Market Operations Weekly Report - Week Ended 10 May 2026

Overview

National hydro storage remains above average, with levels having increased slightly from 110% to 113% of the historic mean for this time of year. North Island storage continues to be exceptionally high at 225% of the historic mean, while South Island storage is close to average at 105% of the mean.

This week's insight covers high-level takeaways from the draft 2026 Security of Supply Assessment.

Security of Supply

Energy

National hydro storage increased to 113% of historic mean at the end of last week. South Island storage increased from 102% to 105% and North Island storage increased from 221% to 225% with higher than average inflows for both islands last week.

Capacity

Residuals were healthy during morning and evening peaks last week. The lowest residual of 984 MW occurred during the evening of Monday 4 May which coincides with the highest demand peak of the week. A residual of 990 MW occurred during the evening of Tuesday 5 May. All other residuals were greater than 1000 MW.

The N-1-G margins in the NZGB forecast remain healthy, but are trending downwards into winter with tighter spots appearing that we recommend the industry watch 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 slightly increased from 758 GWh to 764 GWh. The highest demand peak of 5,874 MW occurred at 6:00pm on Monday 4 May.

Weekly Prices

The average wholesale electricity spot price at Ōtāhuhu last week dropped to $38/MWh from $101/MWh the week prior. Wholesale prices peaked at $136/MWh at Invercargill at 1:00am on Friday 8 May during a period of price separation between the North and South Island. This coincided with the tripping of a synchronous condenser at Haywards resulting in reduced HVDC transfer limits during a period of southward transfer.

Generation Mix

Wind generation increased from 7% to 14% of the generation mix last week, above its yearly average of 10%. Hydro generation decreased from 59% to 53% of the mix and thermal generation remained at 6%, slightly below its yearly average of 7%. Geothermal generation slightly increased from 25% to 26%, continuing to sit above its annual average of 23% as seen in recent weeks due to the additional geothermal capacity at Ngā Tamariki and TOPP2.

HVDC

HVDC flows last week were predominantly northward with periods of southward flow occurring overnight. These periods coincided with high wind and lower hydro generation. Overall, 42 GWh was transferred north, while 29 GWh was transferred south during the week.

Consultations and Engagement

SOSA

Submissions on the Draft Security of Supply Assessment (SOSA) 2026 are open until 5pm Thursday 14 May, followed by a one-week cross-submission period. The SOSA provides a 10-year outlook (2026–2035) on supply-demand balance to support security of supply risk management and investment decisions.

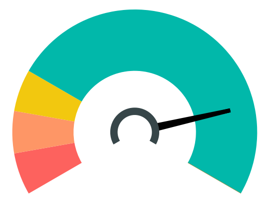
Emergency Reserve scheme

Expressions of interest are also open until Wednesday 20 May for an industry co-design panel to support the development of the new Emergency Reserve ancillary service, enabled by recent Electricity Authority Code changes.

Industry Exercise

There is still time for electricity market participants to register for Industry Exercise 2026 to be held 20-21 May and we encourage all participants to get involved. It is an important opportunity to practice and test how you would respond to a major unexpected power system event.

