Market Operations Weekly Report - Week Ended 18 January 2026

Overview

New Zealand hydro storage was at 127% of the historic mean last week, and continues to sit above the 90th percentile and just above the nominal full level.

This week's insight looks at the record high renewable share in recent weeks.

Security of Supply

Energy

National hydro storage decreased slightly from 129% to 127% of the historic mean. South Island hydro storage decreased from 128% to 125% of the historic mean, and North Island storage increased from 144% to 149%.

Capacity

Residuals were healthy with over 750 MW of residual over all peaks last week. The lowest residual of 761 MW occurred during the evening peak on Wednesday 14 January when wind generation dropped off.

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 724 GWh from 712 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 but increased slightly this week as more people returned to work after the holidays. The highest demand peak of 5,174 MW occurred at 5:30 pm on Thursday 15 January.

Weekly Prices

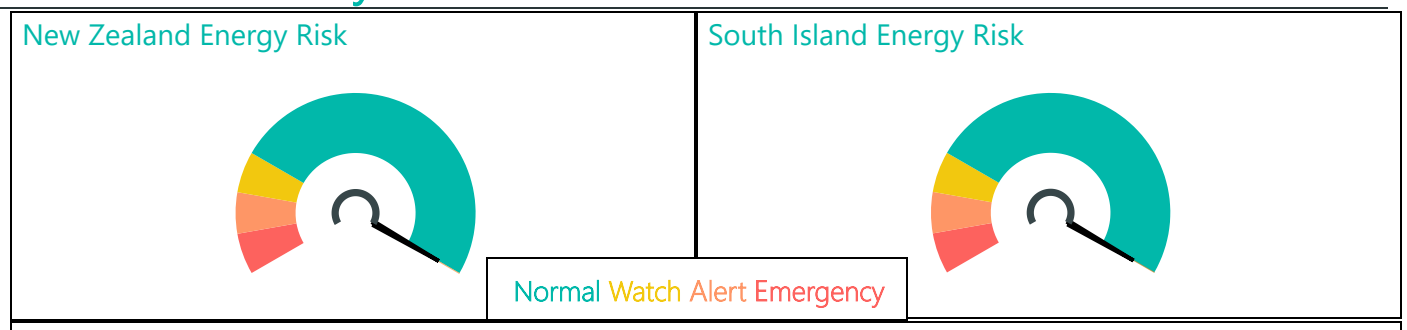
The average wholesale electricity spot price at Ōtāhuhu last week was $5/MWh, up from $2/MWh the week prior. Wholesale prices peaked at $186/MWh at Ōtāhuhu at 9:00 am on Wednesday 14 January. There were periods of price separation between the North and South islands on 14 January when wind generation dropped quickly and higher priced thermal generation was dispatched to meet demand in the North Island due to constrained HVDC flow.

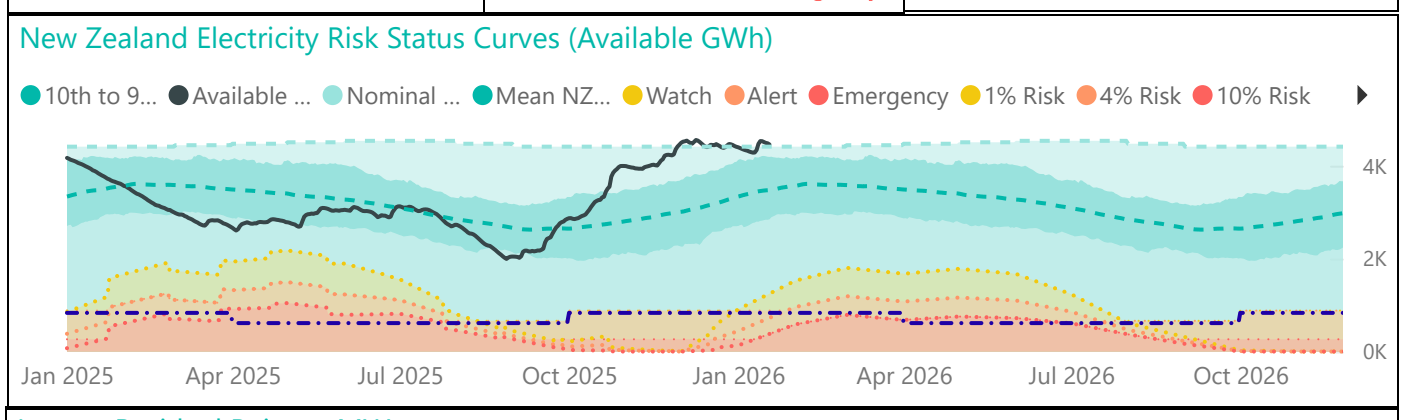
Generation Mix

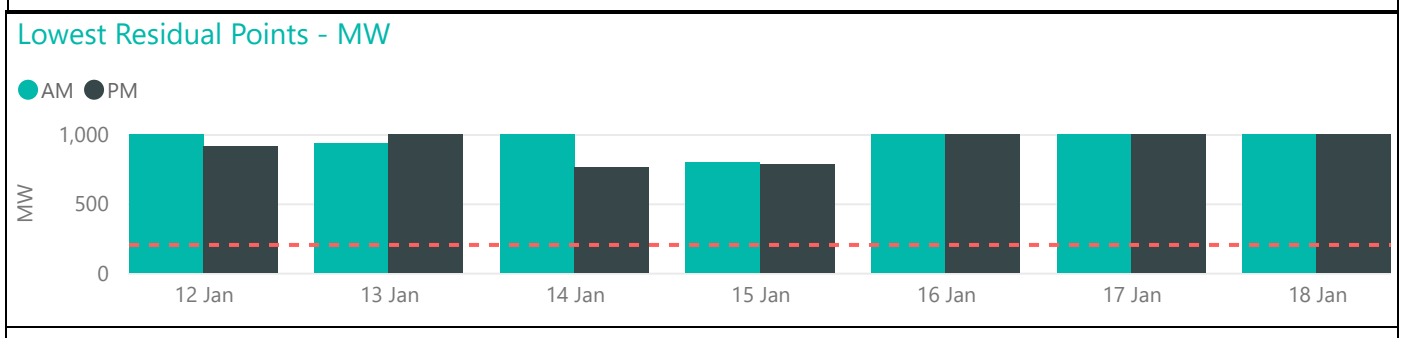
Hydro generation remains above average at 61% of the generation mix and wind generation was at its average contribution level of 9%. Solar generation was 1% of the mix and the geothermal share was 25% of the mix and above its average contribution of 23%. Total renewable contribution to the mix was 96% last week and thermal generation was close to 3% of the mix.

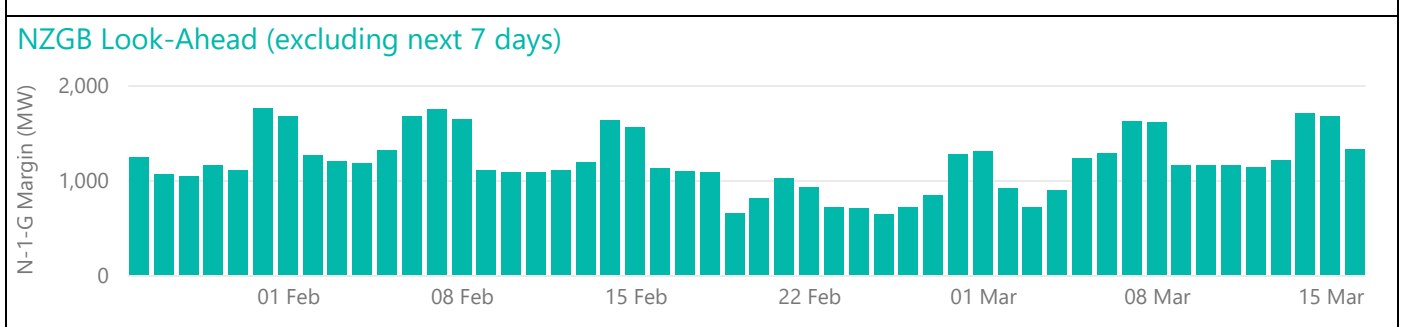
HVDC

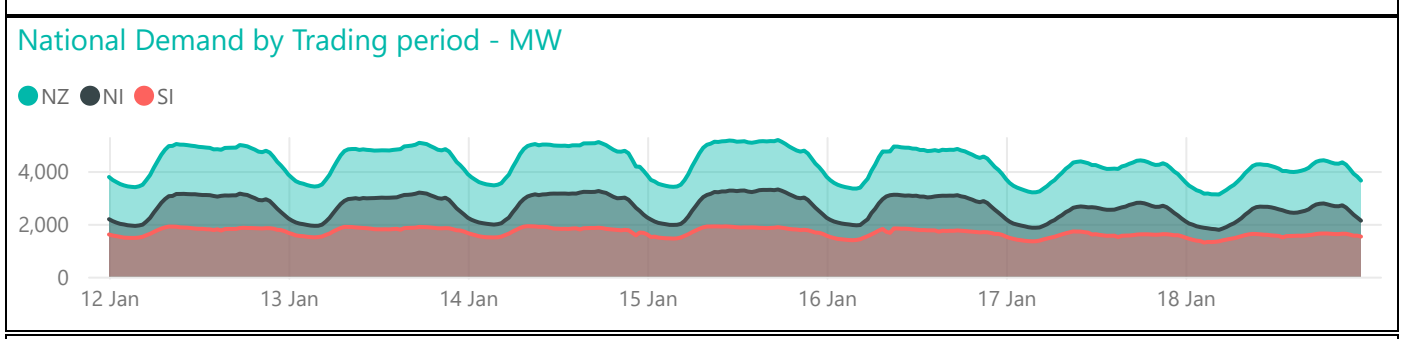
HVDC flow was predominantly northward last week with high hydro generation, and higher demand in the North Island. In total, 70 GWh was transferred north and less than 1 GWh sent south during some overnight periods with high wind generation.

