Market Operations Weekly Report - Week Ended 11 January 2026

Overview

New Zealand hydro storage was at 129% of the historic mean last week, and remains above the 90th percentile.

This week's insight looks closer at the demand over the holiday period and how it compares to previous years.

Security of Supply

Energy

National hydro storage increased slightly from 128% to now sitting at 129% of the historic mean. South Island hydro storage increased from 126% to 128% of the historic mean, and North Island storage increased from 141% to 144%.

Capacity

Residuals were healthy with over 1000 MW of residual over all peaks last week, due to significantly lower demand during the holiday. The lowest residual of 1039 MW occurred during the morning peak on Thursday 8 January.

The N-1-G margins in the NZGB forecast are healthy through to early March. 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 last week increased to 712 GWh from 642 GWh the week before. Lower demand is typical for the beginning of January due to the holiday period and is in line with previous years. We go into more detail in this week's insight. The highest demand peak of 5008 MW occurred at 5:30 pm on Thursday 8 January.

Weekly Prices

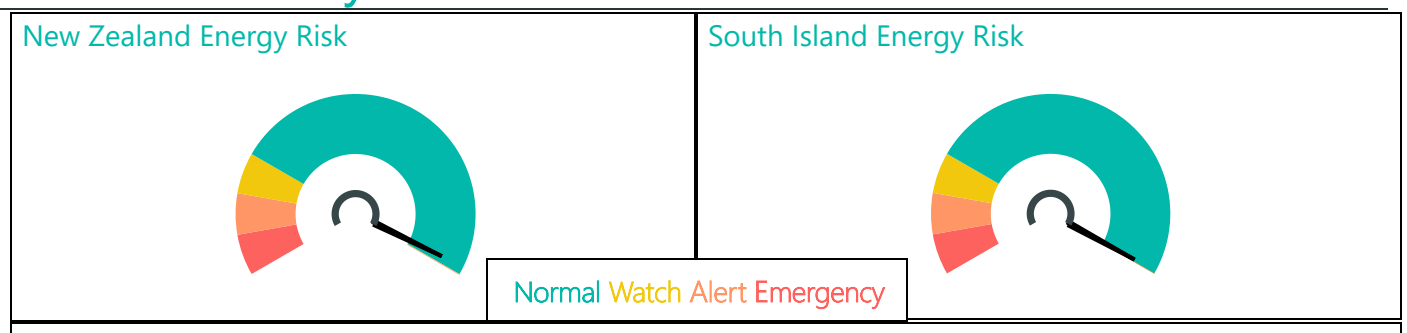
The average wholesale electricity spot price at Ōtāhuhu last week was $3/MWh, up from $1/MWh the week prior. Wholesale prices peaked at $20/MWh at Ōtāhuhu at 5:30 pm on Thursday 8 January. Reserve and energy prices have been low in line with high hydro storage and low demand during the holiday period.

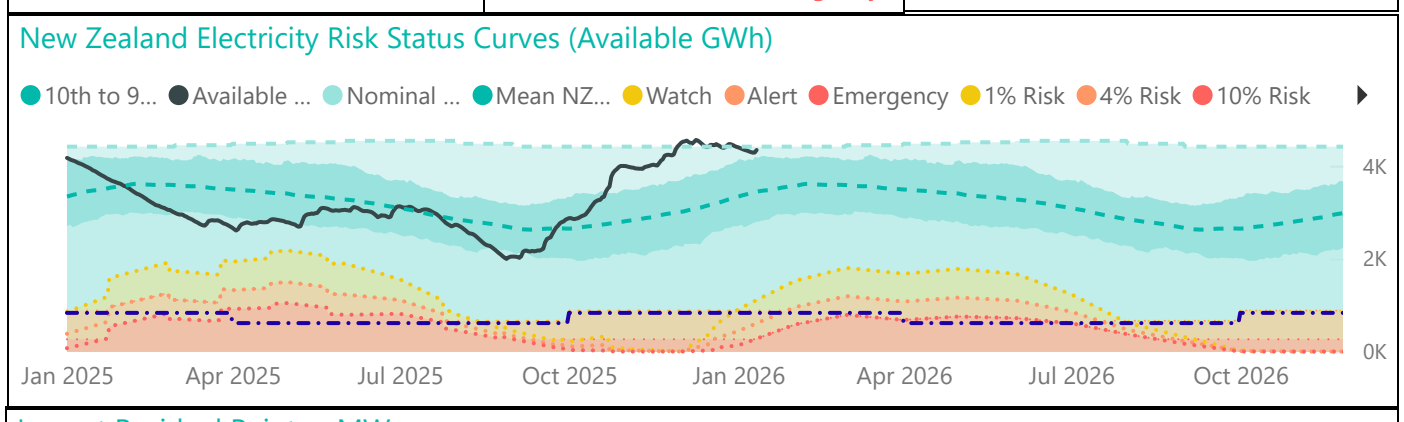
Generation Mix

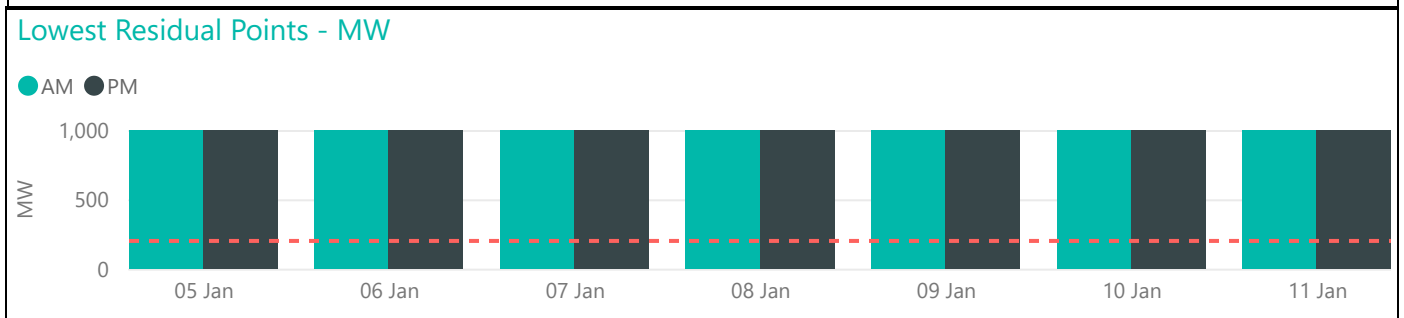
Wind generation was 11% of the generation mix, above the average contribution of 9%. Hydro generation remains above average at 60% of the mix. Solar generation was close to 2% of the mix, reaching an all time record output of 214 MW at 1:00 pm on Thursday 8 January. The geothermal share was 26% of the mix and above its average contribution of 23%. Total renewable contribution to the mix was 99%, the 14th consecutive week of at least 97% renewable generation. Thermal generation was close to 0% of the mix.

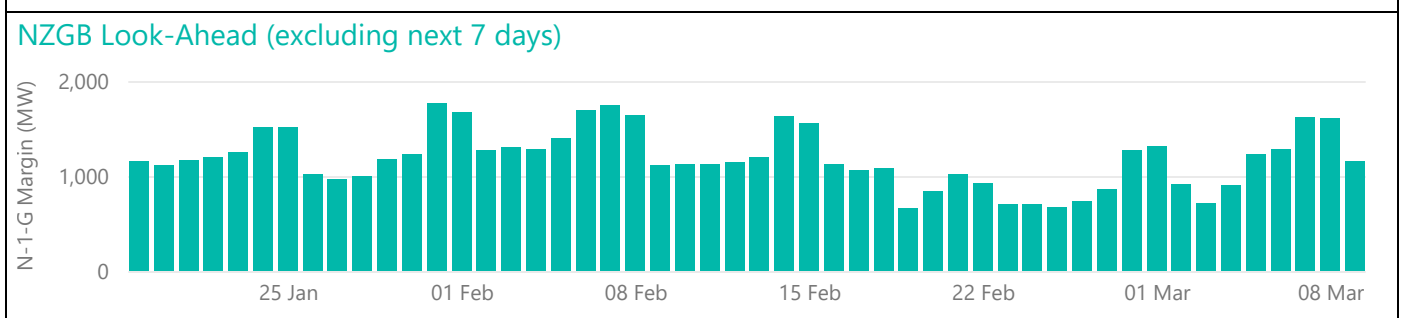
HVDC

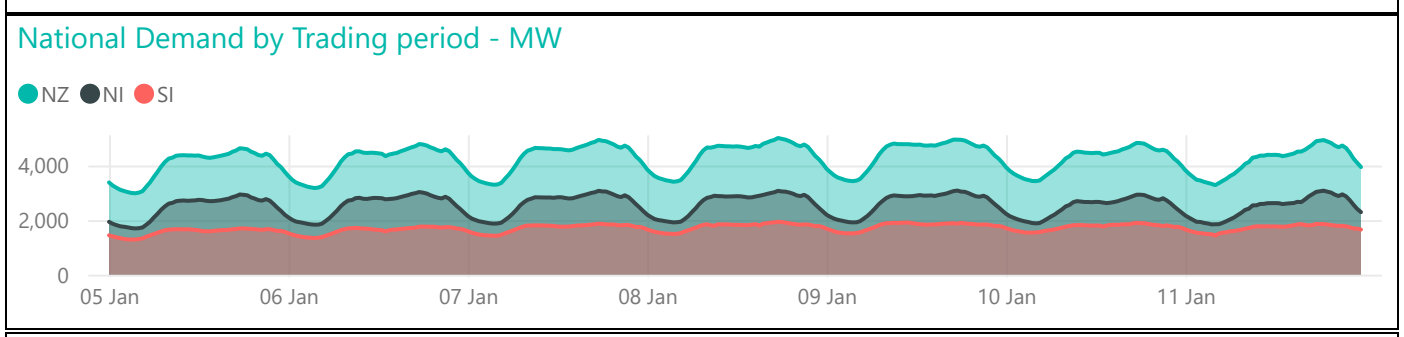
HVDC flow was predominantly northward last week with high hydro generation, and higher demand in the North Island. In total, 63 GWh was transferred north and less than 1 GWh sent south during some overnight periods with high wind generation.