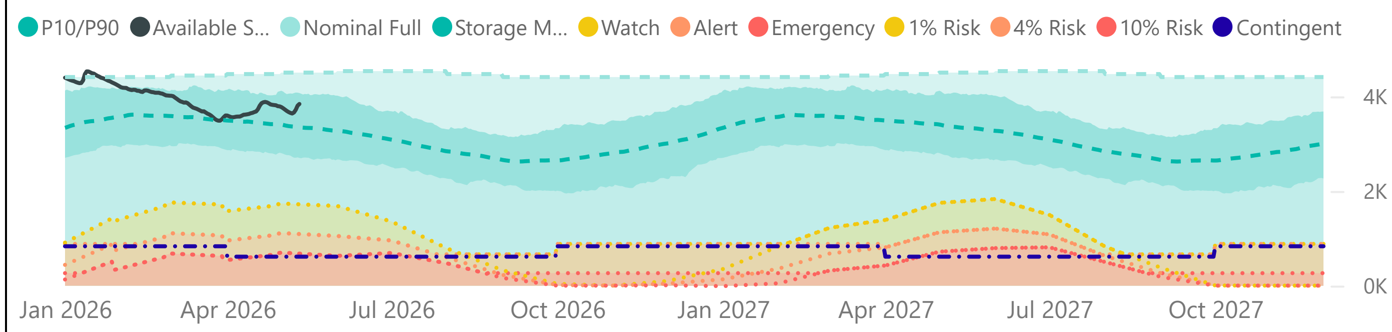
New Zealand Energy Risk



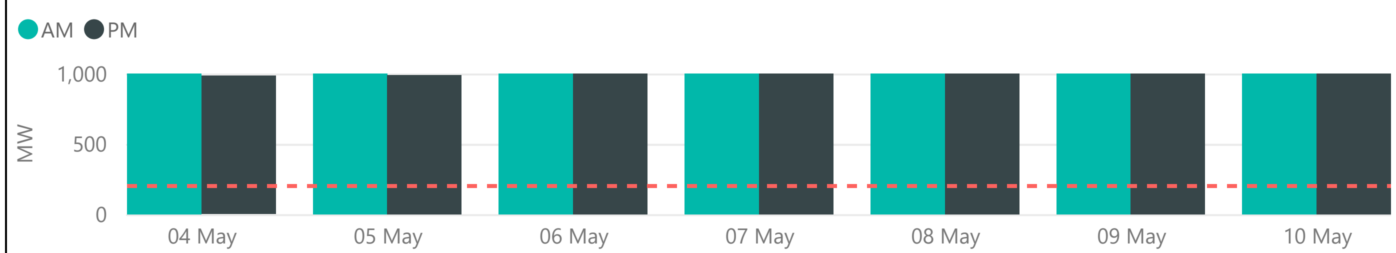
South Island Energy Risk

Normal Watch Alert Emergency

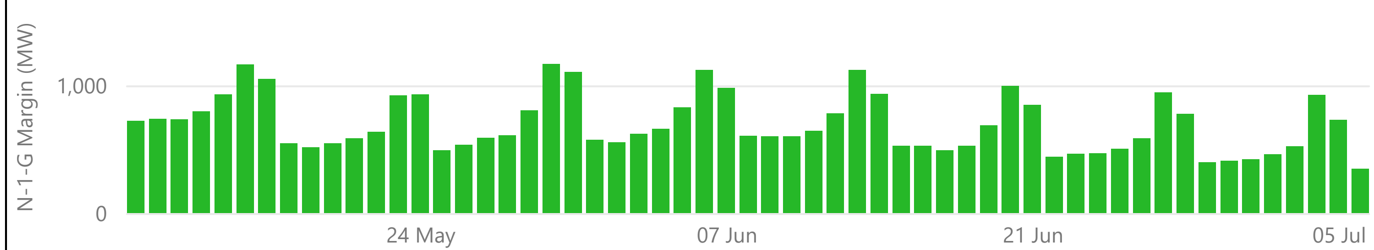
New Zealand Electricity Risk Status Curves (Available GWh)



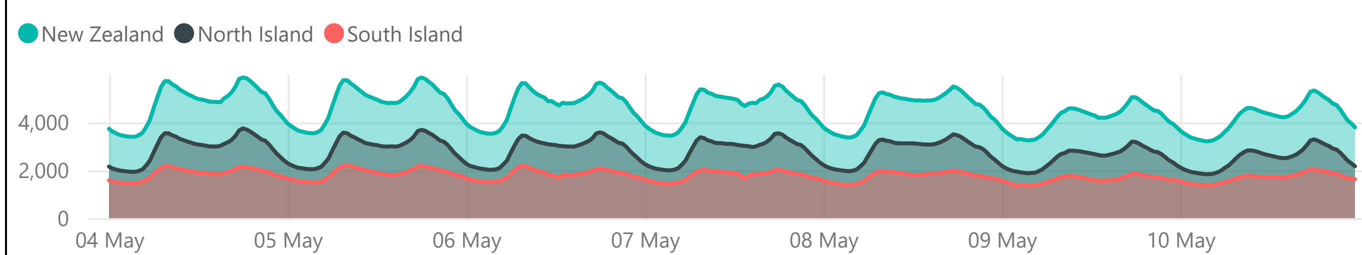
Lowest Residual Points - MW



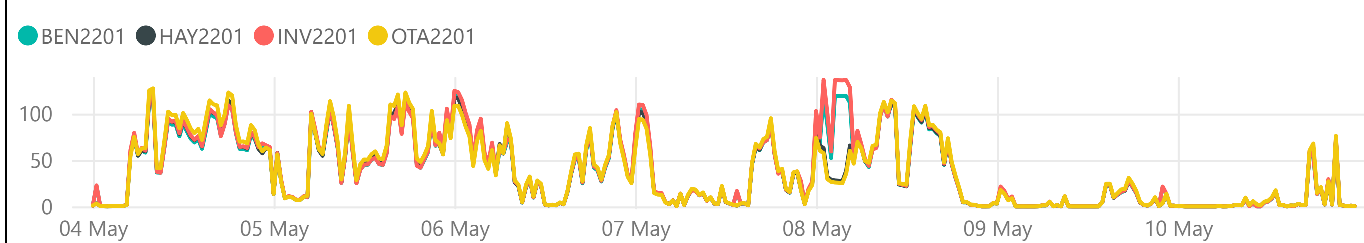
NZGB Look-Ahead (excluding next 7 days)