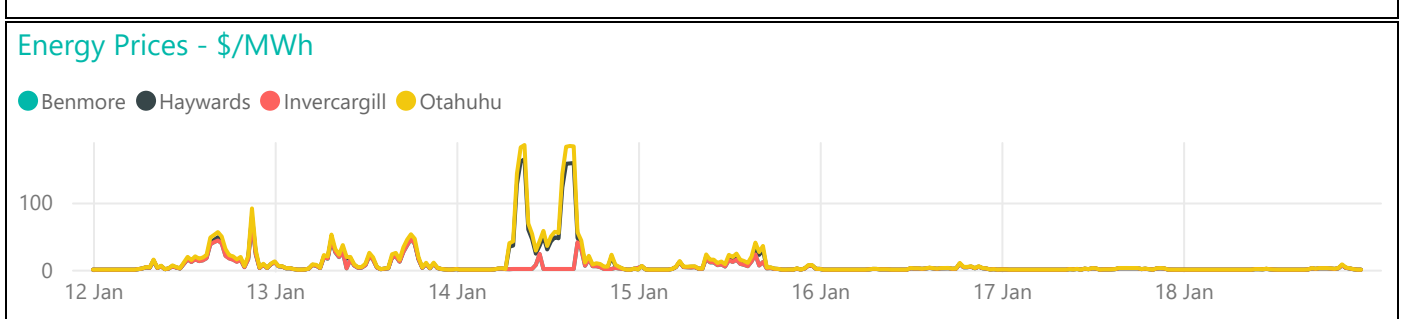


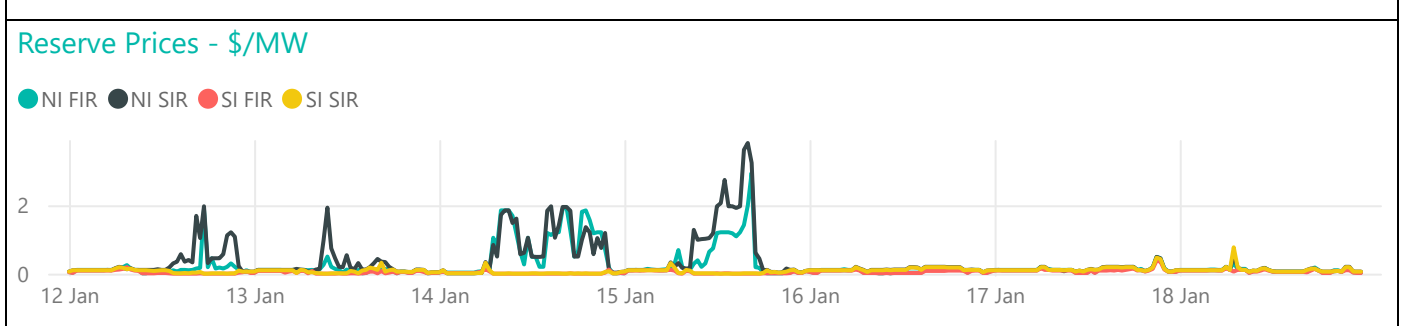


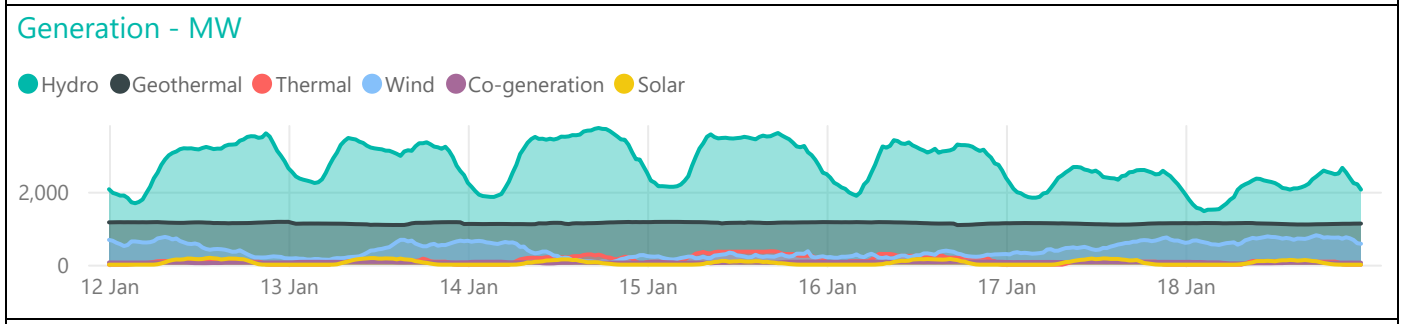


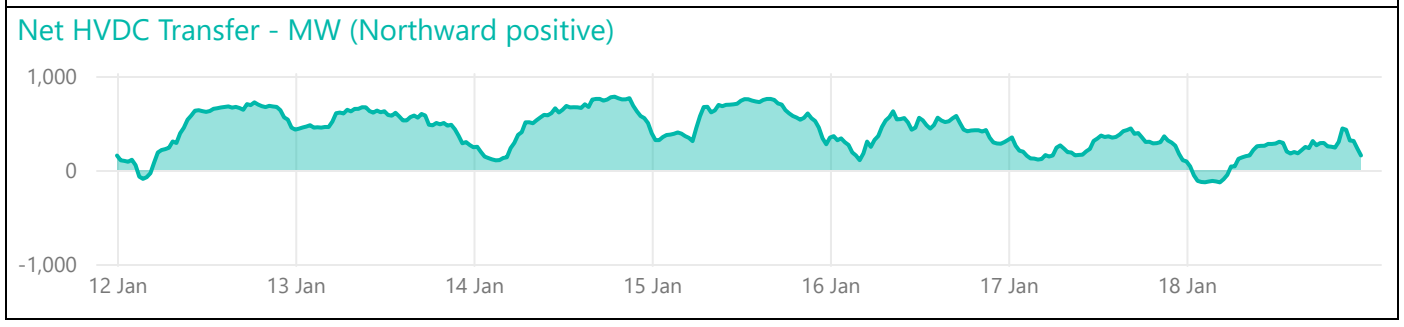












Weekly Insight - Record high renewable share trends

This week's insight looks at the record high levels of renewable generation observed in recent weeks.

The three weeks prior to last week all ranked as the top three renewable share weeks based on our current database (going back to 2014), each reaching very close to 99% renewable share. As shown in Figure 1, these three weeks sit clearly above others in the top 50 ranking. This period reflects a sustained combination of strong hydro and wind conditions and increasing solar generation alongside lower demand during the holiday break, when load across the motu typically eases.

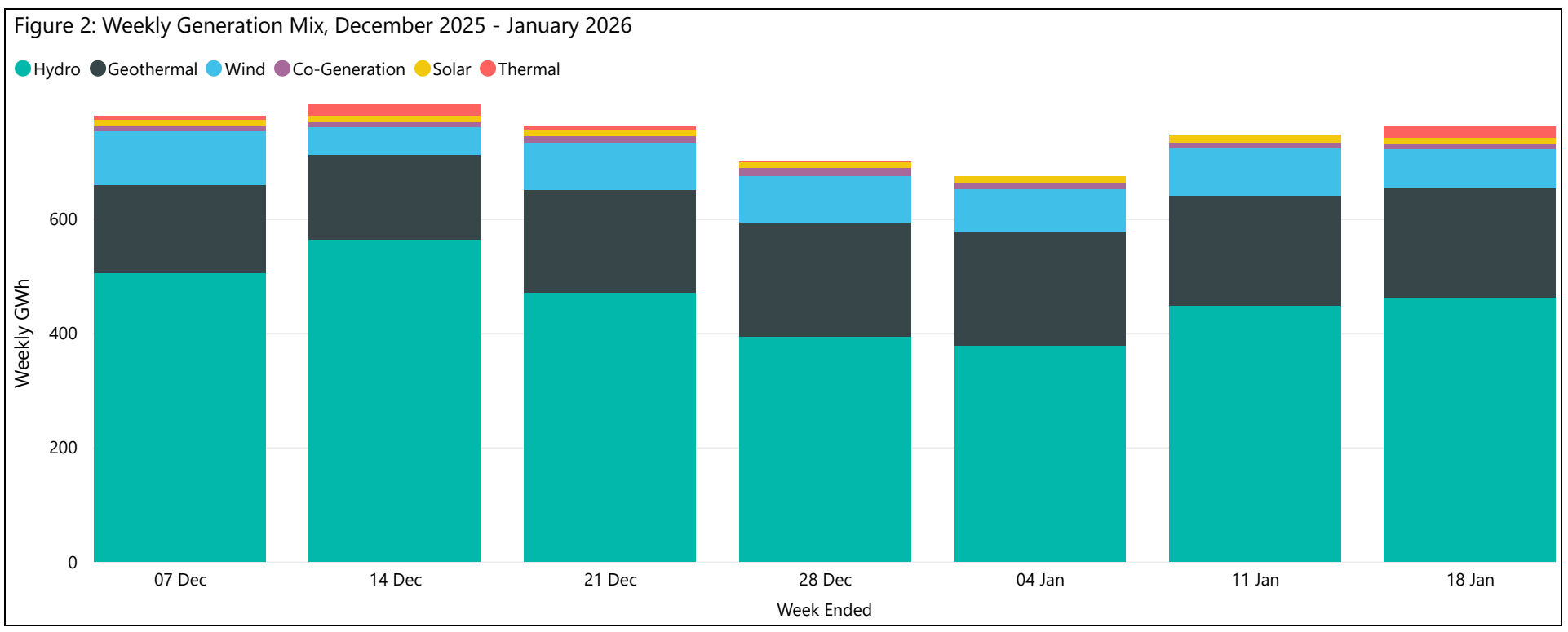
In comparison, last week's renewable share was 96%. While still high, it did not place within the top 20 renewable share weeks of the last decade as shown in Figure 1. The reduction reflects a rise in demand as people returned to normal routines after the holidays, as well as thermal generation returning to the mix. Several thermal units that had produced little to no output in recent weeks began generating again, including the Rankine units (which did not generate from 19 December to 12 January), and Huntly Unit 6, which started generating at times during the last week.