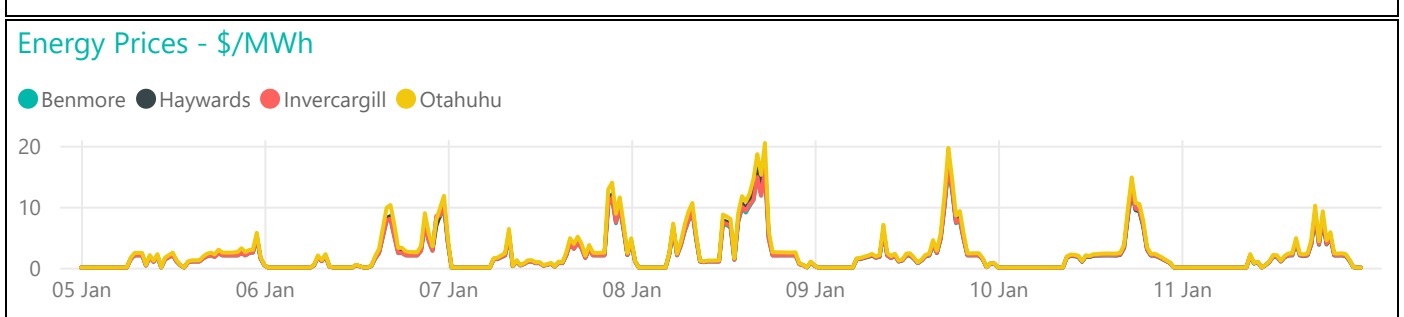


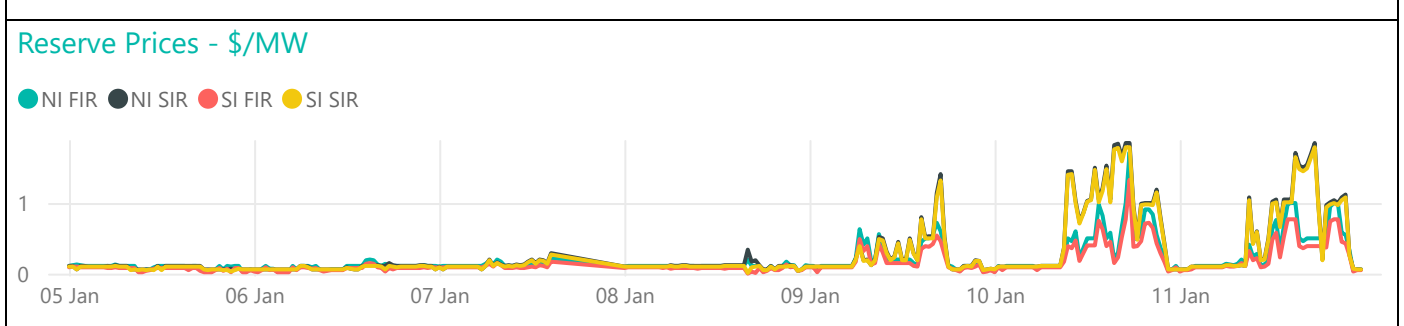


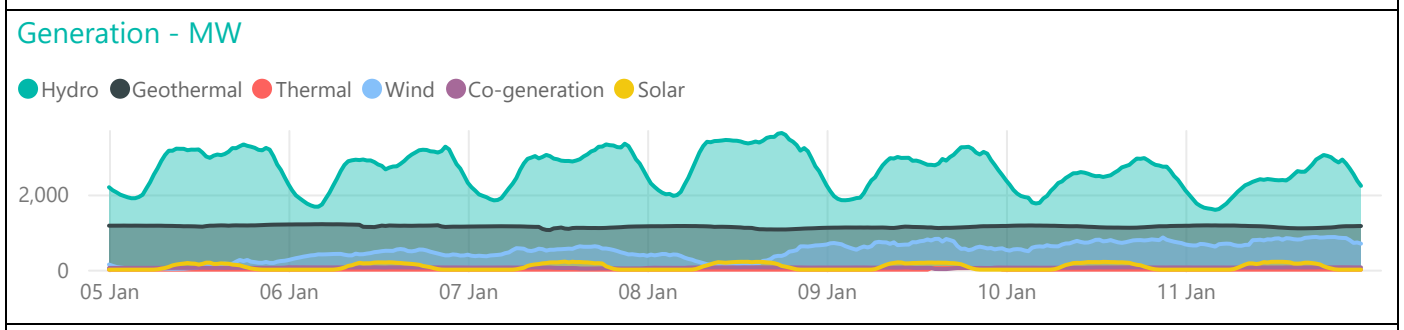


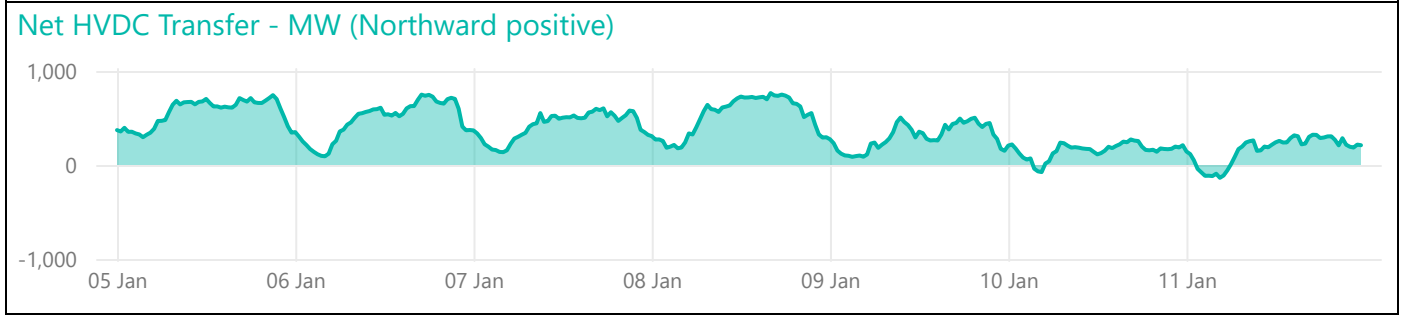












Weekly Insight - Holiday load profiles

Through the summer holiday period, we typically observe much lower demand totals as offices and workplaces have their annual close and children are enjoying their summer break. This year was no exception, and in this insight we take a closer look into the demands profiles over this time.

The Christmas and holiday load profiles are shown in Figure 1 with the solid lines representing the 2025/2026 profiles and dashed lines representing the average of the four years prior. For the 2025/2026 period, October to December load was taken from 1 October to 18 December, and the holiday period dates were from 19 December to 7 January. From this, we can see that while the average daily load from October to December is slightly higher than in previous years, this year's load over the holiday period was lower than previous years.

In last year's holiday profile insight, it was observed that the load was lower than in previous years due to the reduced industrial consumption in the latter half of 2024 following the low hydro storage events. We compared this year's against last year's holiday profiles, as shown in Figure 2, which shows that the load has increased for both the holiday period and the period preceding it due to industrial plants operating at their regular levels.

On Christmas Day, load was slightly lower than in previous years until the evening, when it increased to slightly above average. There was also a trough on Christmas Day at 10:00am when a Tiwai potline tripped, and a slight peak in the evening when the night gets darker and the lights turn on, along with time-of-use plans. In contrast, the Boxing Day load showed a slight increase compared to past years.

Historically, the holiday period is expected to show the lowest demand for the year. The lowest demand total across the country over this time was 2934 MW on 4 January at 3:30 am. The chart below shows the lowest demand points for each summer since 2019, which all occur during the summer holiday period. The only exception during these recent years was March 2020 during the first COVID-19 lockdown.

This data shows us that, while the holiday period is generally predictable in exhibiting much lower demand totals, there is still variance year to year depending on a range of circumstances.

Lowest demand period each summer since 2019

Summer	Date	Time	National Demand
2019/2020	Monday, 30 March 2020	3:30 a.m.	2828 MW
2020/2021	Monday, 4 January 2021	3:30 a.m.	2800 MW
2021/2022	Saturday, 1 January 2022	4:00 a.m.	2998 MW
2022/2023	Monday, 26 December 2022	3:30 a.m.	2854 MW
2023/2024	Tuesday, 2 Januart 2024	3:30 a.m.	2958 MW
2024/2025	Saturday, 28 December 2024	4:00 a.m.	2952 MW
2025/2026	Sunday, 4 January 2026	3:30 a.m.	2934 MW