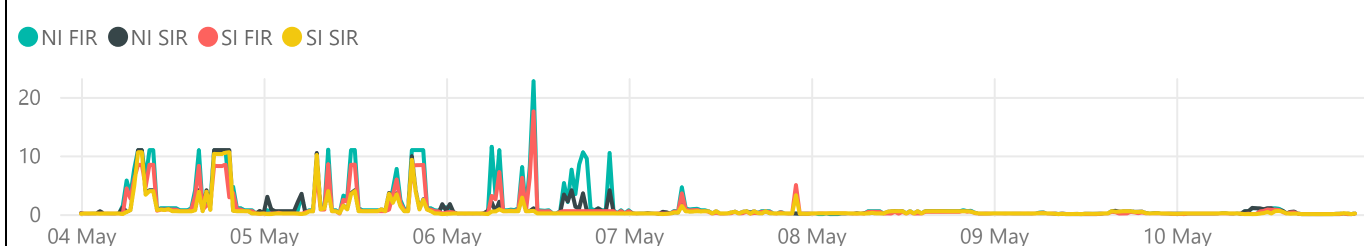
National Demand by Trading period - MW



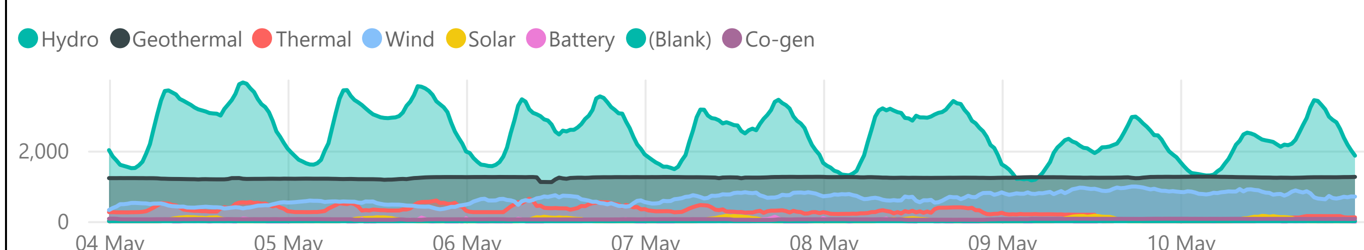
Energy Prices - $/MWh



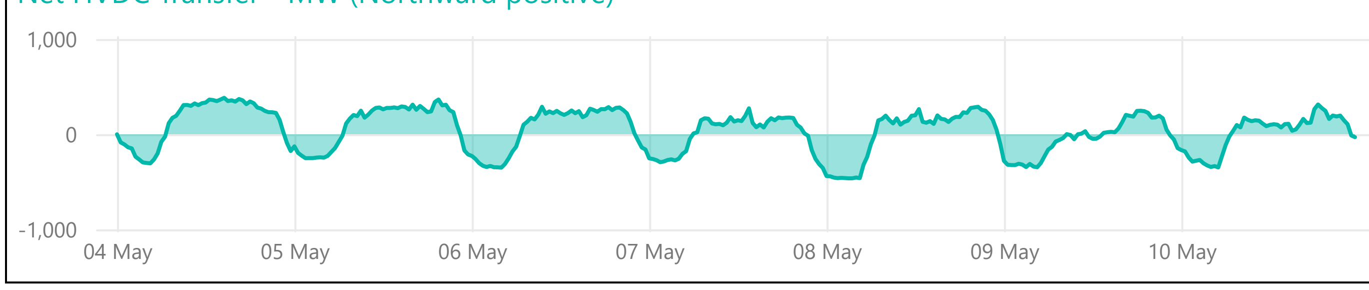
Reserve Prices - $/MW



Generation - MW



Net HVDC Transfer - MW (Northward positive)



Weekly Insight - Draft 2026 Security of Supply Assessment

The System Operator released the draft 2026 Security of Supply Assessment (SOSA) for consultation. The assessment reports on the expected balance between supply and demand in the New Zealand electricity system over the next 10 winters. The consultation closes on 14 May. This is followed by a one-week cross-submission period closing on 21 May.

The SOSA evaluates three security margins, using supply and demand forecasts under different scenarios.

These security margins are assessed against lower and upper security standards set by the Electricity Authority. The range between the upper and lower security standards signals an efficient balance between supply and demand resources, where the expected cost of shortage is equal to the expected cost of new generation.

The potential generation supply pipeline is included in the assessment in three stages.

- Stage 1 = Existing and committed
- Stage 2 = Stage 1 + consented and likely
- Stage 3 = Stage 2 + consent likely to be sought

This week's insight covers high-level takeaways from the draft 2026 SOSA.

In addition to the reference case, this year we have introduced an expected future case to represent the combination of reference case sensitivities that reflects our current view of the most likely system outlook over the next 10 years. A medium-growth load forecast was used in this case as it provides a more realistic view of future system risks such as large new loads (industrial electrification and data centres) connecting quickly and not visible in historical data. A low gas supply was also used based on the trends in gas supply relative to forecasts.

The 2026 SOSA analysis shows the market has taken meaningful steps to help reduce the risks for Winter 2026 with the margins sitting above the energy and capacity standards under the reference and expected future case. Beyond this winter, the draft SOSA indicates security margins remain above the standards until three-to-five years out, at which point additional generation is needed to increase margins back above the standards. Bringing forward generation investment will help reduce exposure to risks (such as reduced thermal generation plant availability or reduced gas availability) and will help support a higher demand growth potential.

A summary of the key findings from the draft 2026 SOSA are provided in the overview figure below.

Draft Security of Supply Assessment (SOSA) 2026 – At a glance

1. What is the SOSA?

- Assess three security margins over the next 10 years and compare against the security standards
- Standards represent an efficient range – Expected cost of shortage equals cost of reserve resources
- New Zealand Winter Energy Margin - Do we have enough national energy to get through extended dry winters? [Standards: 14% to 16%]
- South Island Winter Energy Margin - Can the South Island meet its winter energy needs, given both supply and inter-island transfer limits? [Standards: 25.5% to 30%]
- North Island Winter Capacity Margin - Do we have enough generation to meet North Island peak winter demand? [Standards: 630 MW to 780 MW]

2. How do we assess the margins?

- Survey participants and investors on future pipeline projects
- Forecast electricity demand for next 10 years
- Consult on assumptions and sensitivities to key inputs
- Use Security Standards Assumptions Document which specifies the methodology and some key assumptions
- Develop other inputs and assumptions as required (eg. gas forecasts, coal estimates, plant availability)
- Assess margins for Reference case R, Expected Future case E and sensitivities S

3. Key findings from Draft SOSA 2026

New Zealand Winter Energy Margin (NZ-WEM)	
R E S Short-term (2026-2028)	**Adequate but fragile energy margin:** Margins above standards if projects are delivered on-time but fall below the lower standard if gas supply is lower than expected. Project delays, low thermal support, high demand, or weak renewable output increase risks of margins falling below standards. Deliver projects on time and add flexible supply to reduce risks.
R E S Mid-term (2029-2031)	**Emerging energy gap in 2030s:** Margins fall below the standard by 2031 even with planned projects, with lower gas bringing this forward. Risks from delays, reduced thermal support, high demand and weak renewables increase exposure, requiring earlier project delivery, ensuring thermal generation availability and developing a more diverse supply pipeline.
R E S Long-term (2032-2035)	**Pipeline-dependent adequacy:** Margins stay above the standard only if future pipeline delivered, but strong demand growth and weaker thermal, gas, or renewables can still drive shortfalls by ~2035. Reducing risk requires expanding and diversifying the future pipeline, with less reliance on weather-dependent generation.