Figure 1: Top 50 Weekly Renewable Percentages since 2014

The change in thermal contribution is visible in Figure 2, with the three weeks prior to last week showing almost no thermal in the generation mix. Thermal output remained close to zero through this period, supported by very high hydro storage and favourable wind conditions. Last week's column (Week Ended 18 January) shows the first noticeable return of thermal generation since mid-December. Hydro generation has been the key driver of these high renewable shares, supported by high storage levels in both North and South Island catchments. This strong storage position allowed hydro to supply well above its annual average of around 57% during the last four weeks. Across the last week of December and the first two weeks of January, thermal generation contributed close to just 1% of the weekly mix. Thermal outages may also have contributed to this, including the extended outage of Huntly Unit 5.

Recent generation build also continues to strengthen renewable generation. Solar generation reached close to 2% of the mix during the Week Ended 11 January, with a record solar output of 214 MW on Thursday 8 January. New solar, wind and geothermal build in recent years, combined with the currently high hydro storage position, has helped push renewable shares to these record levels when compared to weeks in the last decade.

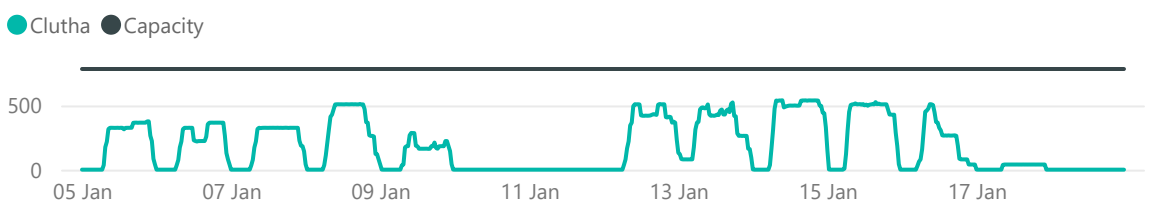
Figure 2: Weekly Generation Mix, December 2025 - January 2026