Figure 1: Christmas and holiday load profiles

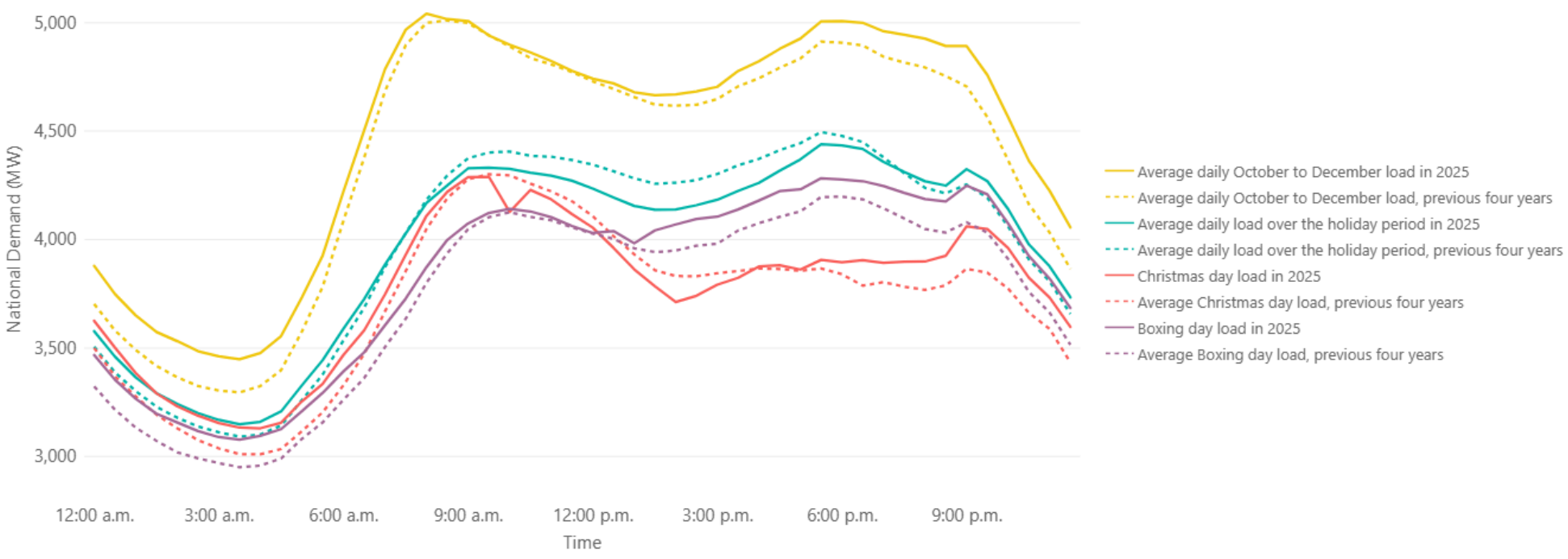
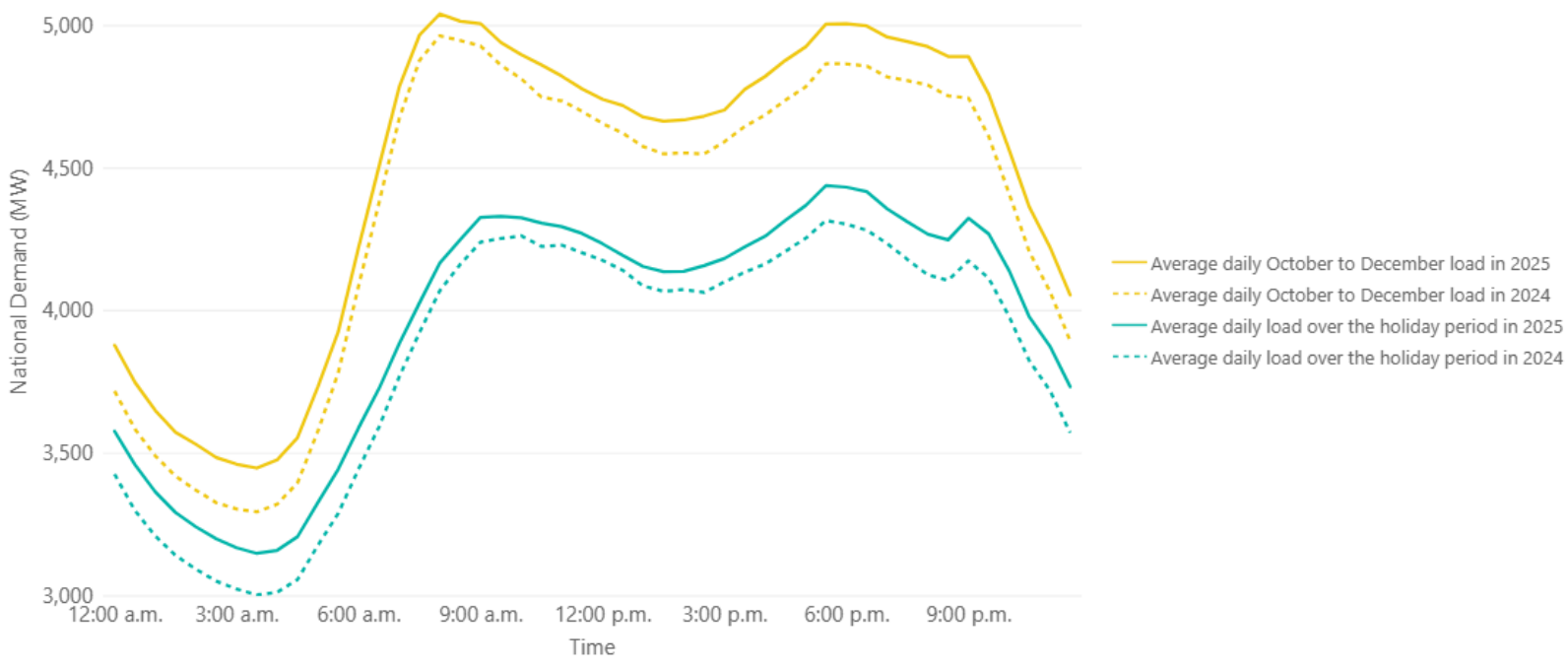


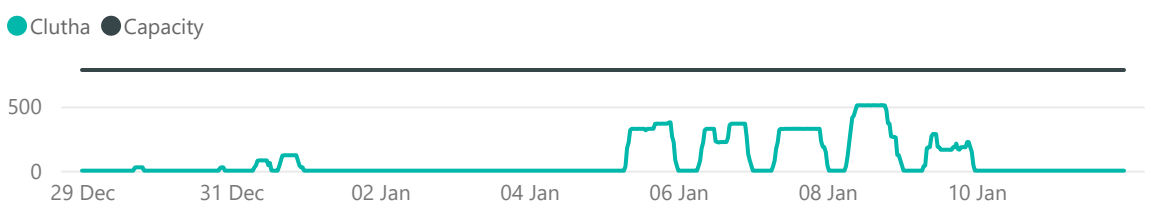
Figure 2: 2025 and 2024 holiday load profiles