South Island Winter Energy Margin (SI-WEM)	
R E S Short-term (2026-2028)	**Strong but adequacy sensitive to risks:** Margins remain above the standard under expected conditions with committed project delivery. Delays, reduced thermal support, higher demand, or low gas can drive shortfalls by 2027–2028, so timely delivery and firm backup are critical.
R E S Mid-term (2029-2031)	**Adequate but exposed to risks:** Margins remain above the standards if committed and consented projects proceed on-time but can still fall below the lower standard if gas supply is lower than expected. If new supply projects are delayed or if demand is higher and gas, thermal, or renewables underperform then shortfalls emerge. Expanding and diversifying supply is key.
R E S Long-term (2032-2035)	**Robust but demand-sensitive adequacy:** Margins remain above the standard if committed, consented and unconsented projects are delivered. Strong demand growth with weaker gas, thermal, or renewables can still erode margins, so expanding the future project pipeline is key to manage this risk.

North Island Winter Capacity Margin (NI-WCM)	
R E S Short-term (2026-2028)	**Adequate but capacity risks exist:** Margins remain above the standard in the short term with committed projects. Peak risks from low wind, limited thermal support, and higher demand require timely delivery and strong winter thermal commitment.
R E S Mid-term (2029-2031)	**Emerging capacity shortfalls:** Margins sits between standards if committed and consented projects proceed but fall below by ~2029 if they don't. High demand, weaker thermal/gas, and project delays increase risks, so more flexible peak capacity is needed.
R E S Long-term (2032-2035)	**Enduring peak capacity risk:** Margins remain above the standards if committed, consented and unconsented projects are delivered. High demand, low gas, and operational constraints mean peak risks persist, so expanding flexible, fast-response resources is critical.

Overall implication: Maintaining security of supply over the next decade requires strong delivery discipline, earlier commitment of additional consent ready projects in the short and mid-term to reduce downside risks, ensuring thermal generation and fuel availability and active development of a more diverse and flexible future pipeline.

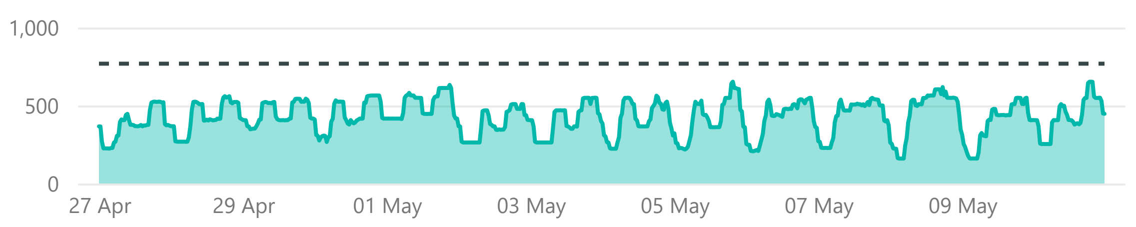
Figure 1: Draft 2026 SOSA at a glance

Following industry consultation and any updates, the final 2026 SOSA will be published by 30 June 2026.