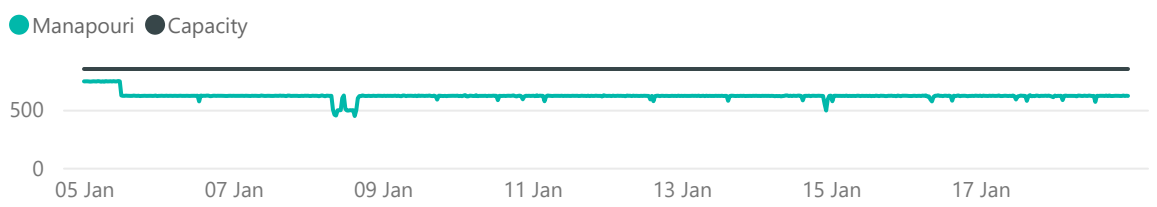
Generation Breakdown - Last Two Weeks

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

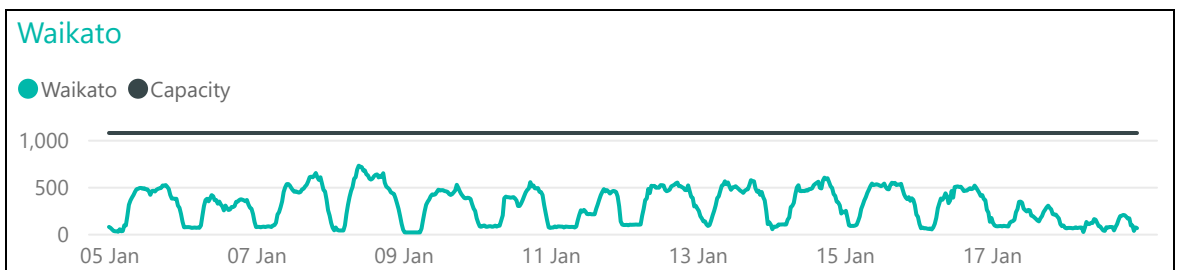
Clutha



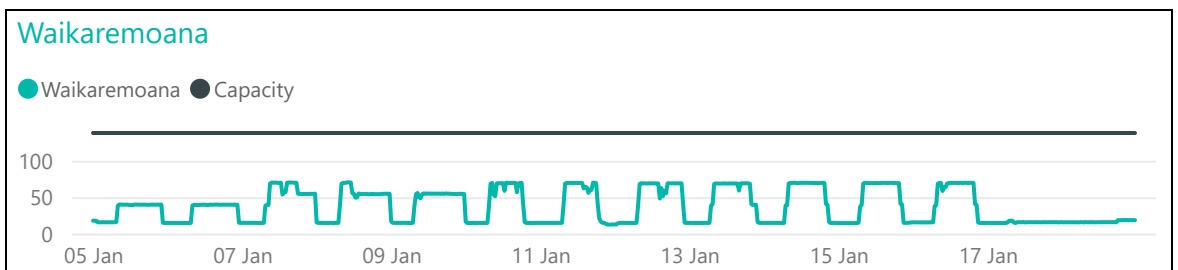
Manapouri



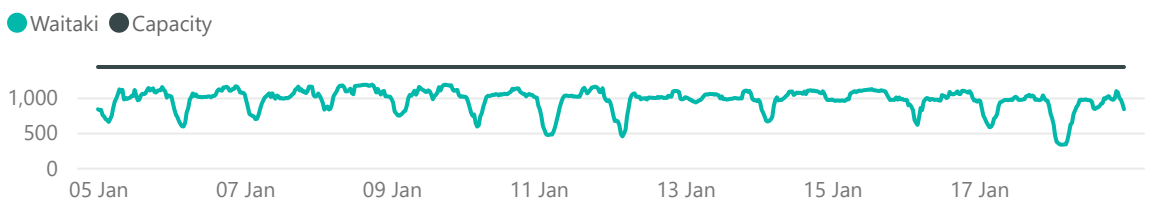
Waikato



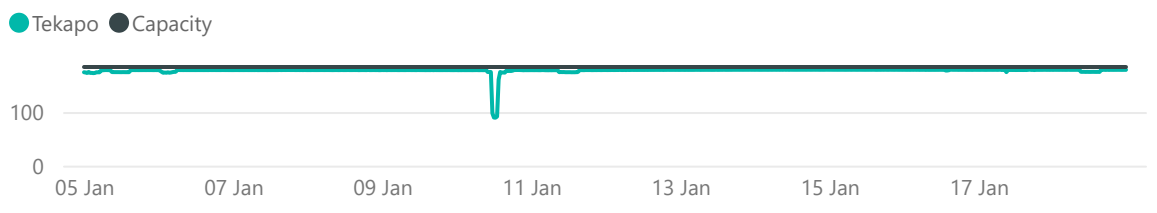
Waikaremoana



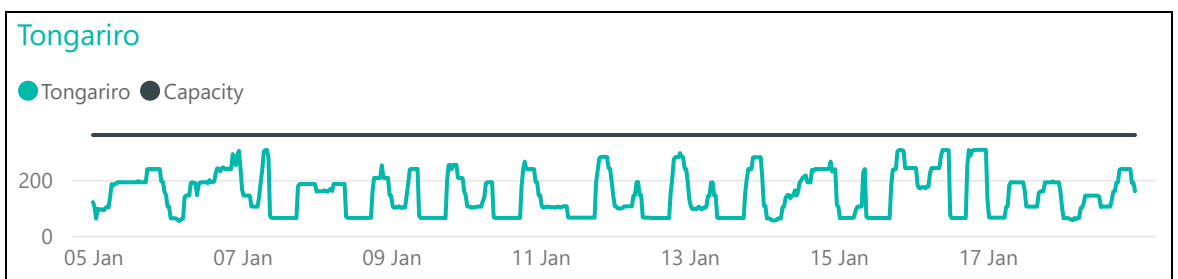
Waitaki



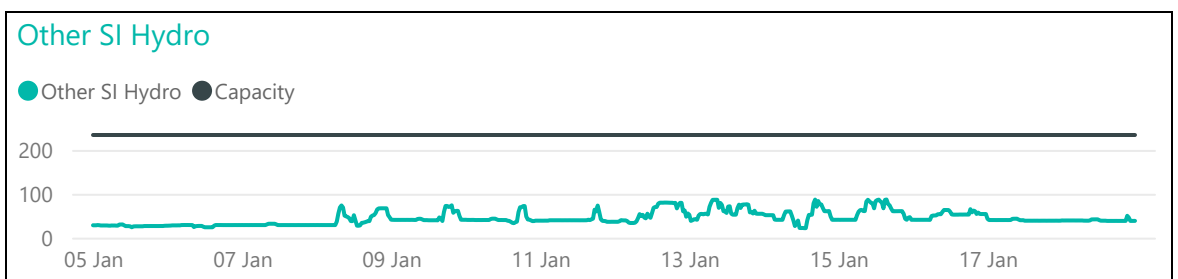
Tekapo



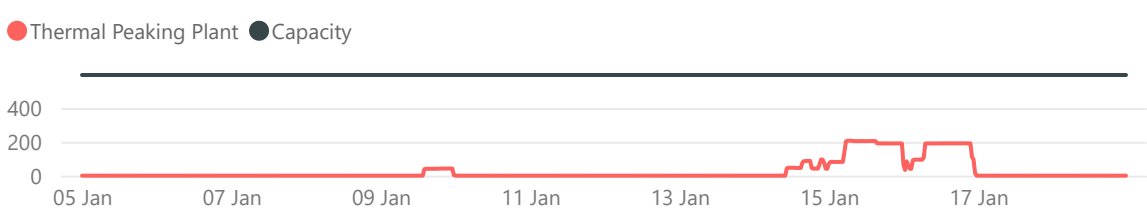
Tongariro



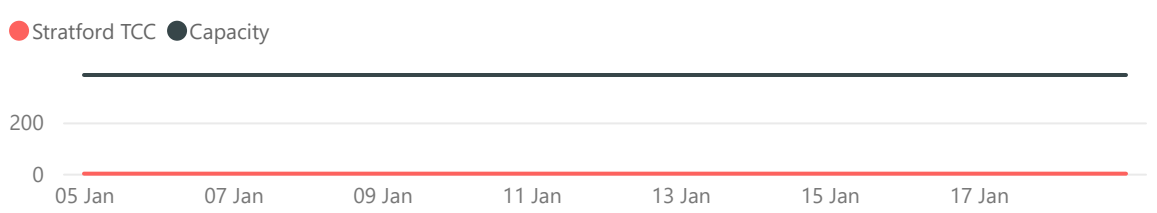
Other SI Hydro



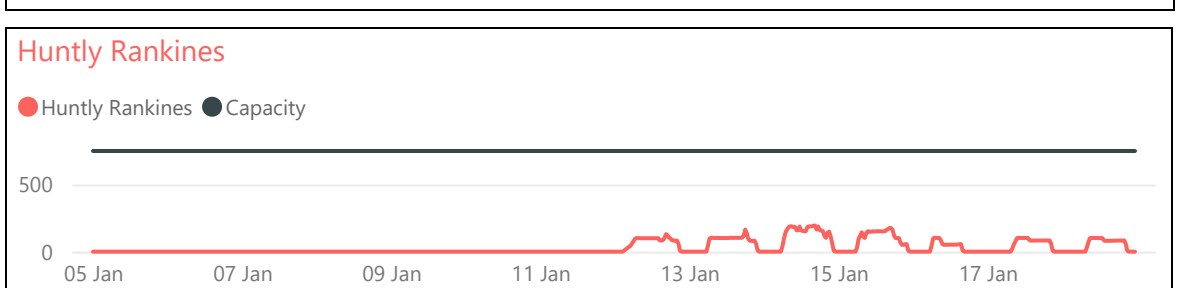
Thermal Peaking Plant



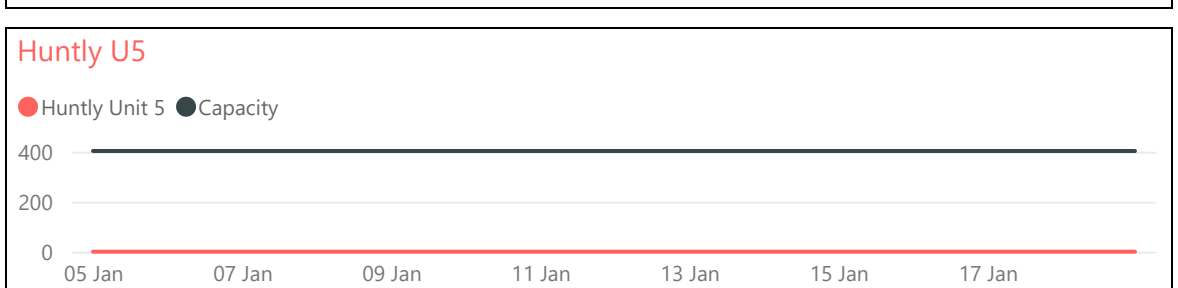
Stratford TCC



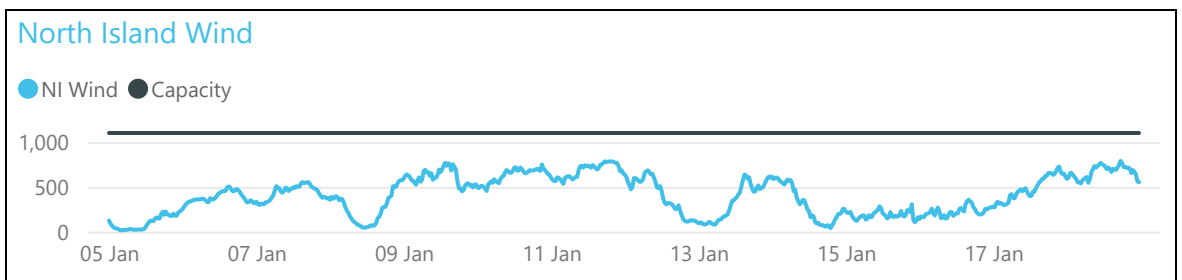
Huntly Rankines



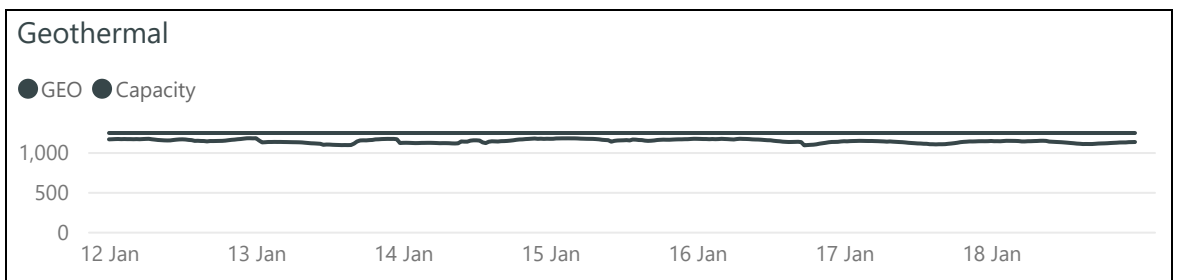
Huntly U5



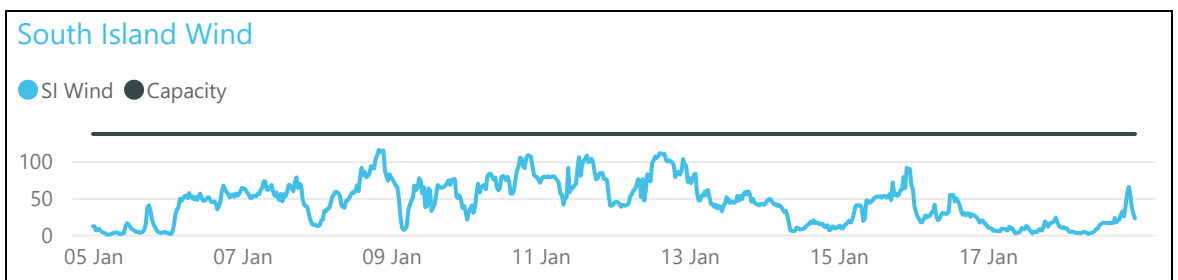
North Island Wind



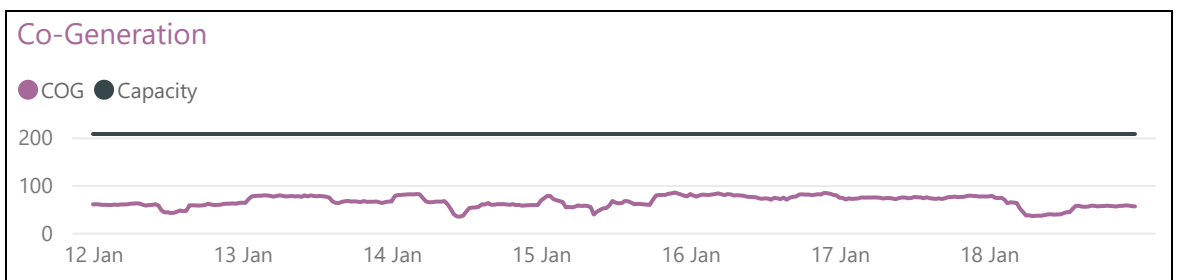
Geothermal



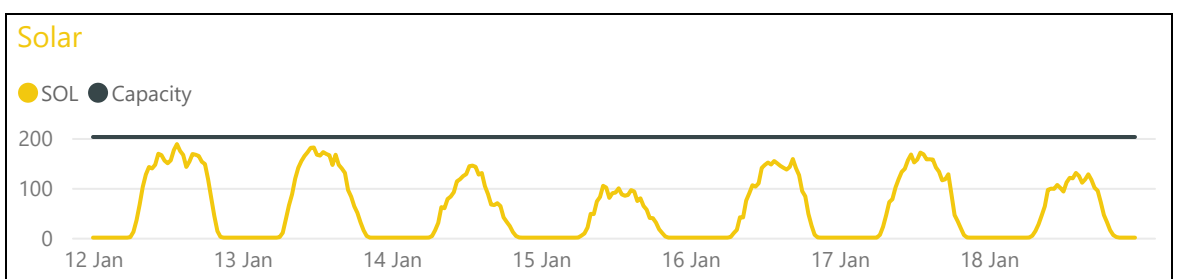
South Island Wind



Co-Generation