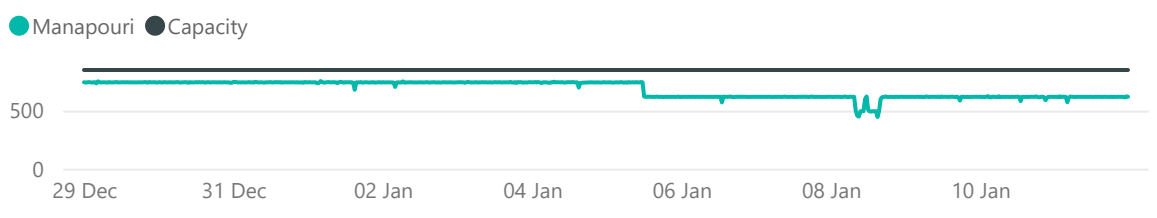
Generation Breakdown - Last Two Weeks

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

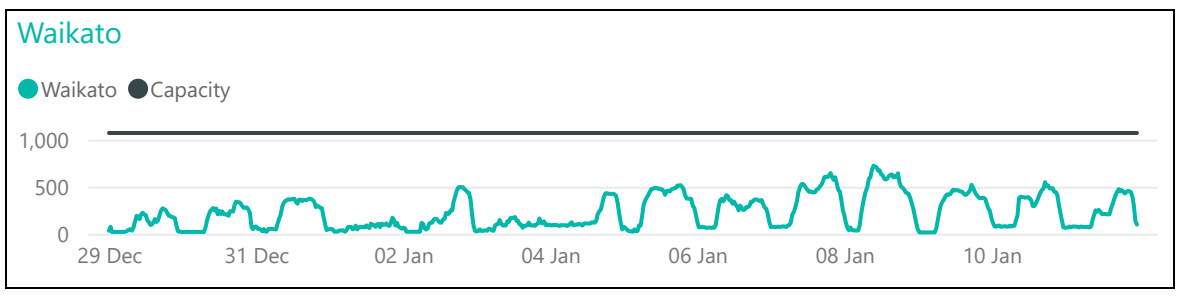
Clutha



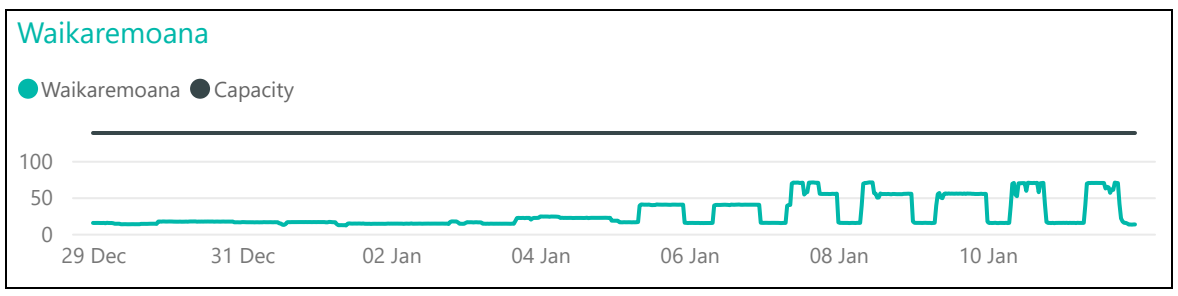
Manapouri



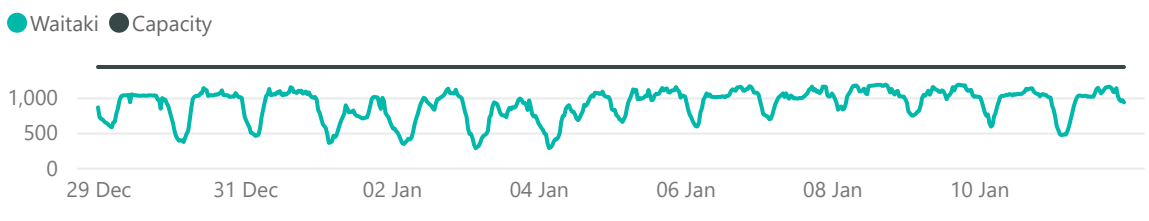
Waikato



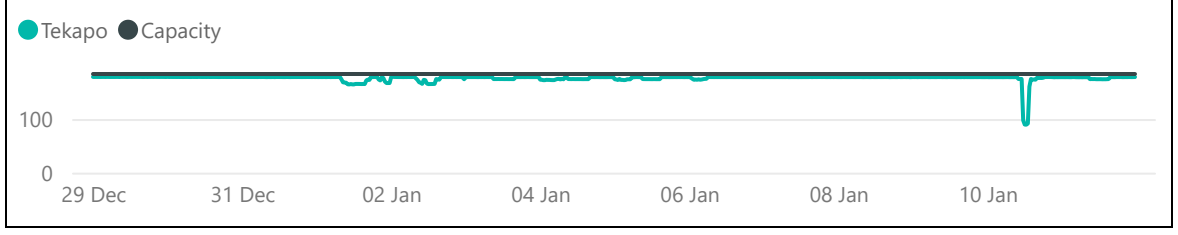
Waikaremoana



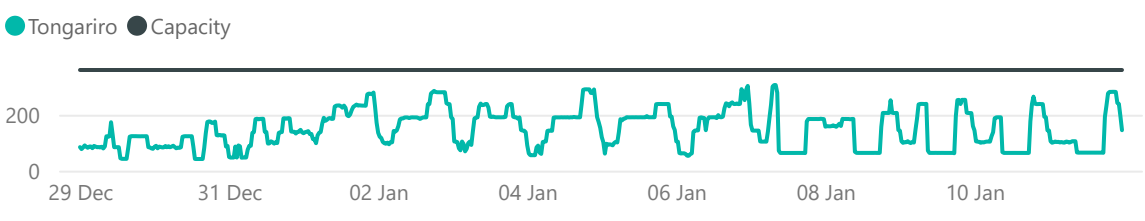
Waitaki



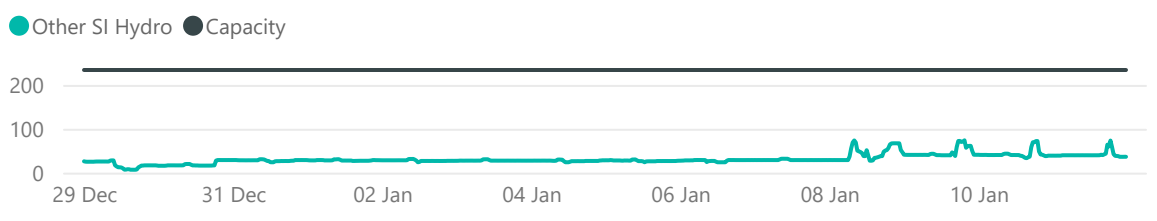
Tekapo



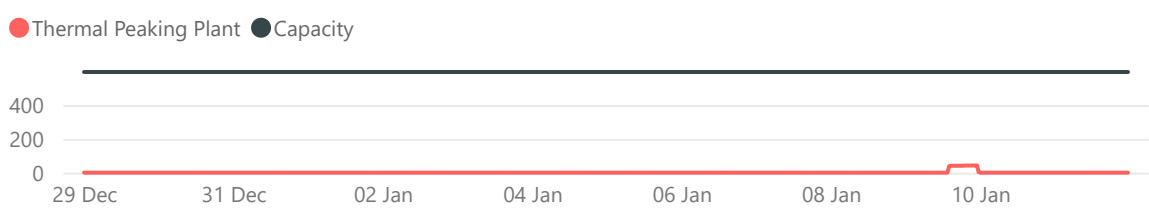
Tongariro



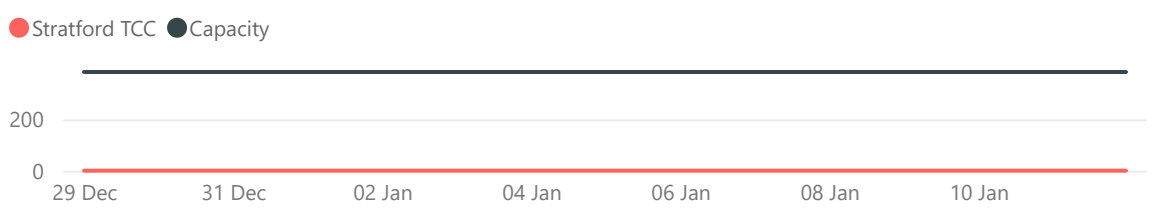
Other SI Hydro



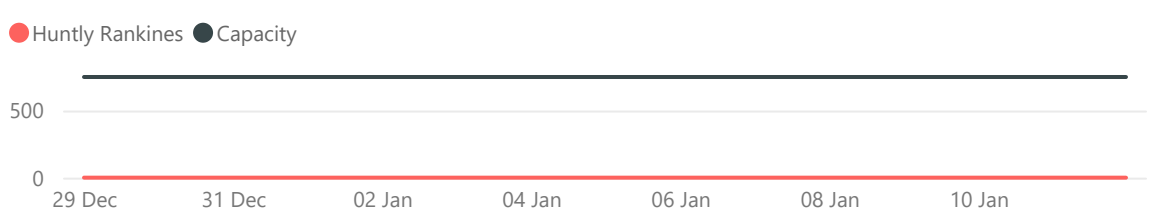
Thermal Peaking Plant



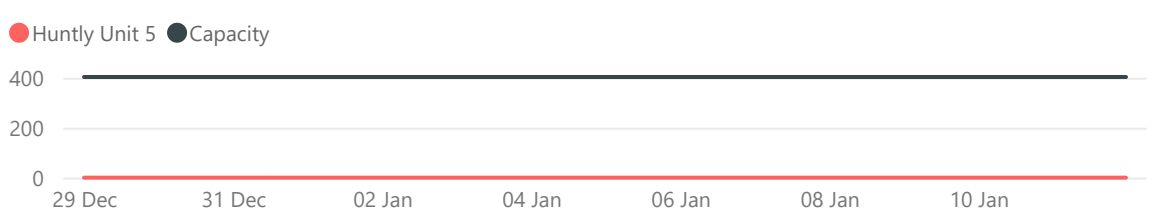
Stratford TCC



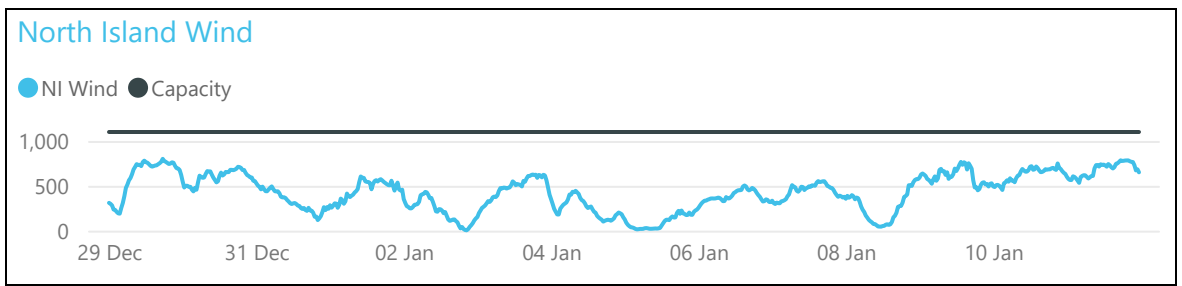
Huntly Rankines



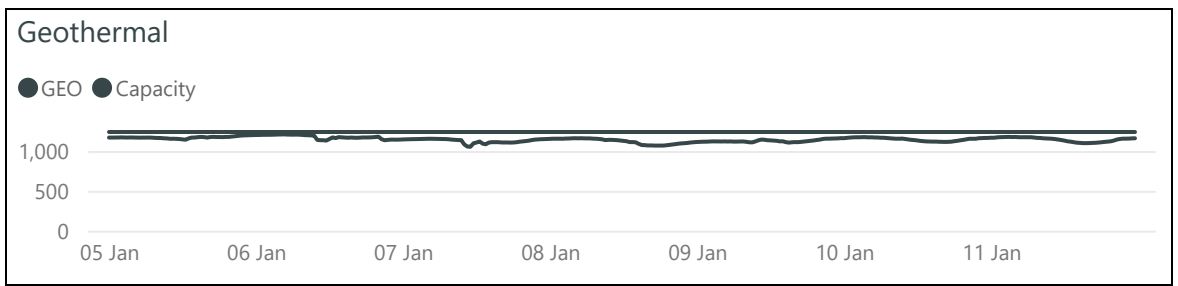
Huntly U5



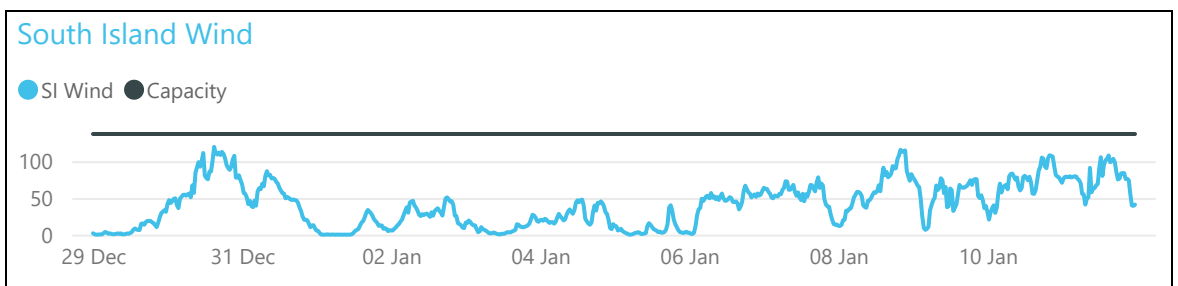
North Island Wind



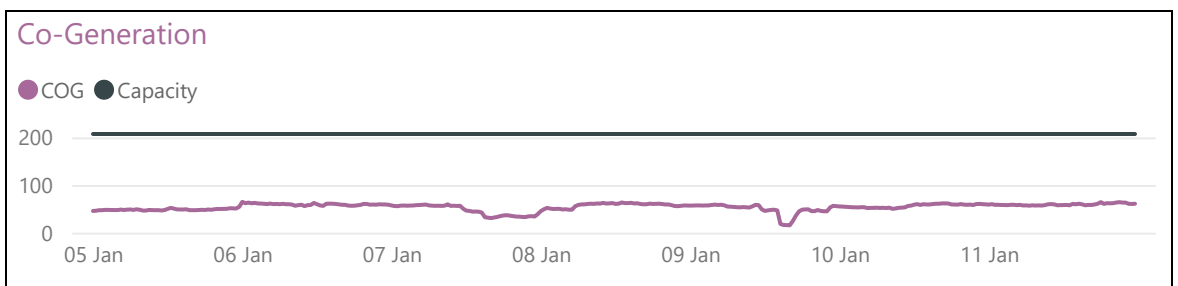
Geothermal