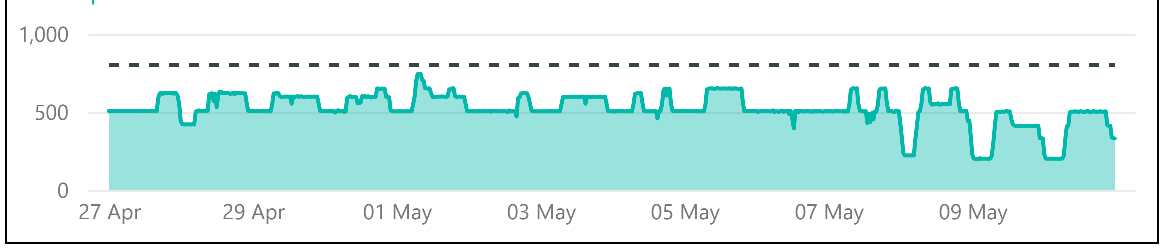
Generation Breakdown - Last Two Weeks

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

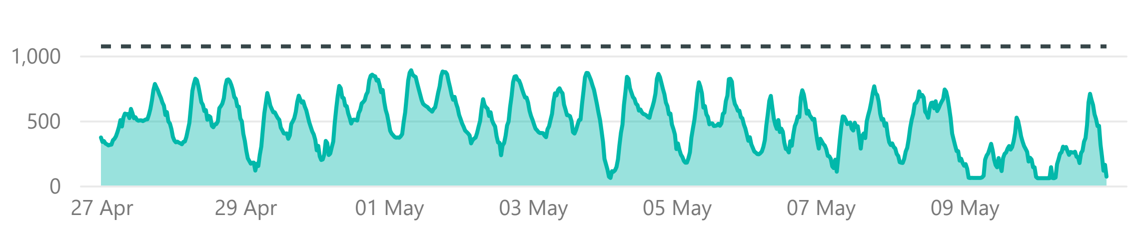
Clutha



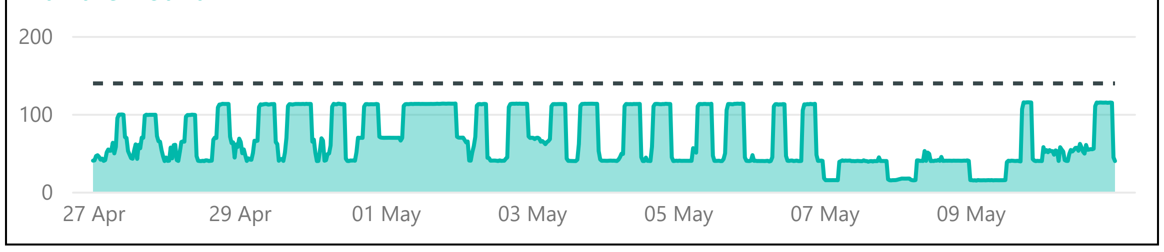
Manapouri



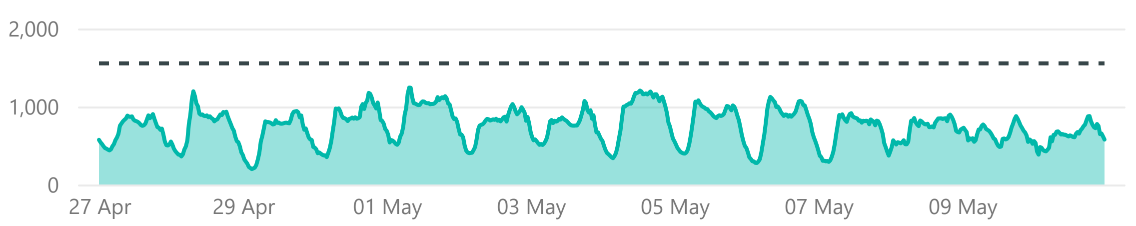
Waikato



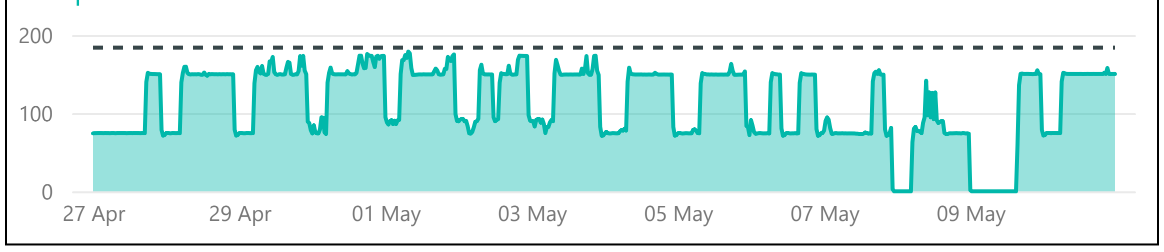
Waikaremoana



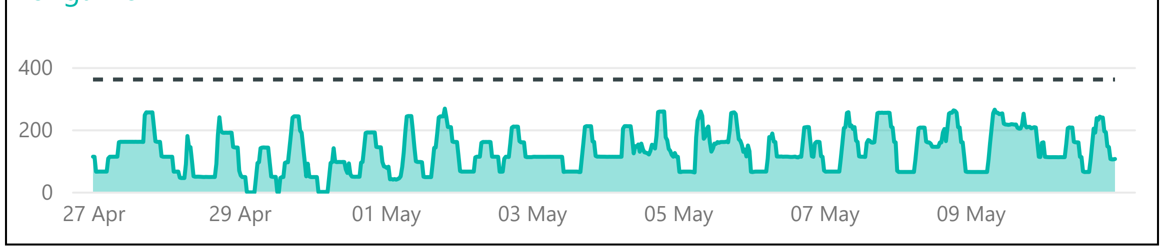