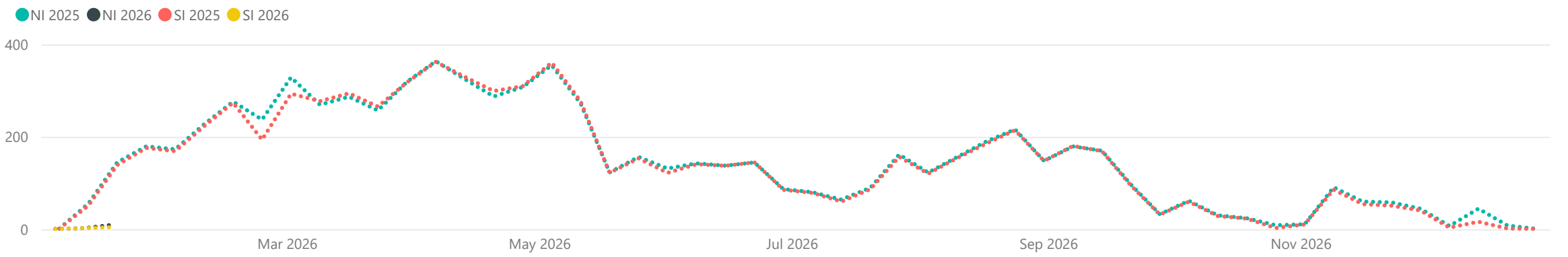
Solar



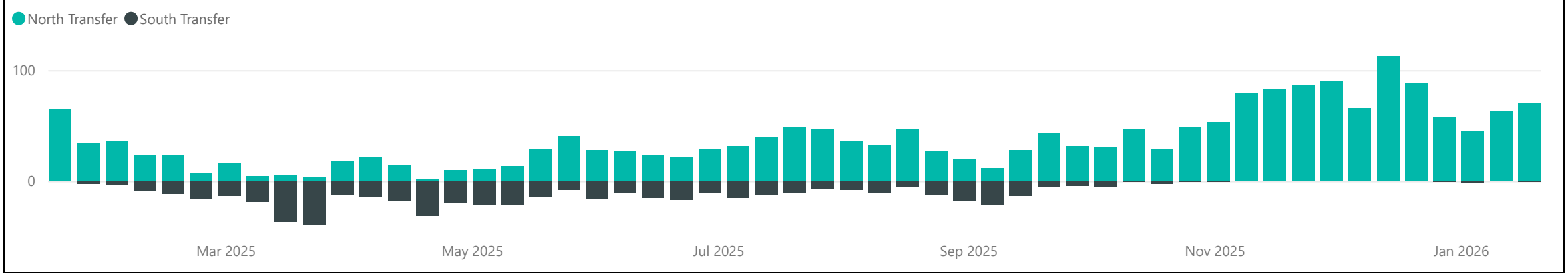
Weekly Profiles

National Weekly Demand - GWh - 7 Day Rolling

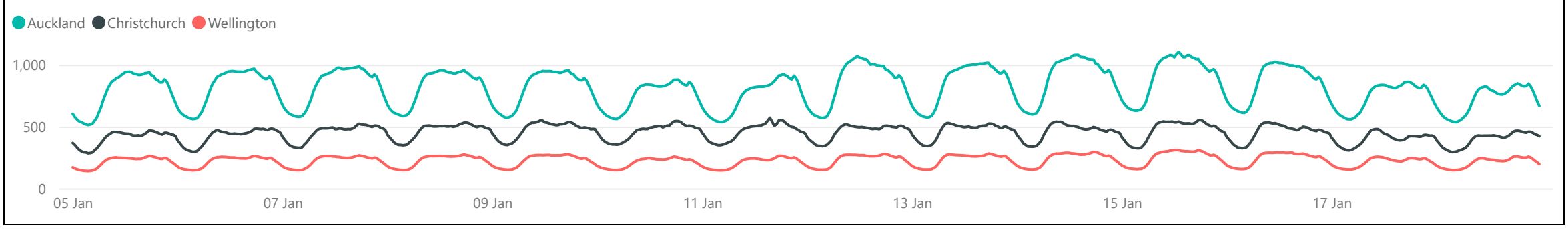
Weekly Spot Price - $/MWh



HVDC Transfer - Weekly GWh

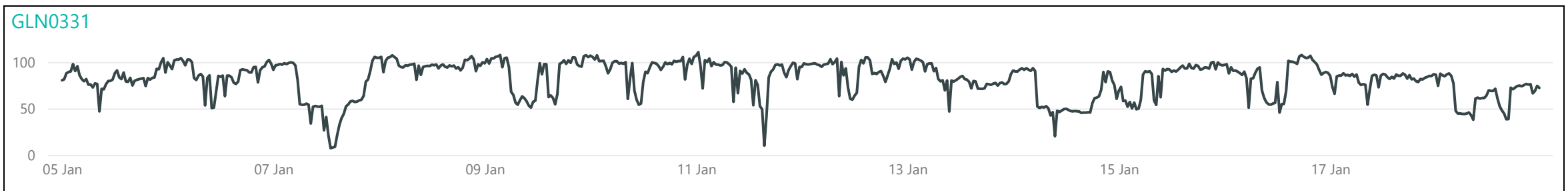


Conforming Load Profiles - Last Two Weeks *Measured in MW shown by region*



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

GLN0331



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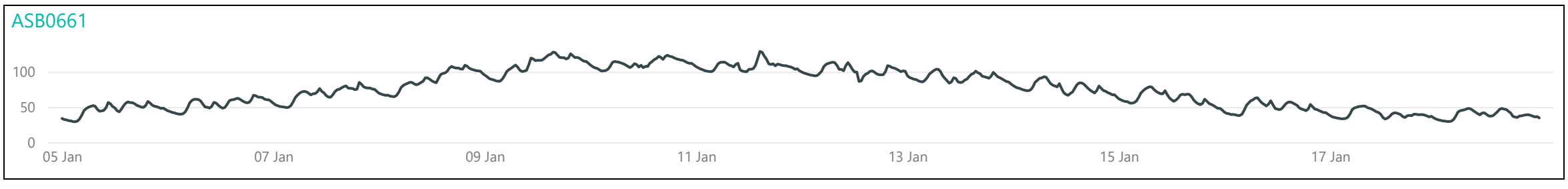

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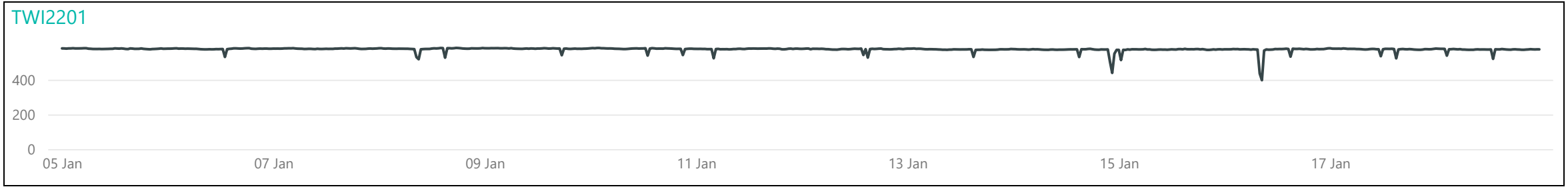
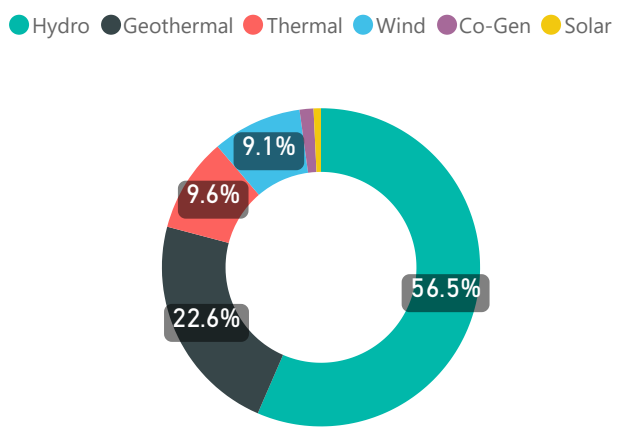


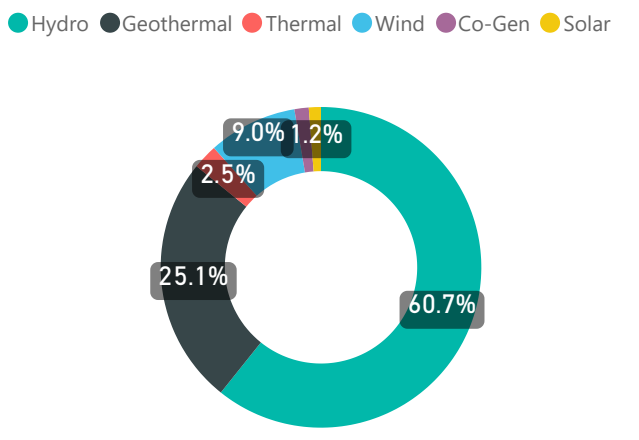
TRANSPOWER

Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



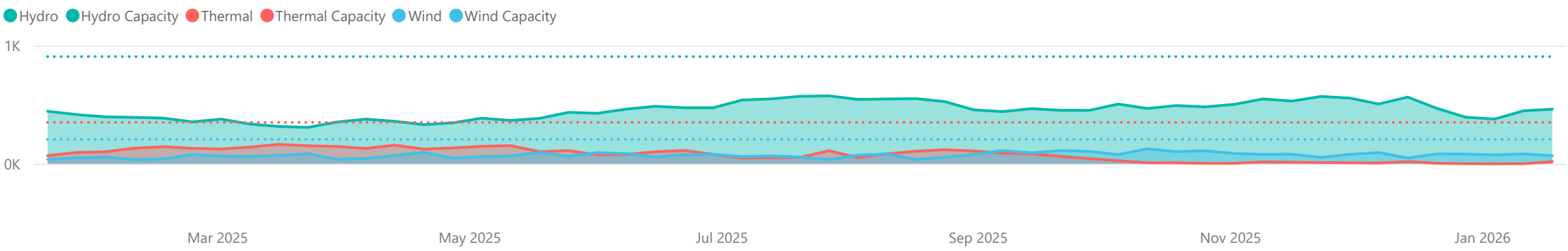
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
96%	30,026	38.9

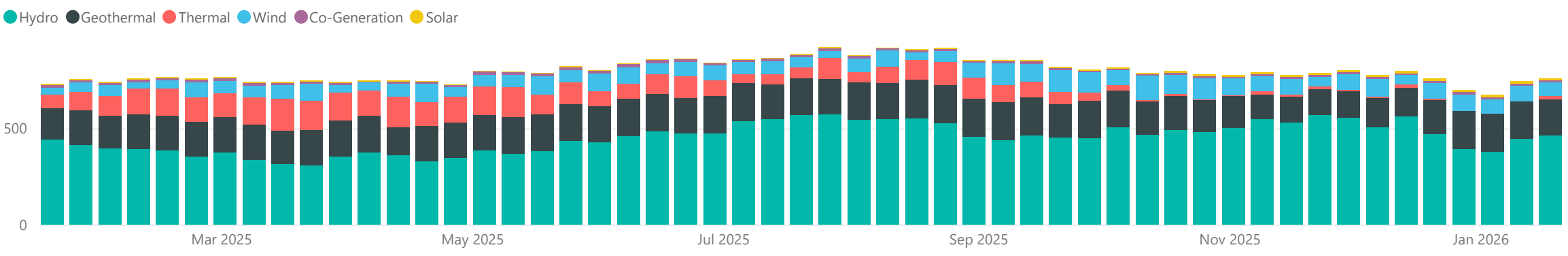
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
89%	63,764	80.0