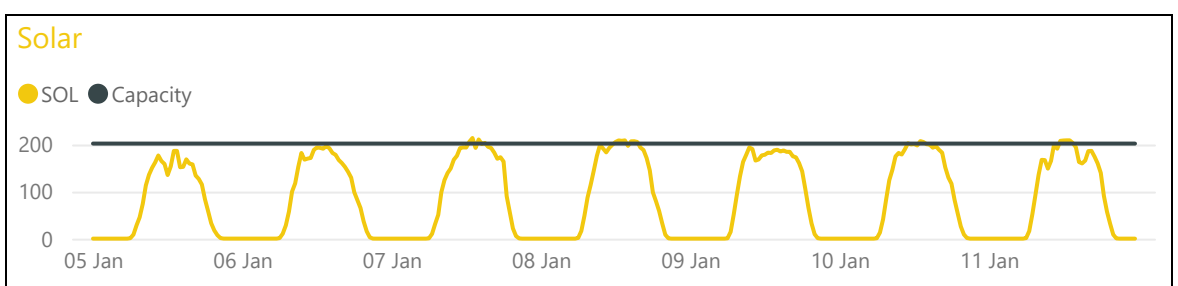
South Island Wind



Co-Generation

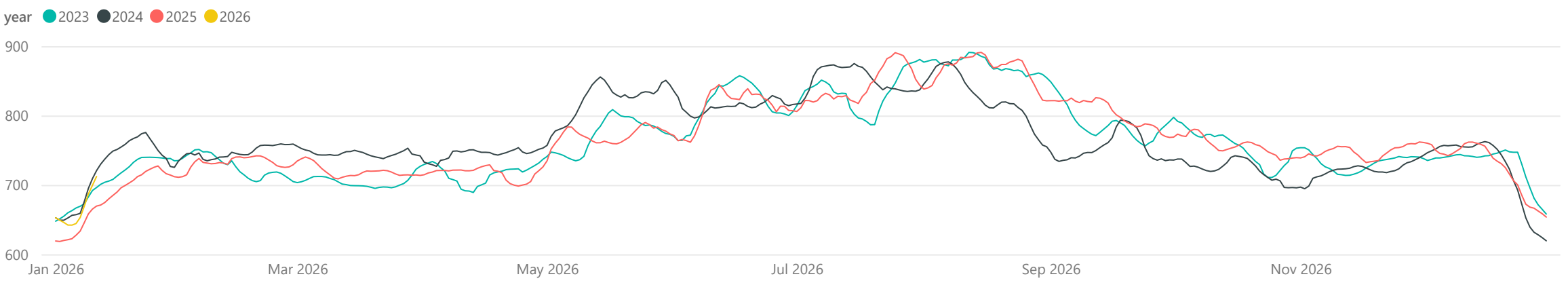


Solar

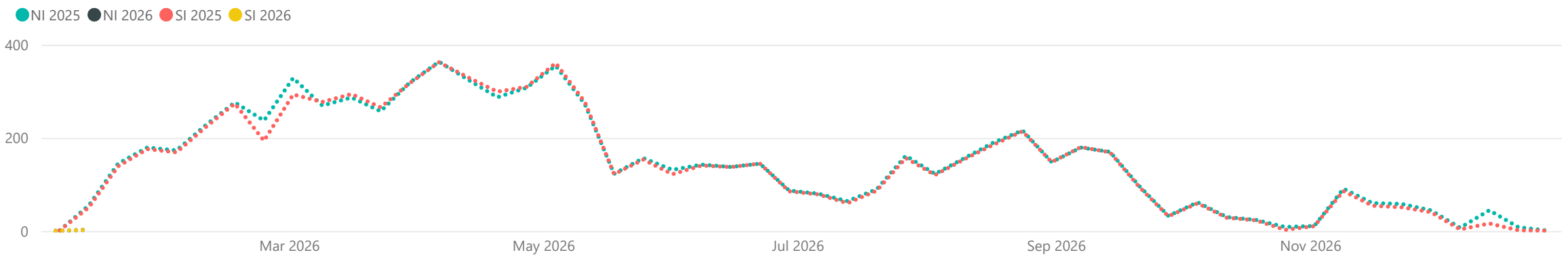


Weekly Profiles

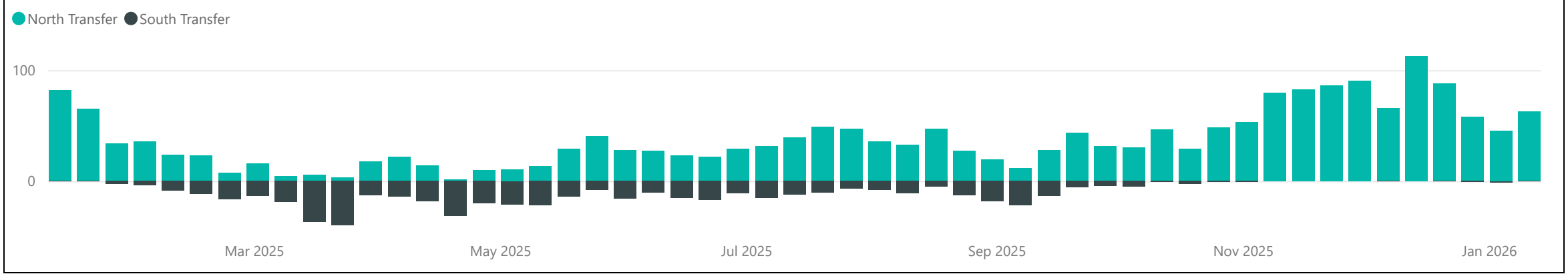
National Weekly Demand - GWh - 7 Day Rolling



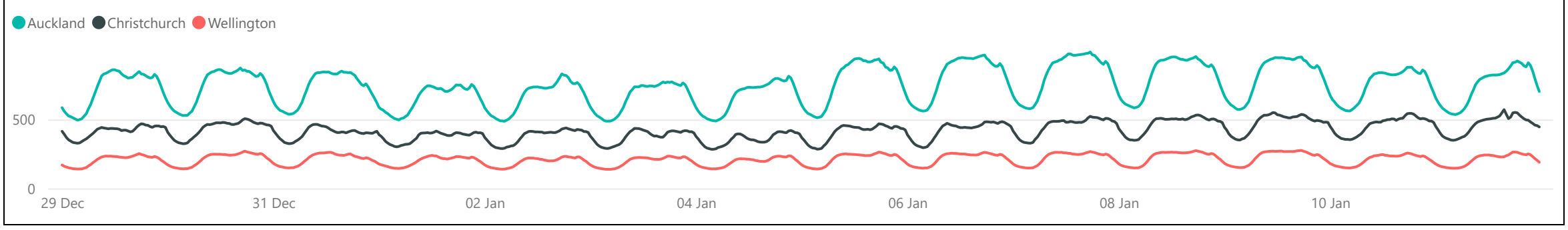
Weekly Spot Price - $/MWh



HVDC Transfer - Weekly GWh

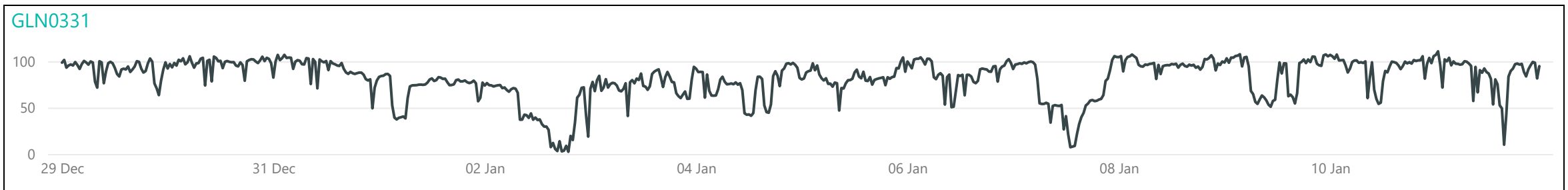


Conforming Load Profiles - Last Two Weeks *Measured in MW shown by region*

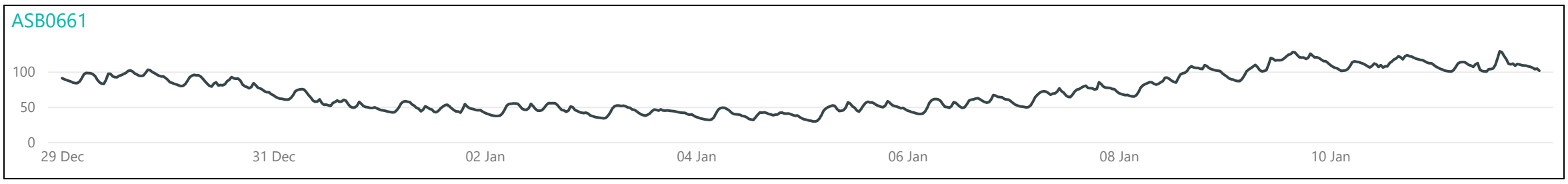


Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*

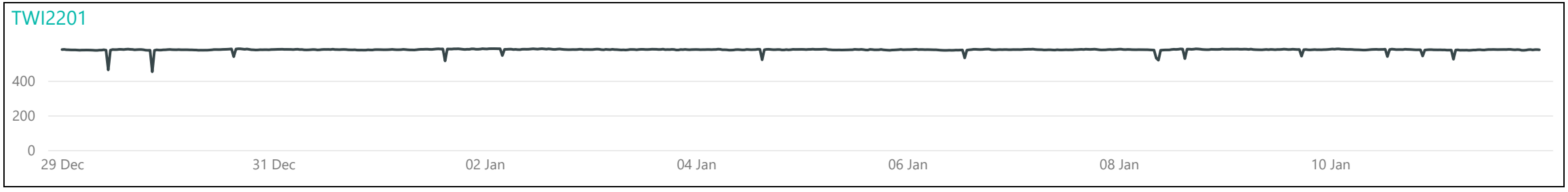
GLN0331



ASB0661



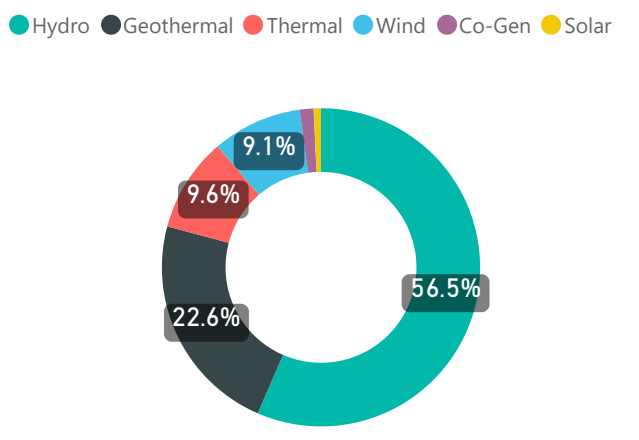
TWI2201



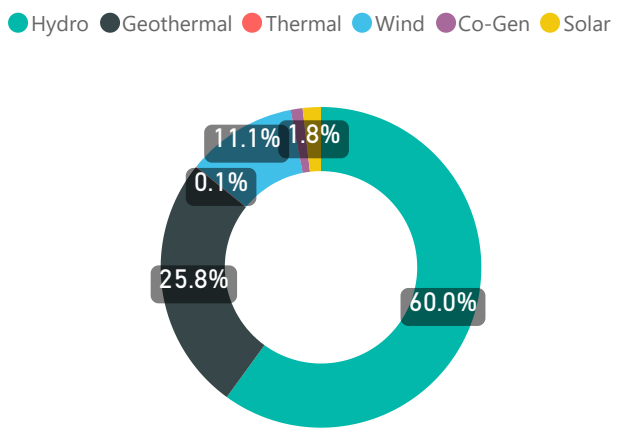
TRANSPOWER

Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



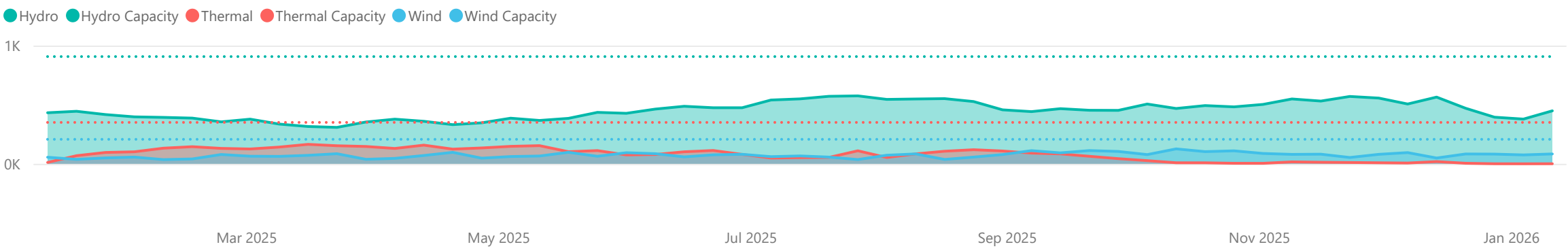
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
99%	18,420	25.1