Waitaki



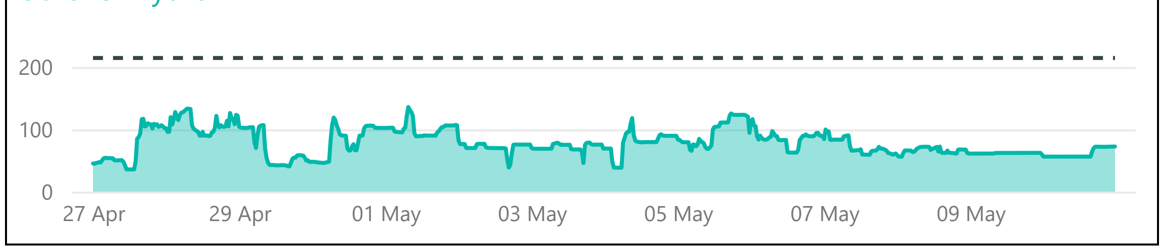
Tekapo



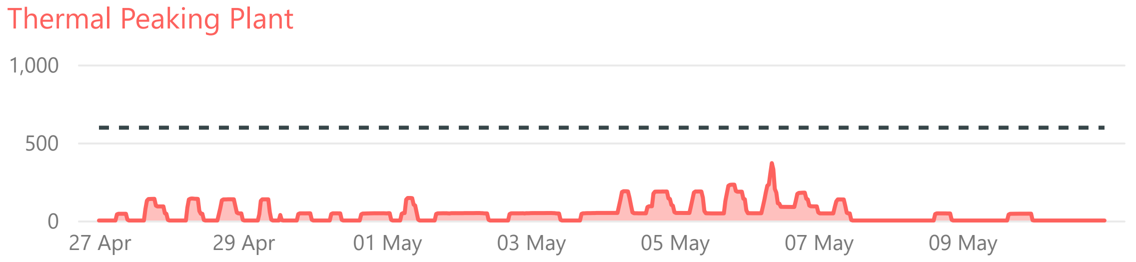
Tongariro



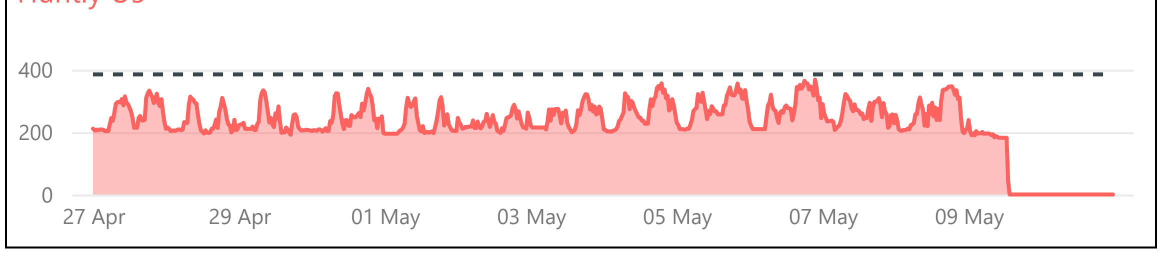
Other SI Hydro



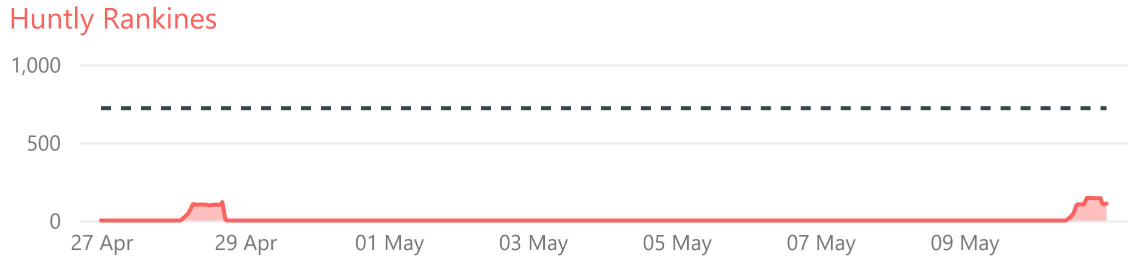
Thermal Peaking Plant



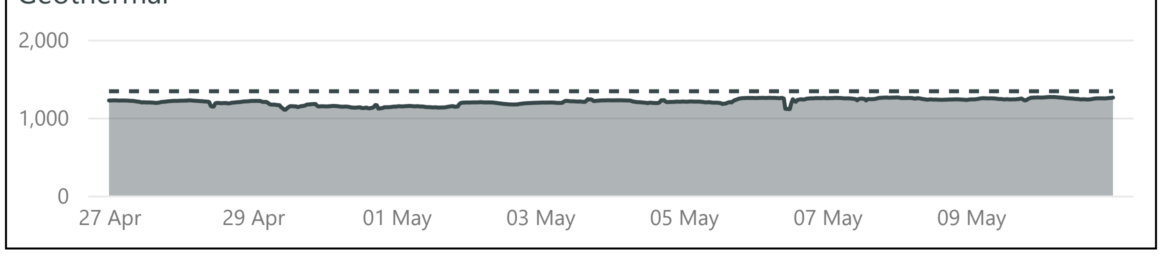
Huntly U5



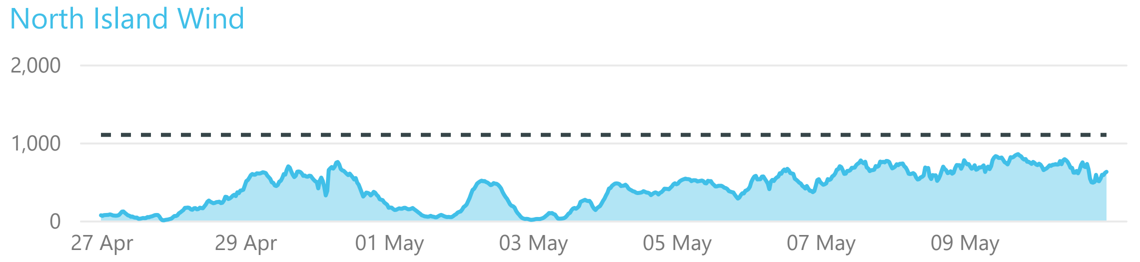
Huntly Rankines