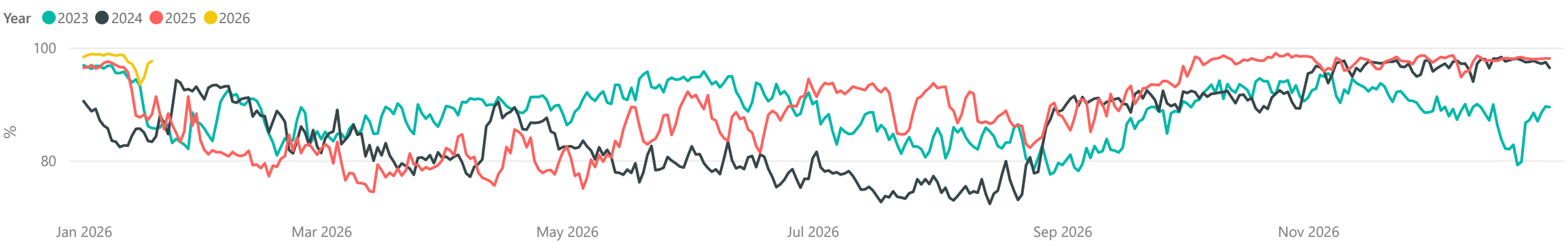
Weekly Generation Mix vs Capacity - GWh



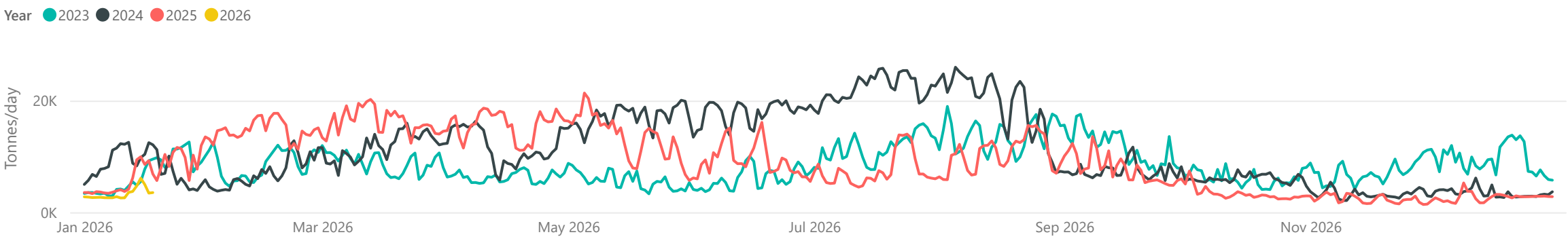
Weekly Generation Mix - GWh



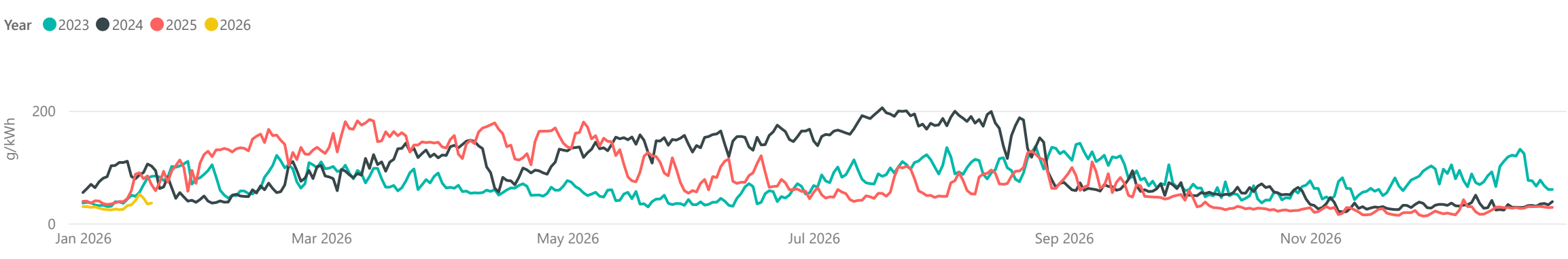
NZ Renewable Percentage



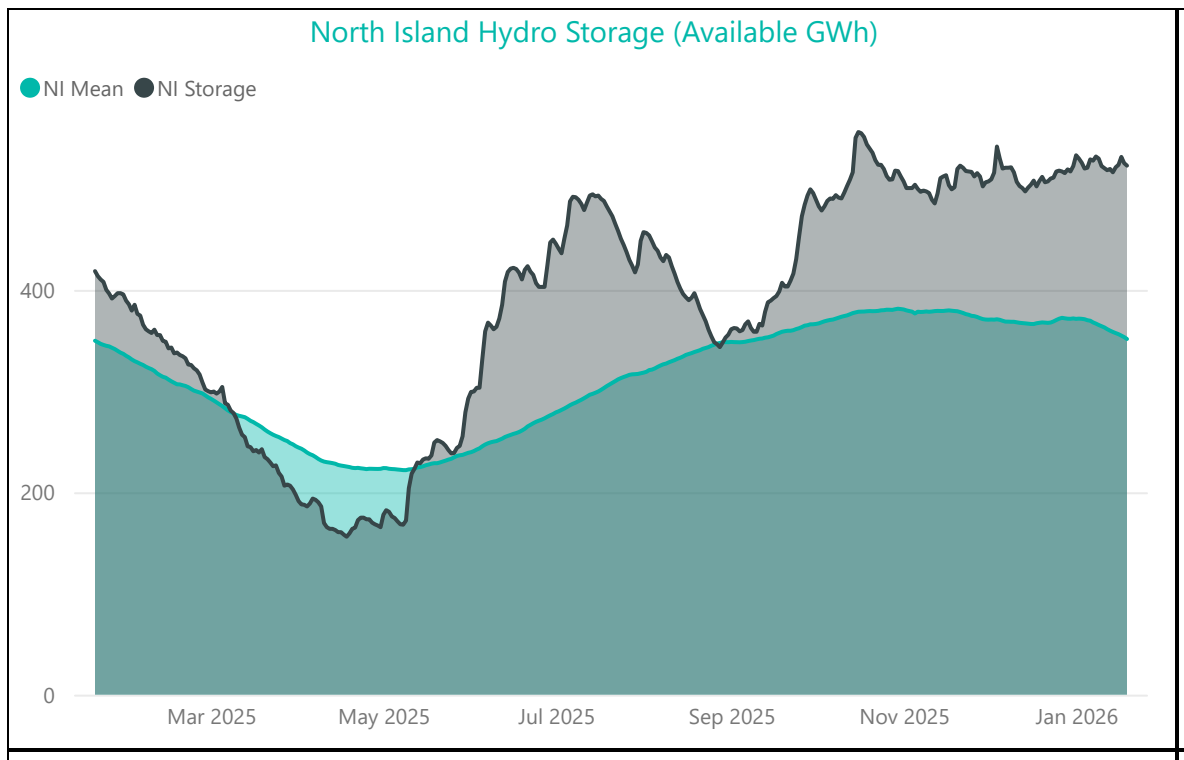
CO2 Tonnes/Day

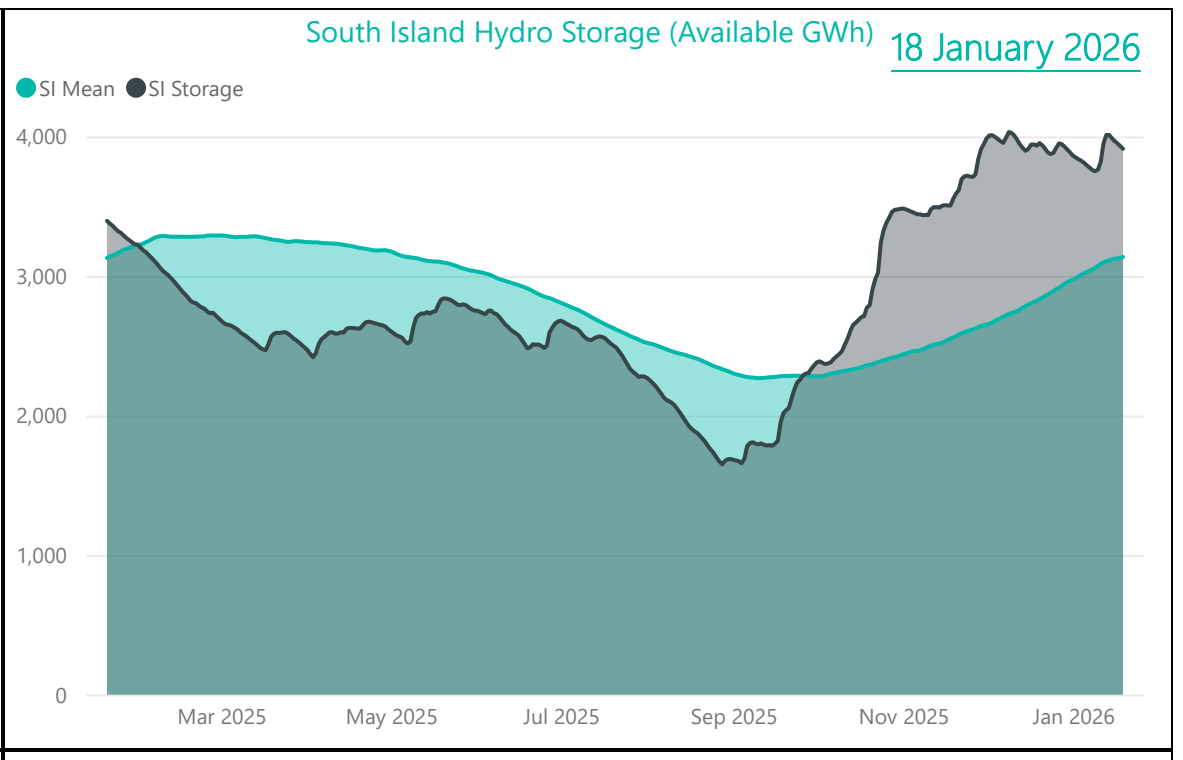