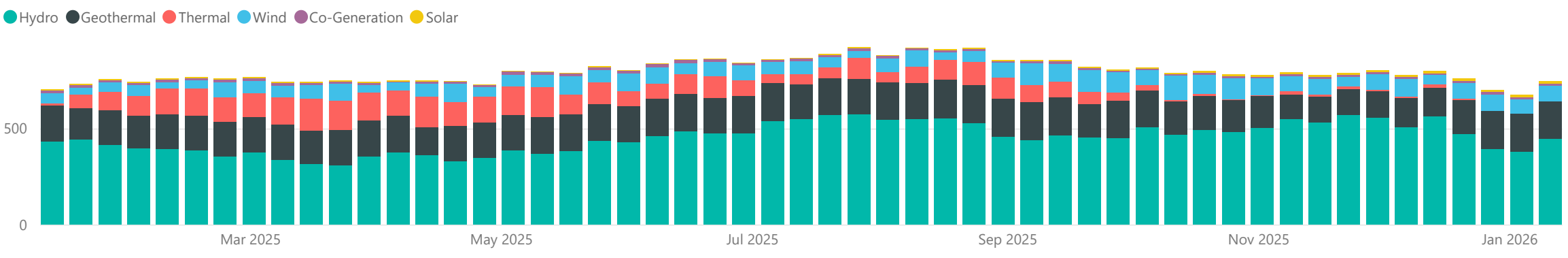
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
89%	64,231	80.6

