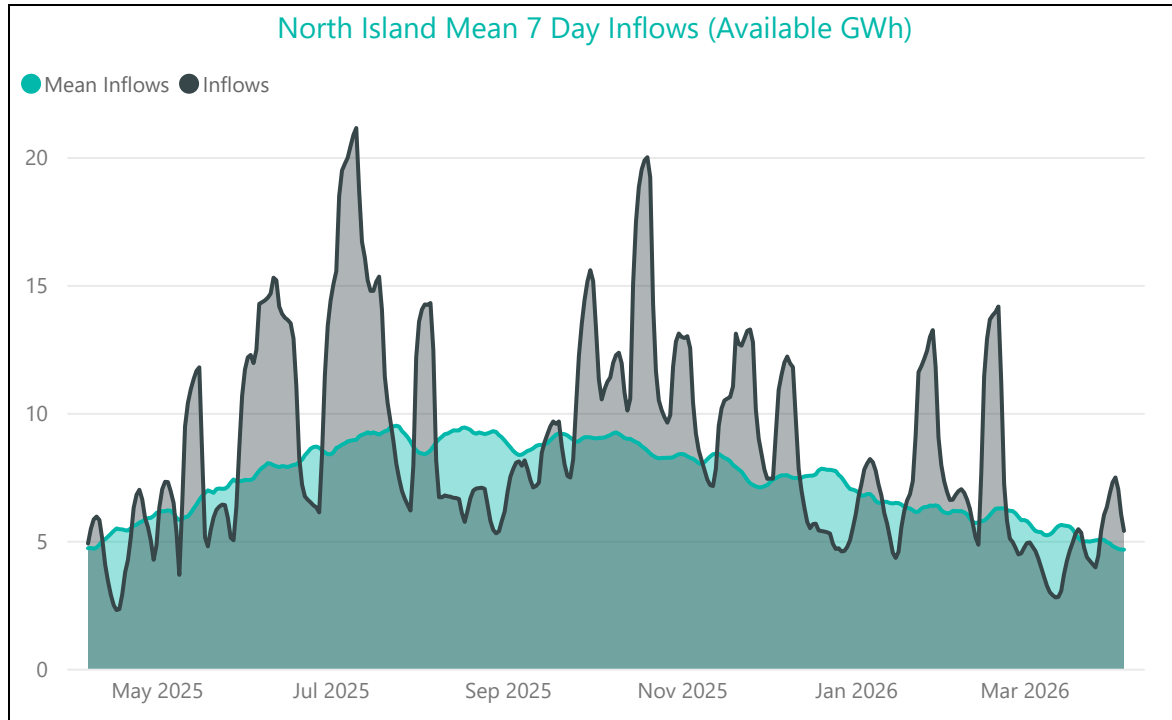
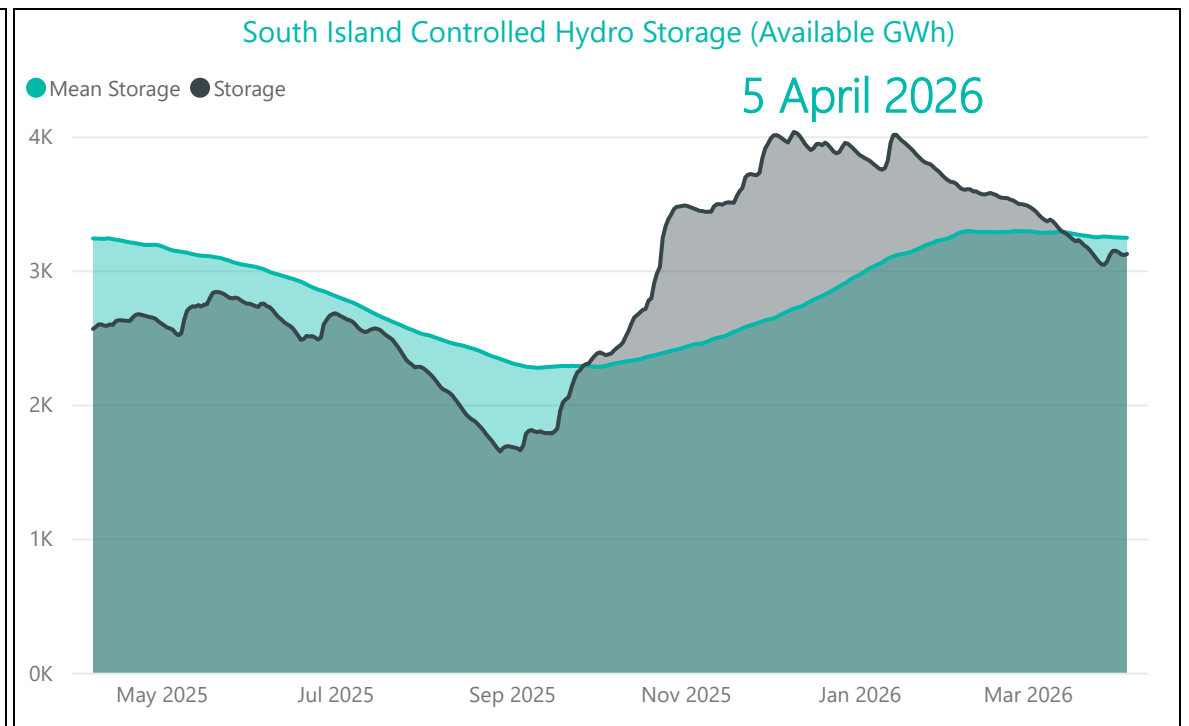