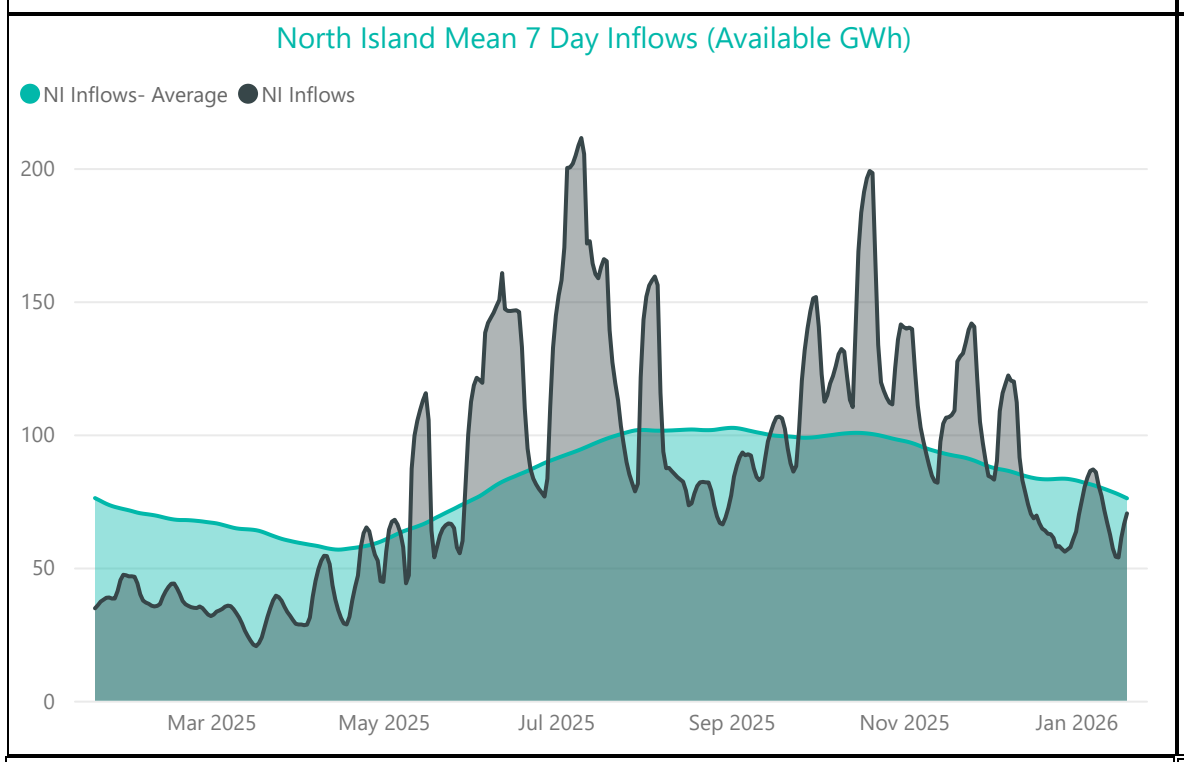
CO2 g/kWh

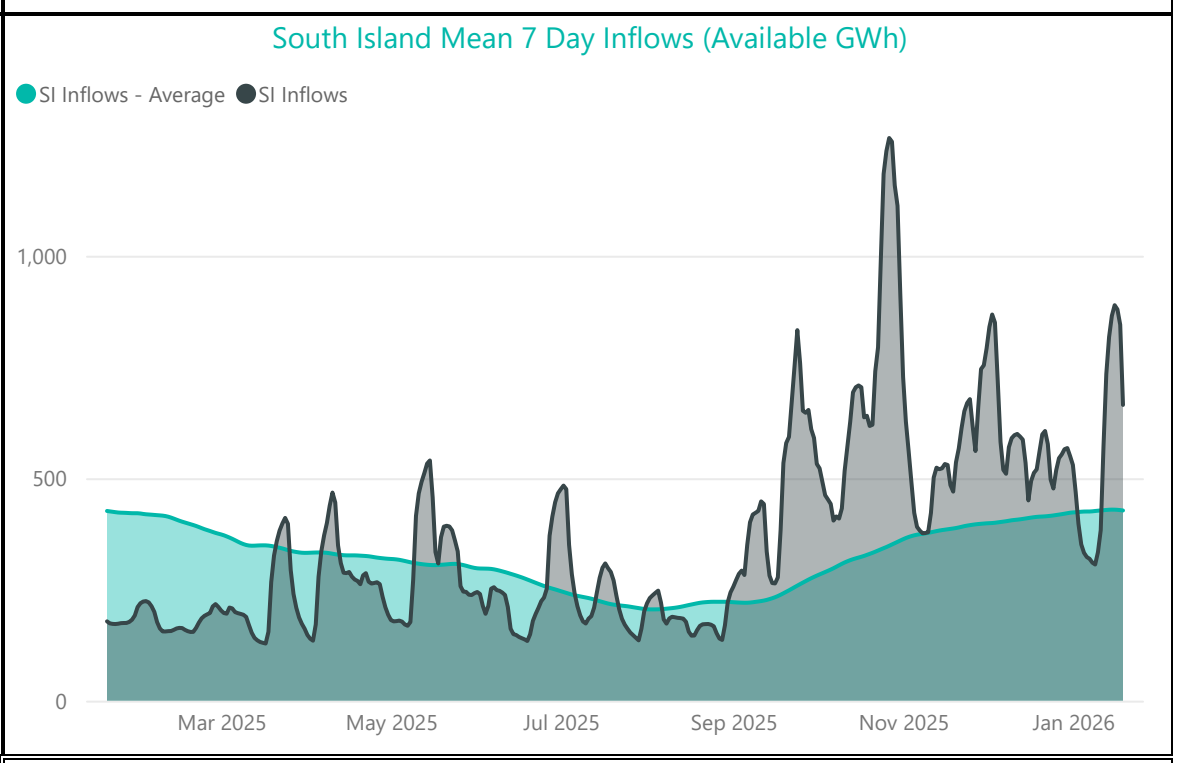


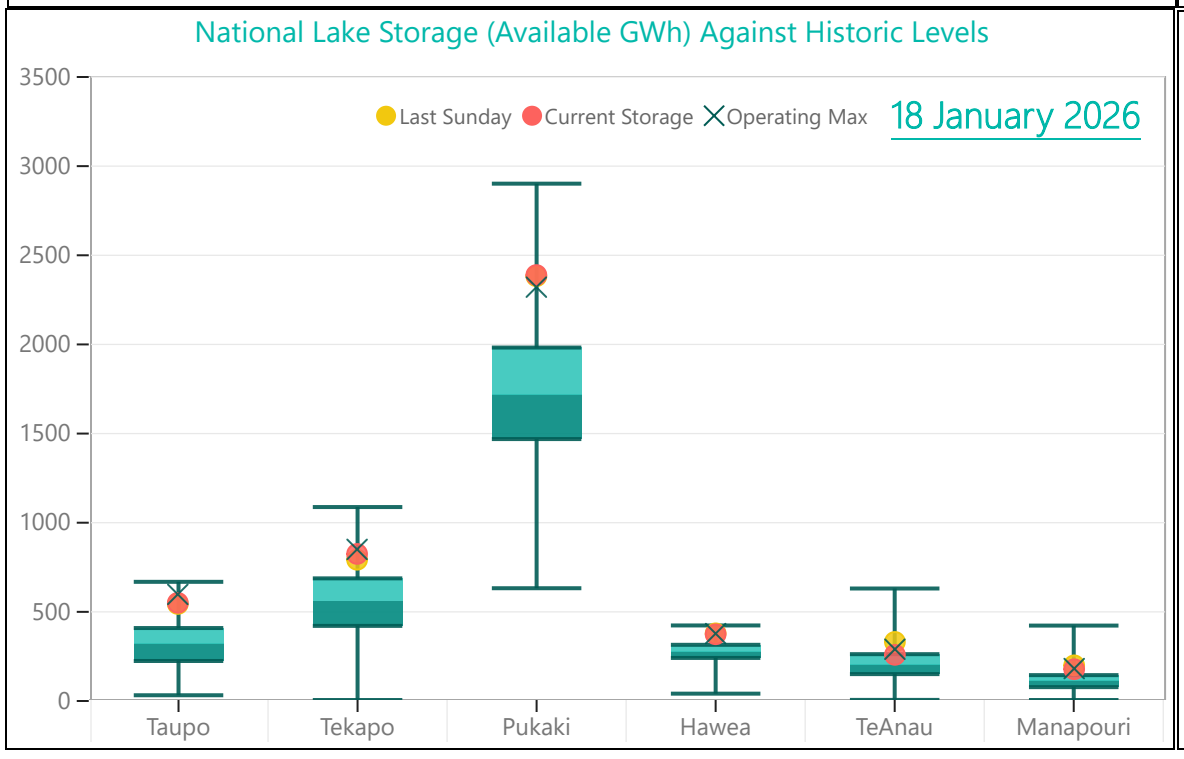
Hydro Storage

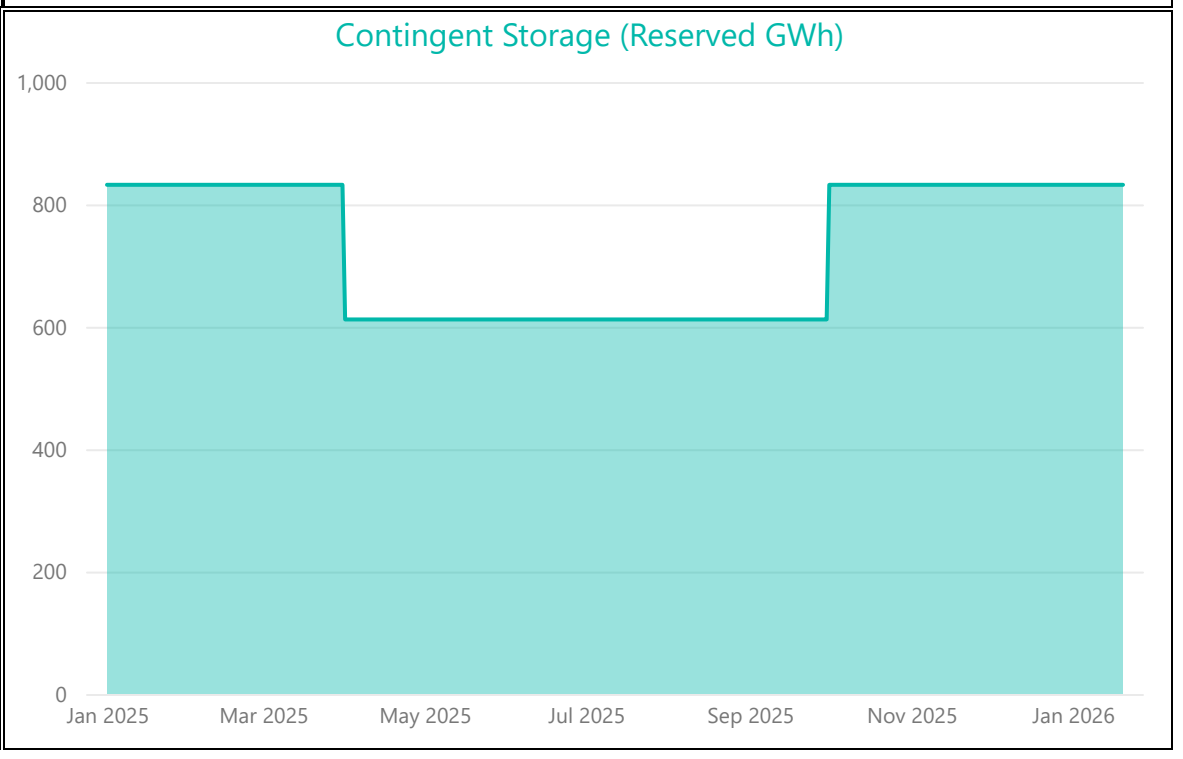












For further information on security of supply and Transpower's responsibilities as the System Operator, refer to our webpage here: https://www.transpower.co.nz/system-operator/security-supply