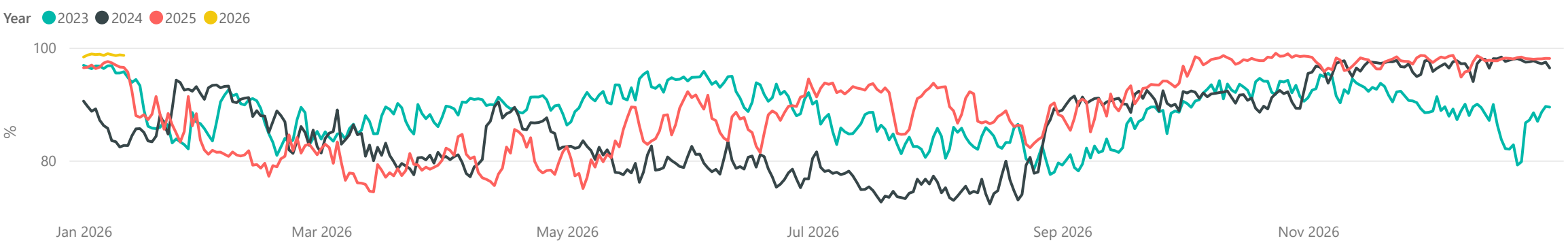
Weekly Generation Mix vs Capacity - GWh



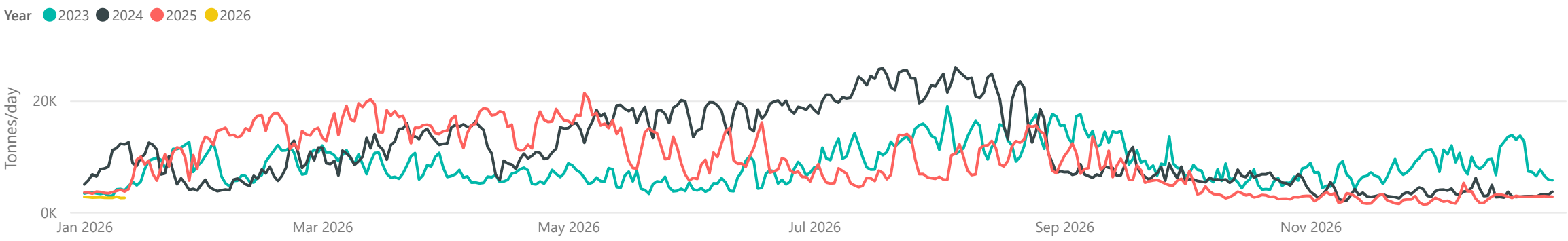
Weekly Generation Mix - GWh



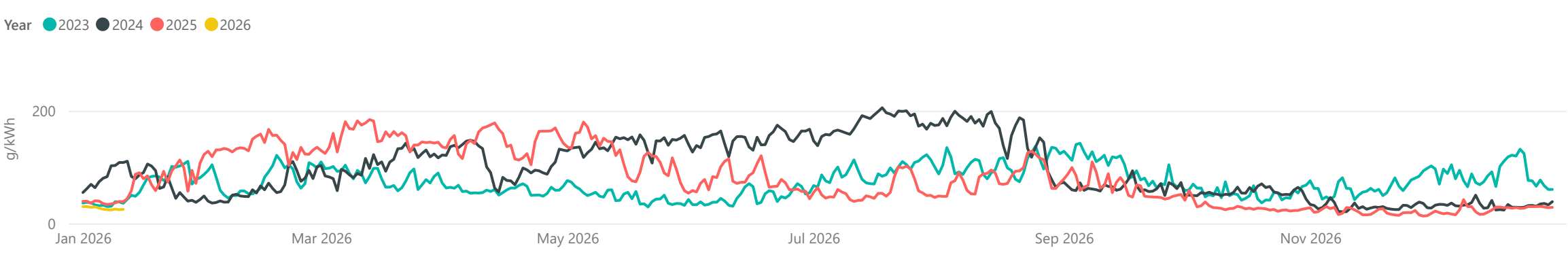
NZ Renewable Percentage



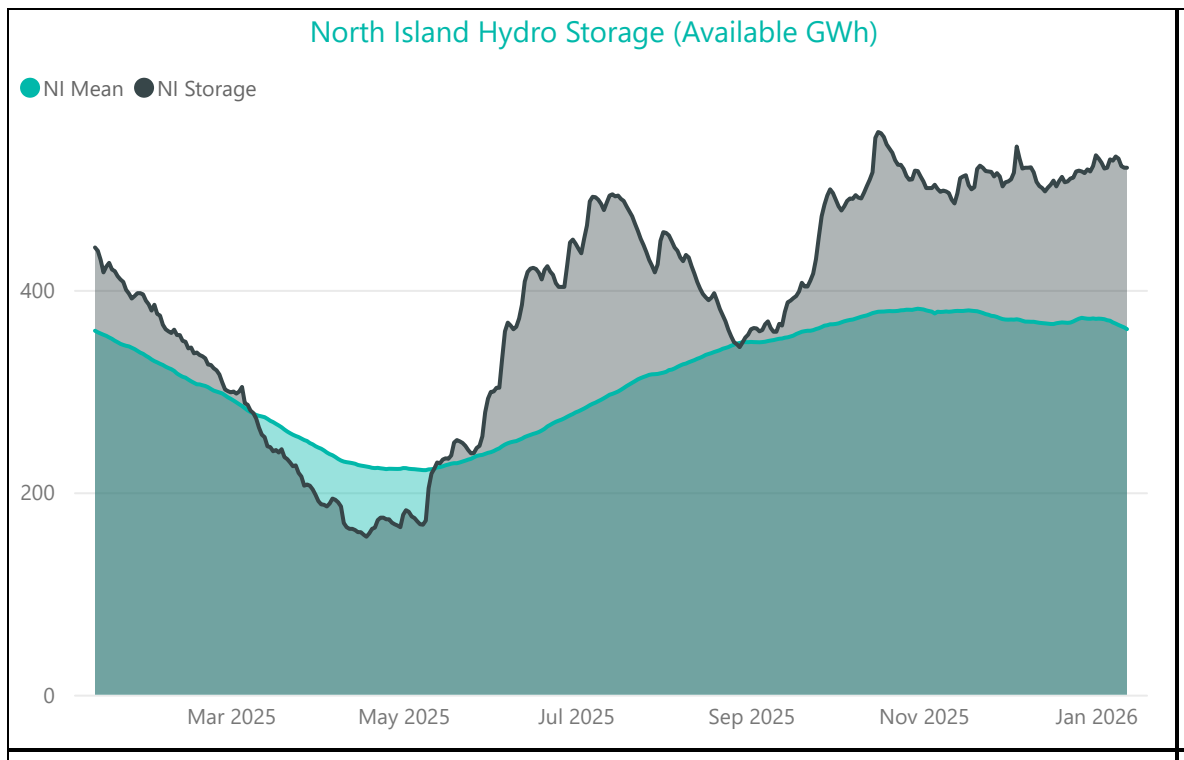
CO2 Tonnes/Day

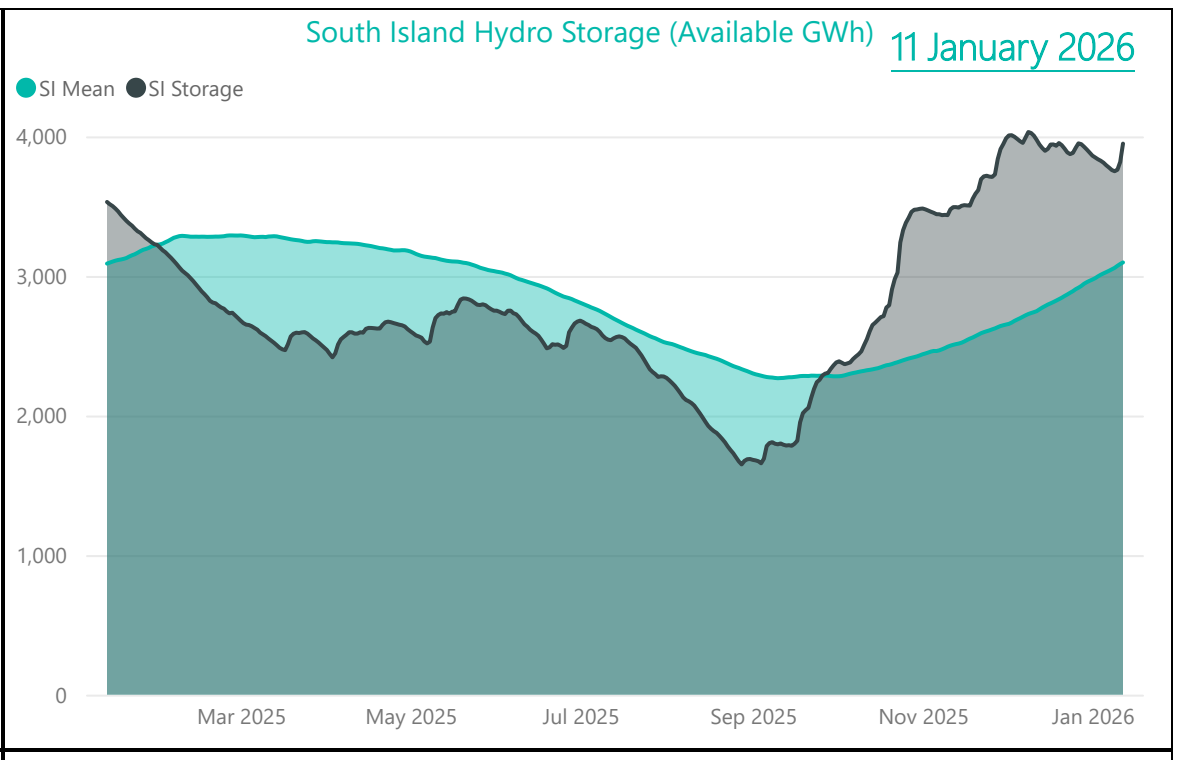


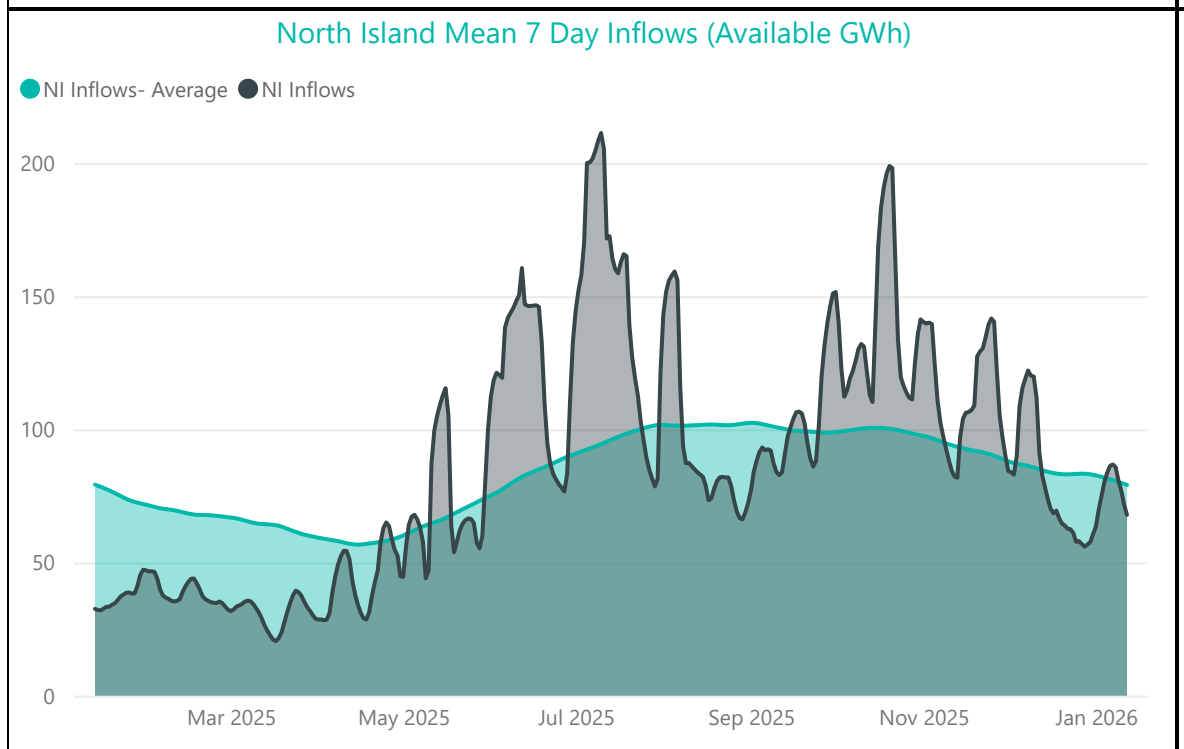
CO2 g/kWh

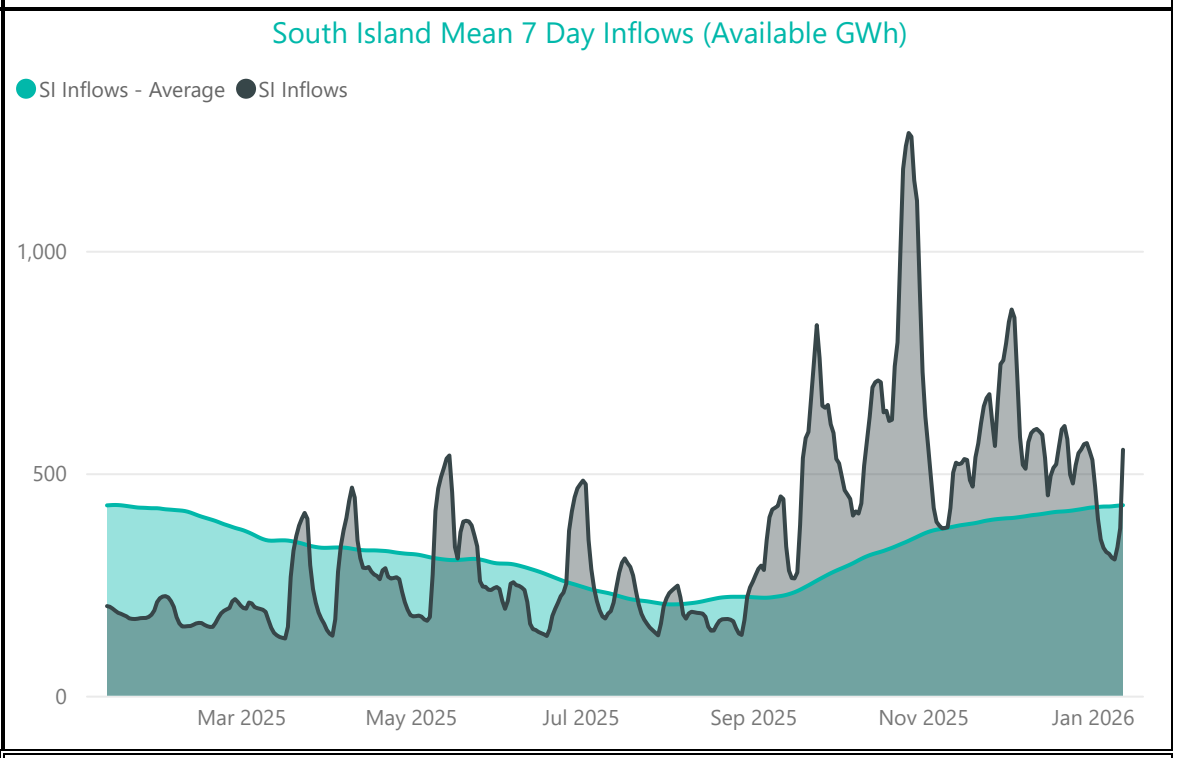


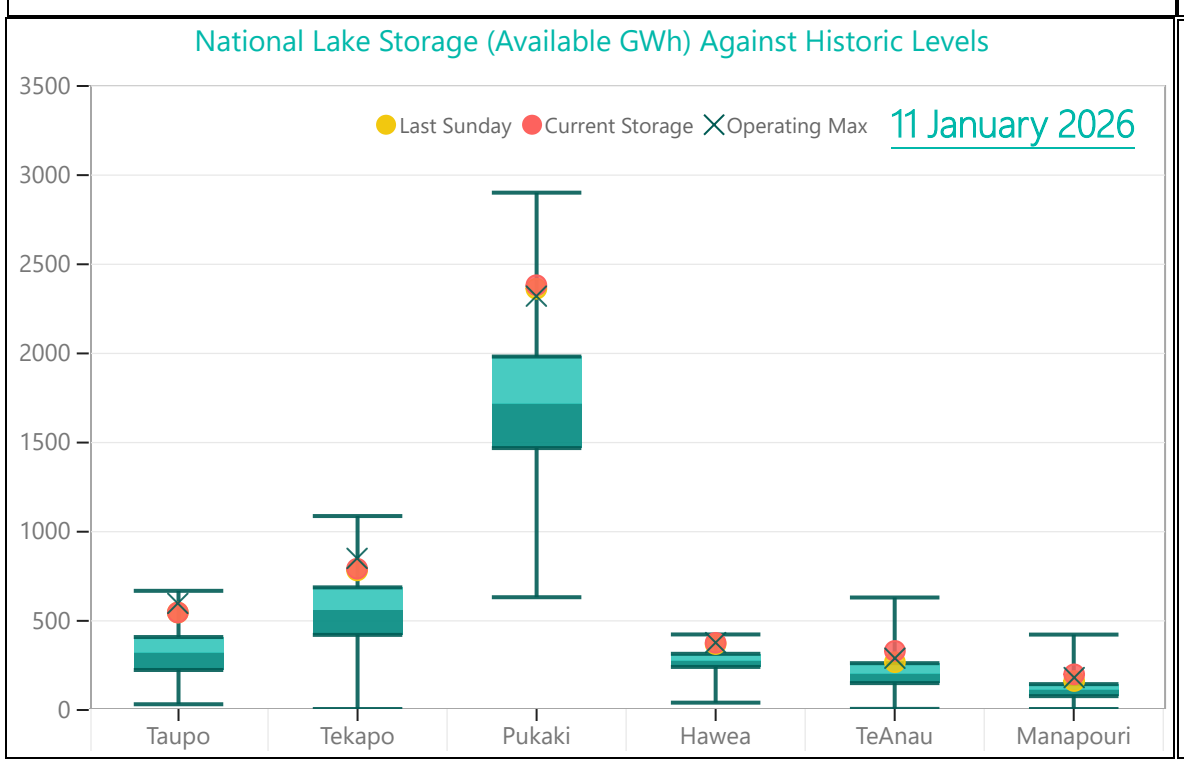
Hydro Storage

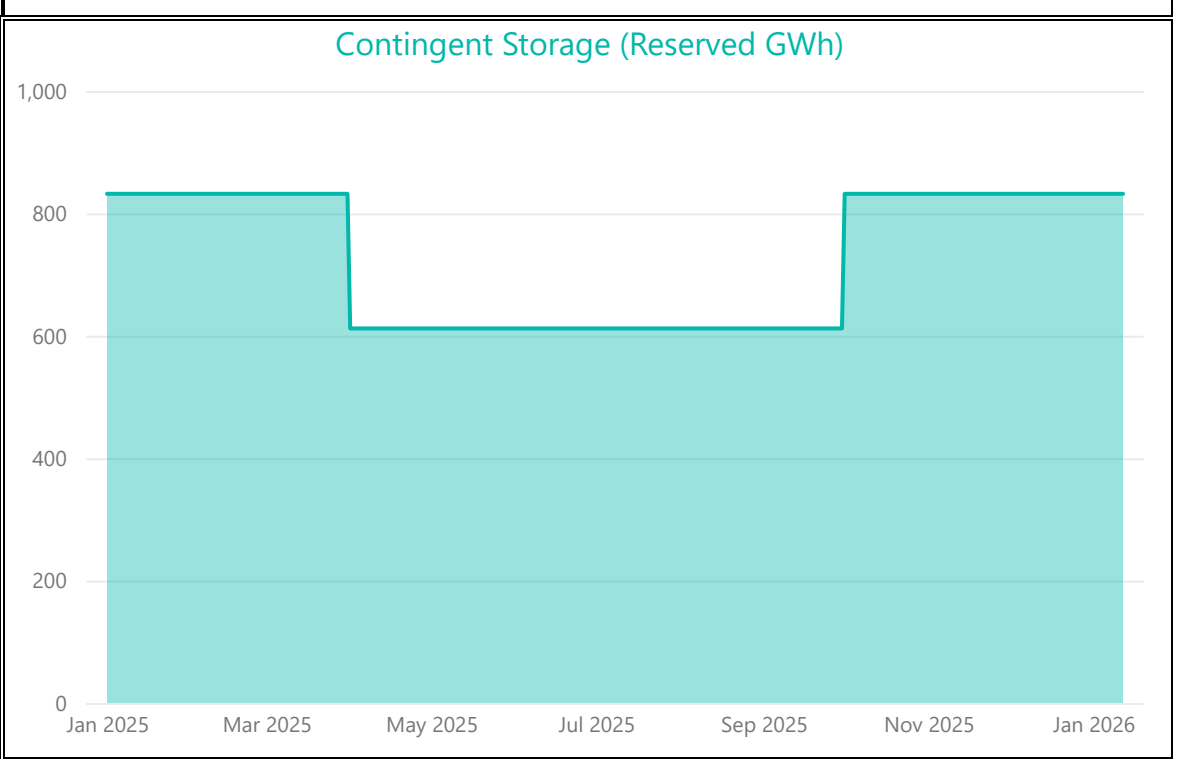