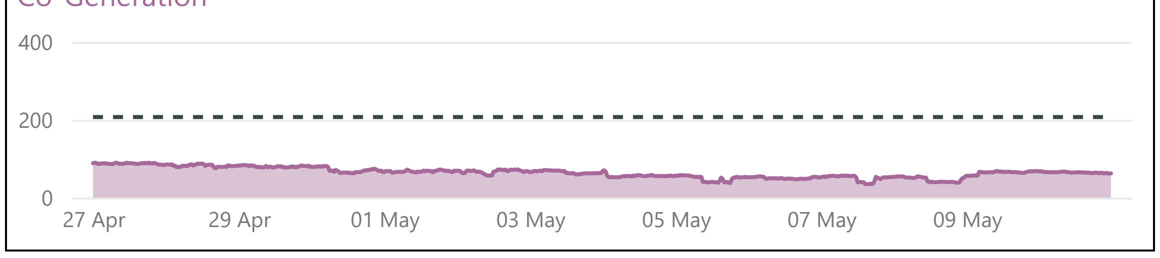
Geothermal



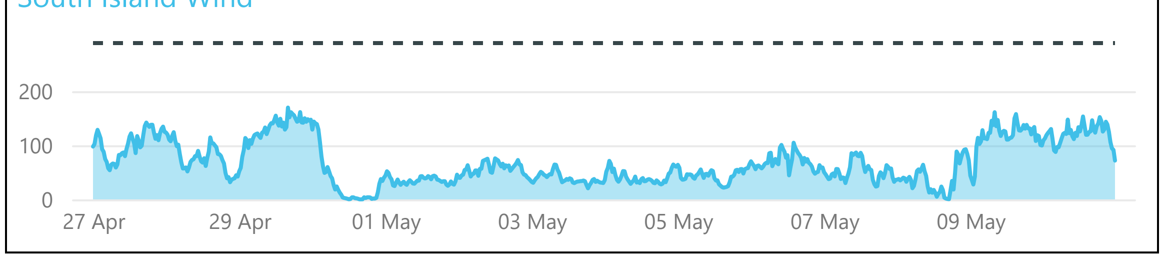
North Island Wind



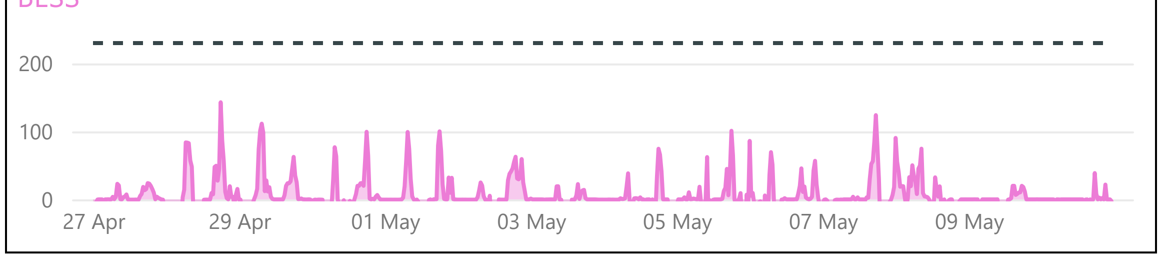
Co-Generation



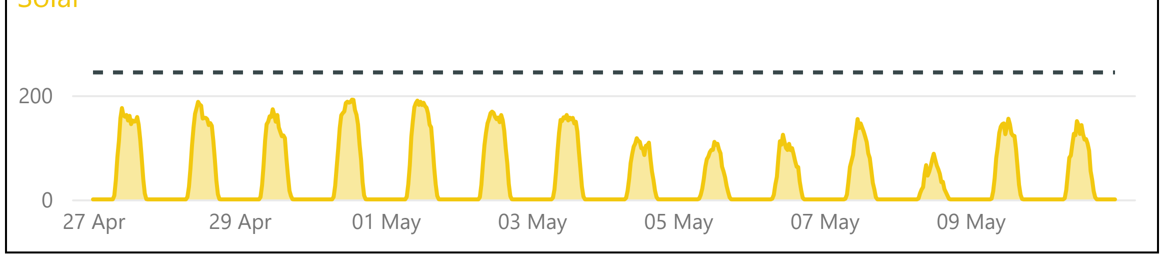
South Island Wind



BESS

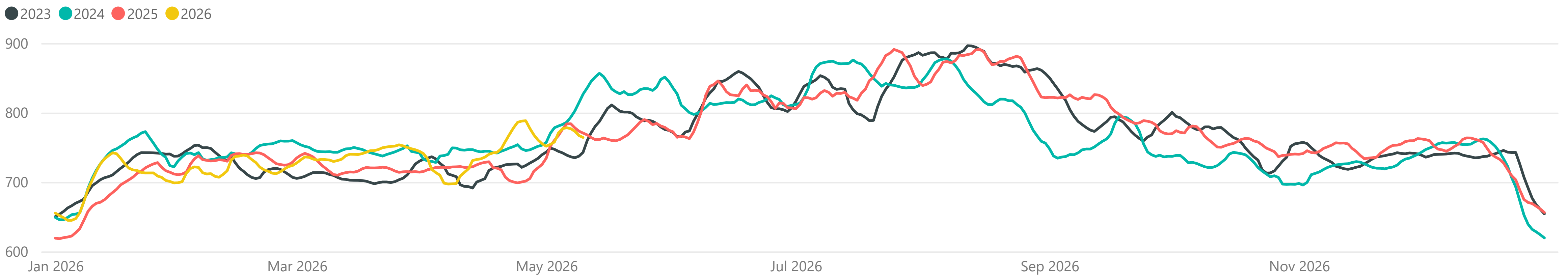


Solar

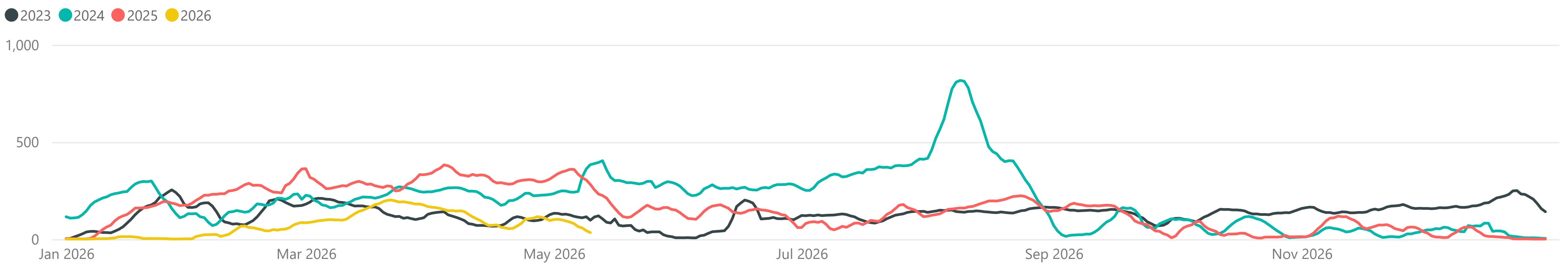


Weekly Profiles

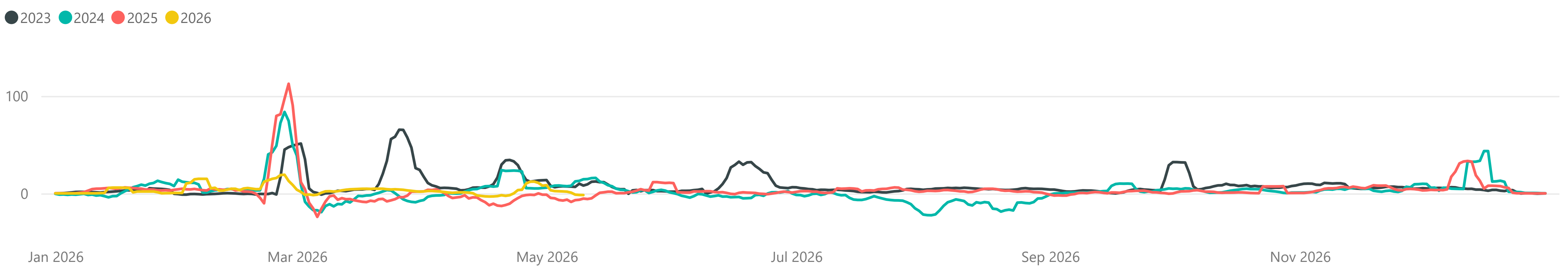