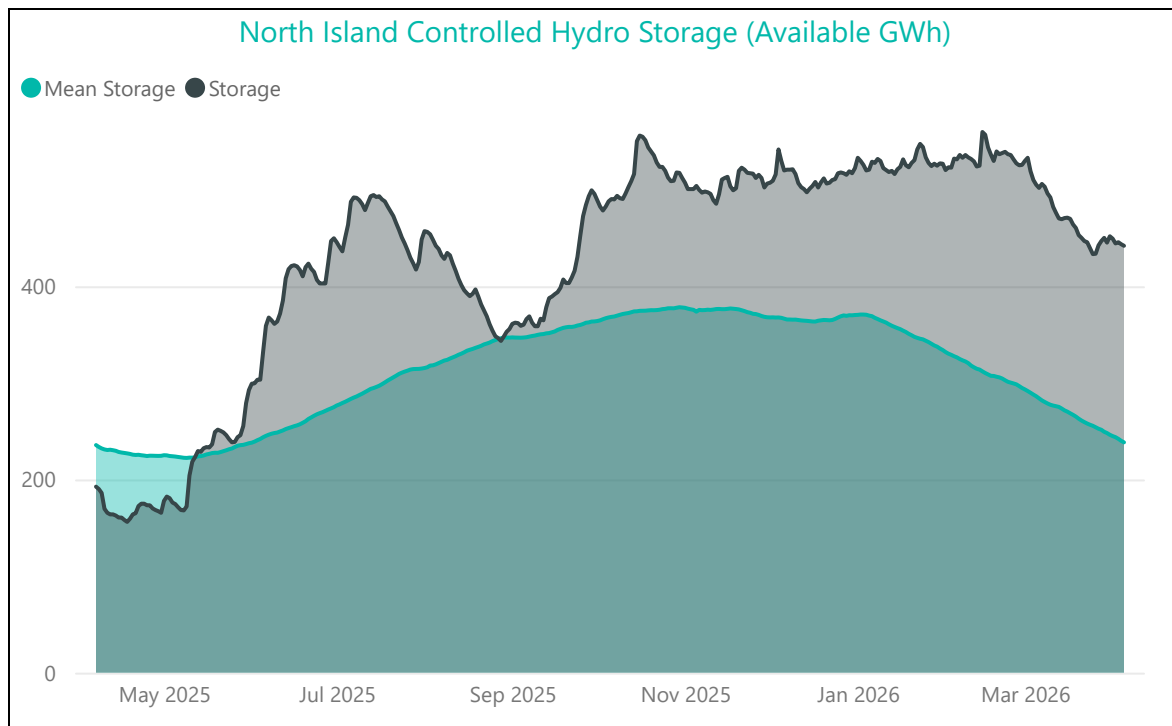
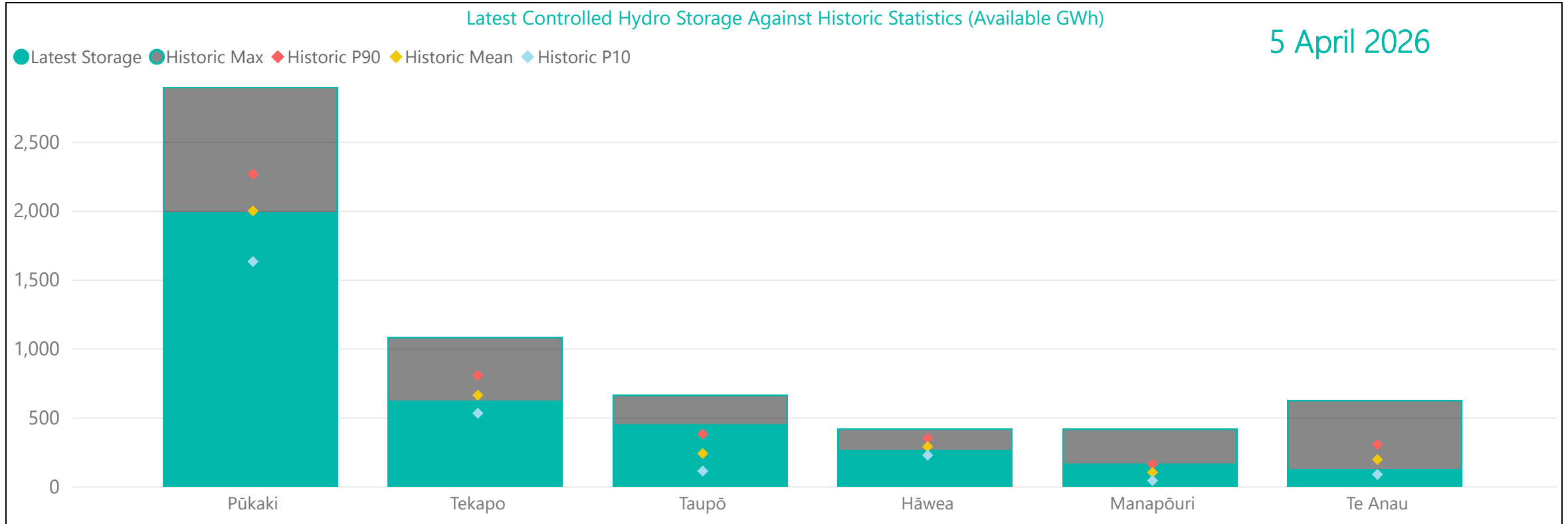
Generation Mix