For further information on security of supply and Transpower's responsibilities as the System Operator, refer to our webpage here: https://www.transpower.co.nz/system-operator/security-supply

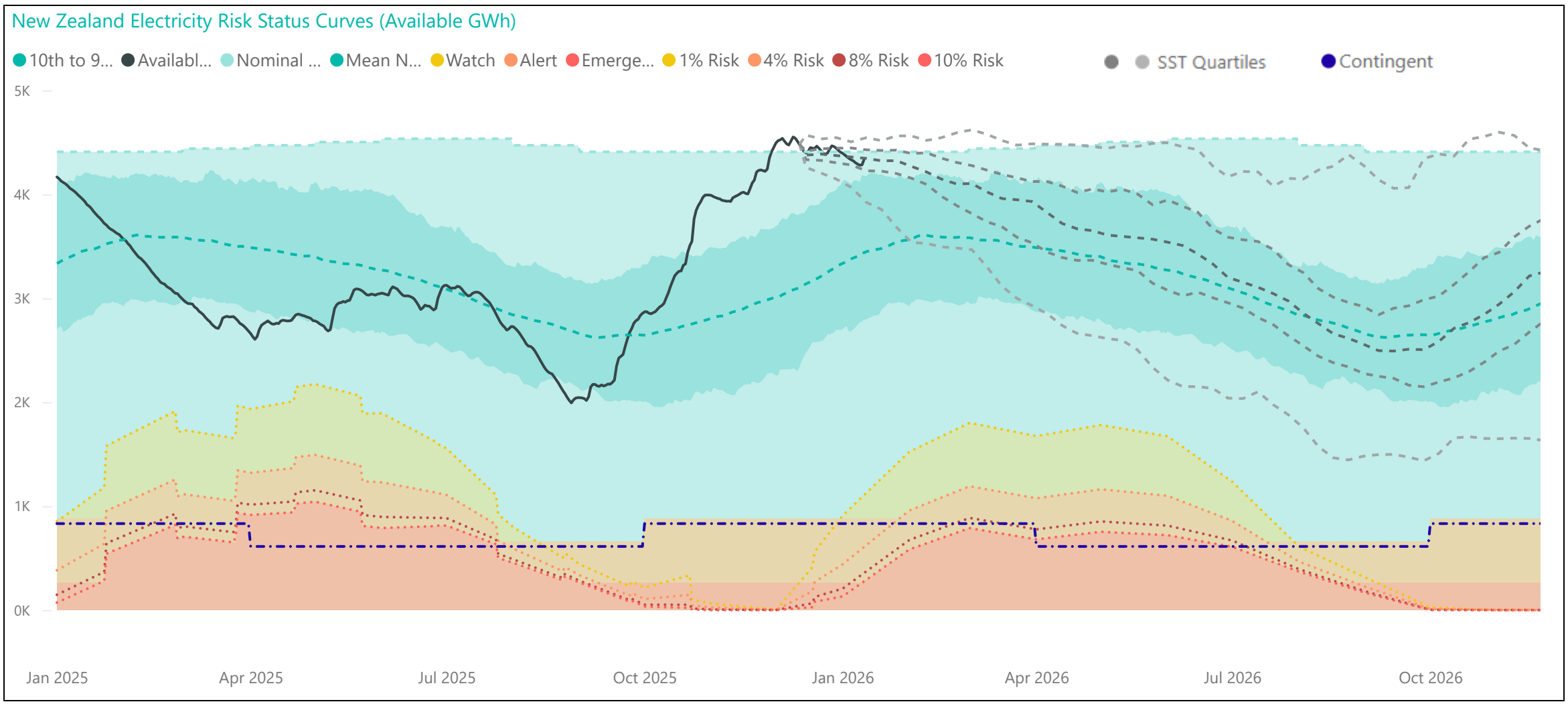
For any inquiries related to security of supply contact market.operations@transpower.co.nz

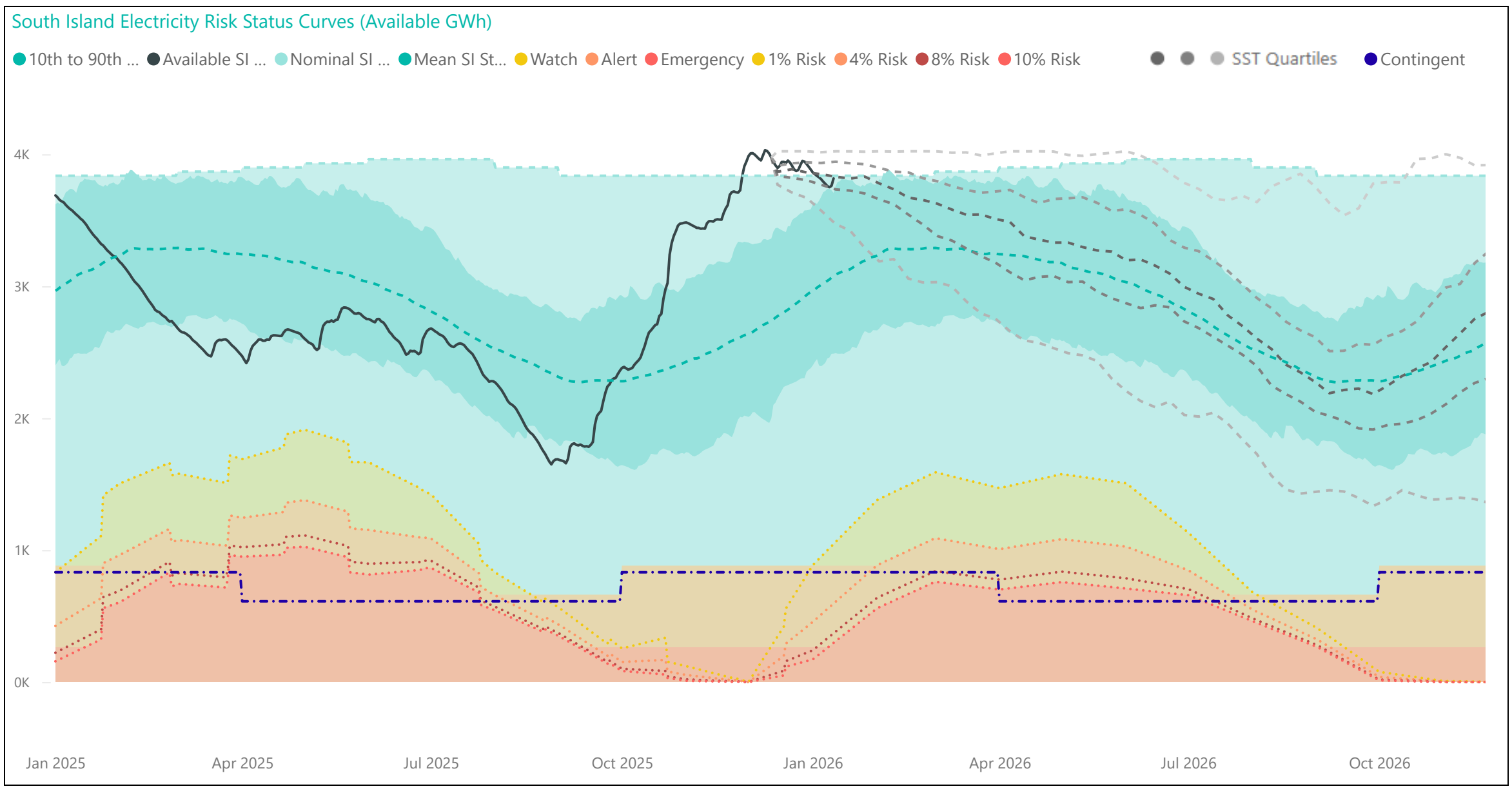
Hydro data used in this report is sourced from *NZX Hydro*.

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





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).