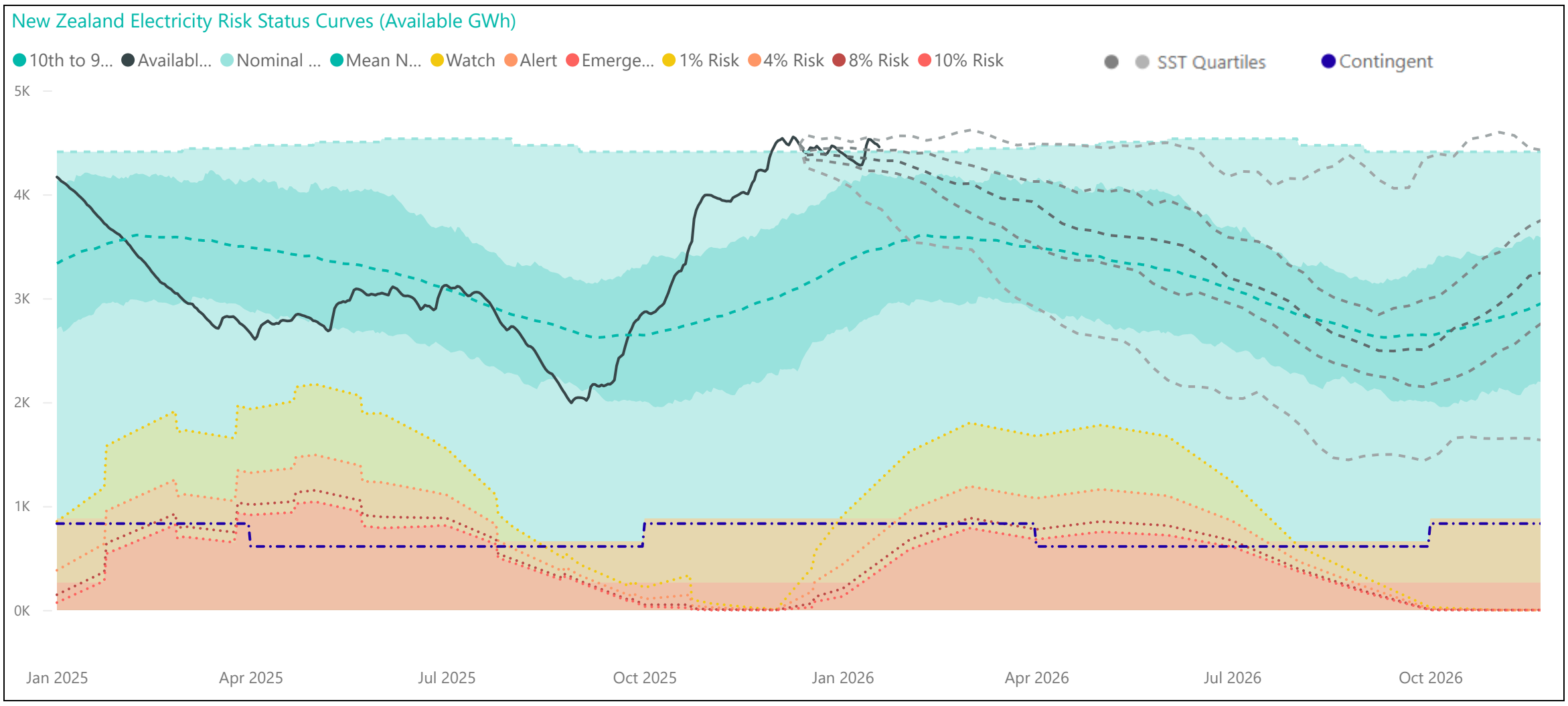
For any inquiries related to security of supply contact market.operations@transpower.co.nz

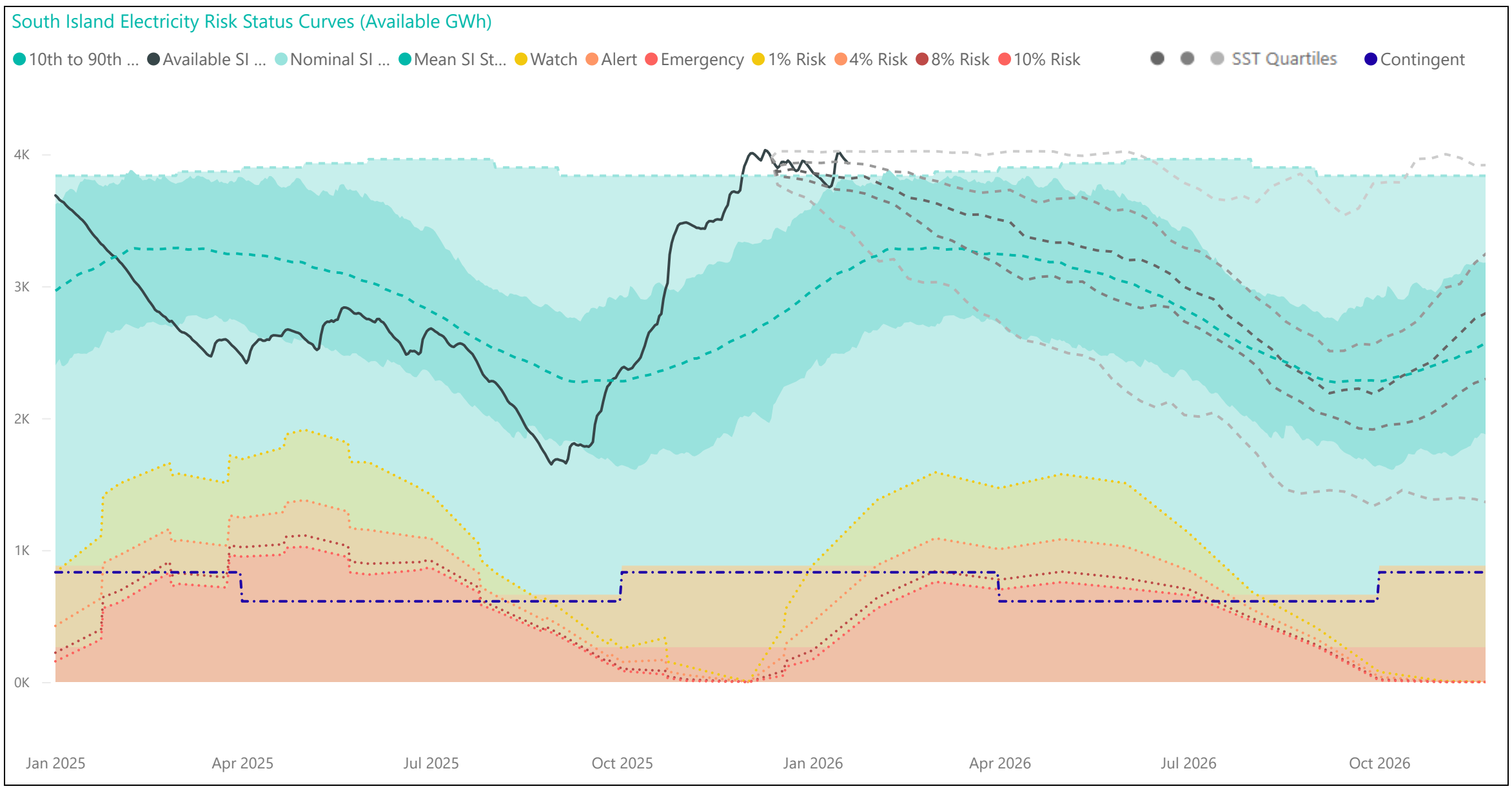
Hydro data used in this report is sourced from *NZX Hydro*.

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).