Average Metrics Last 7 Days		
Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
88%	57,423	77.0
Average Metrics Last 52 Weeks		
Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
92%	50,510	62.3



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>.

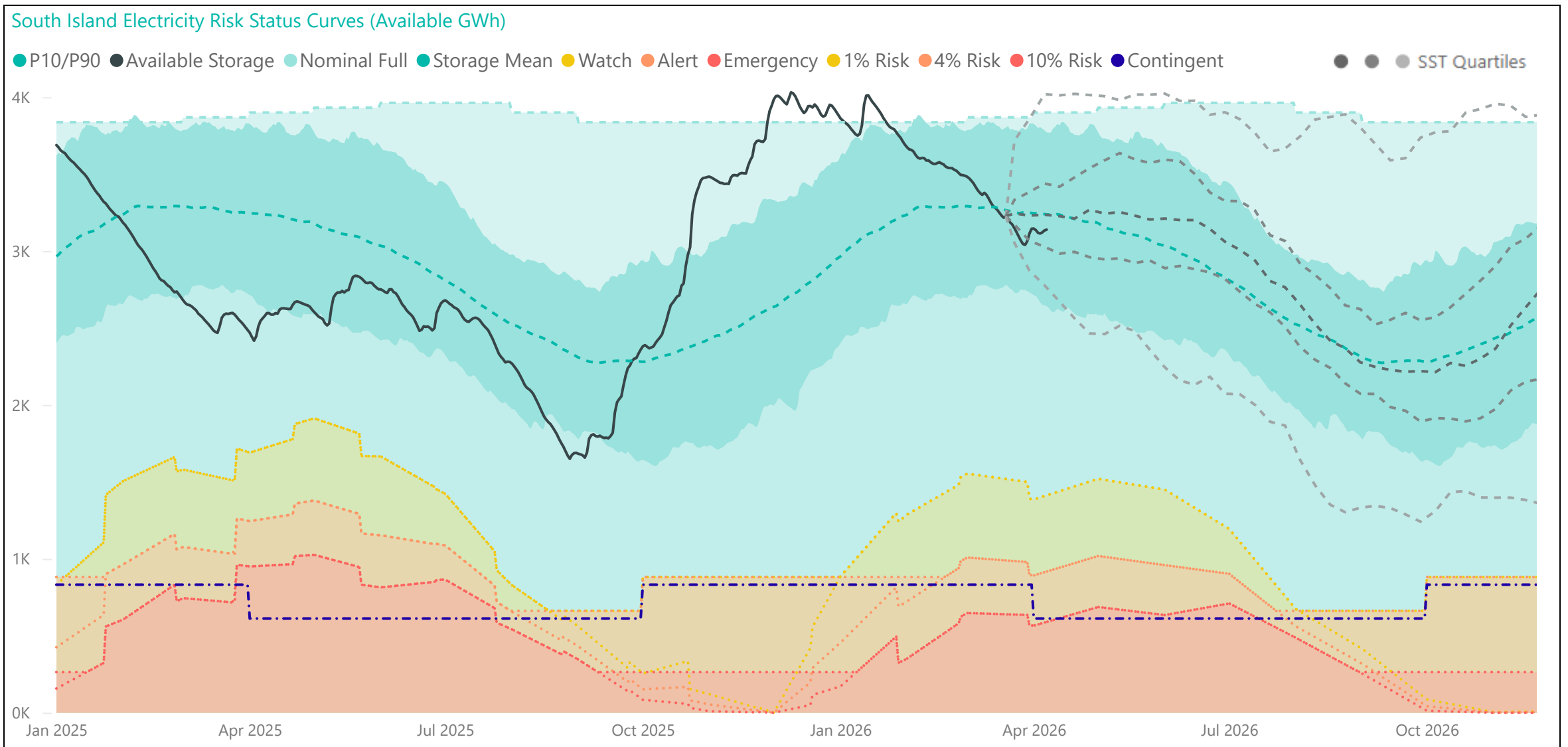
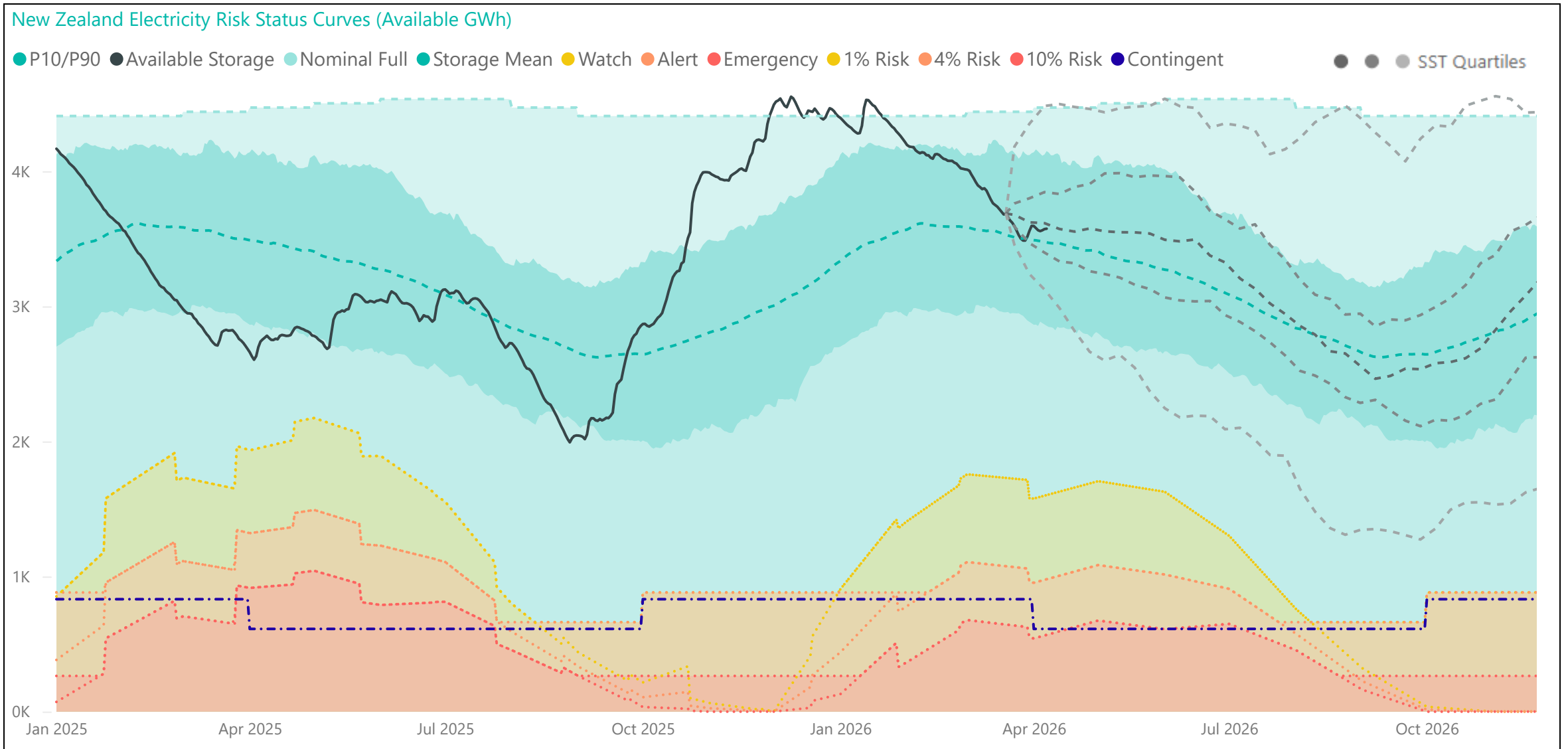
For any inquiries related to security of supply contact market.operations@transpower.co.nz

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



Electricity Risk Curve Explanation:

- Watch Curve - The maximum of the one percent risk curve and the floor and buffer
- 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. The buffer is 50 GWh.

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).