National Weekly Demand - GWh - 7 Day Rolling



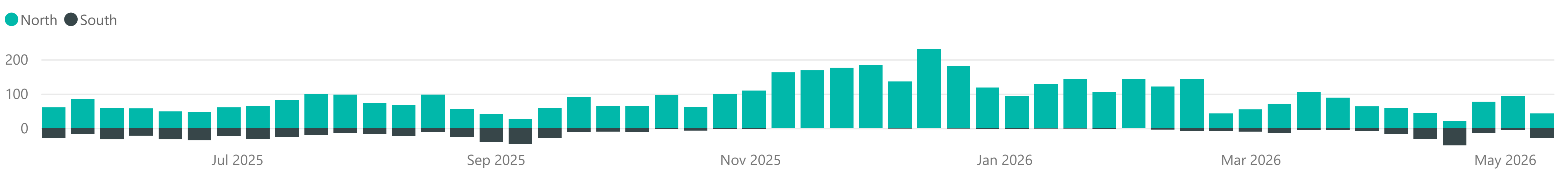
OTA2201 Weekly Rolling Average Spot Price - $/MWh



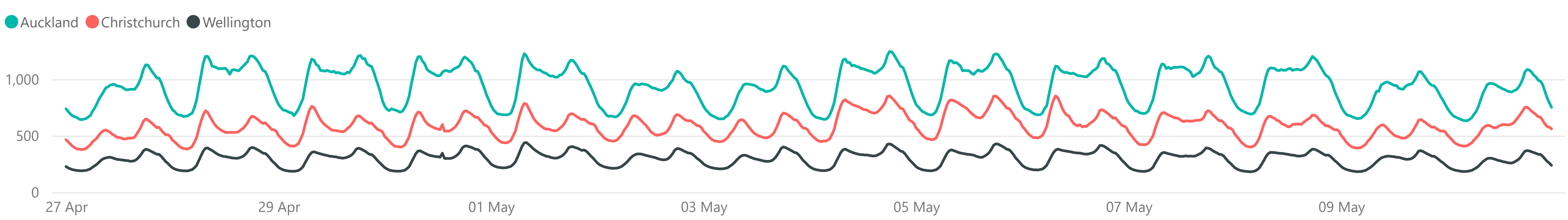
Weekly Rolling Price Separation (HAY2201 - BEN2201) - $/MWh



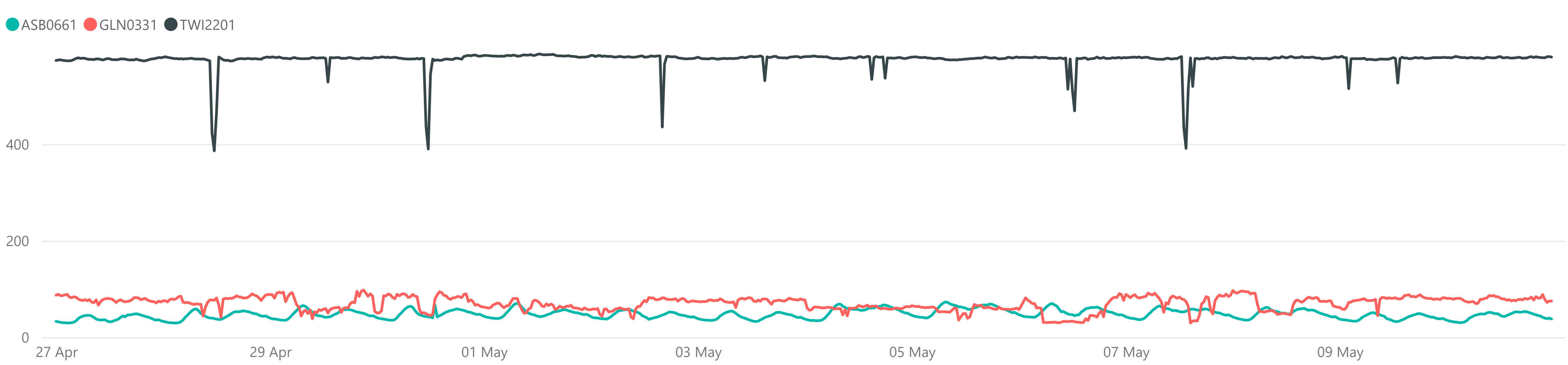
HVDC Transfer - Weekly GWh



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



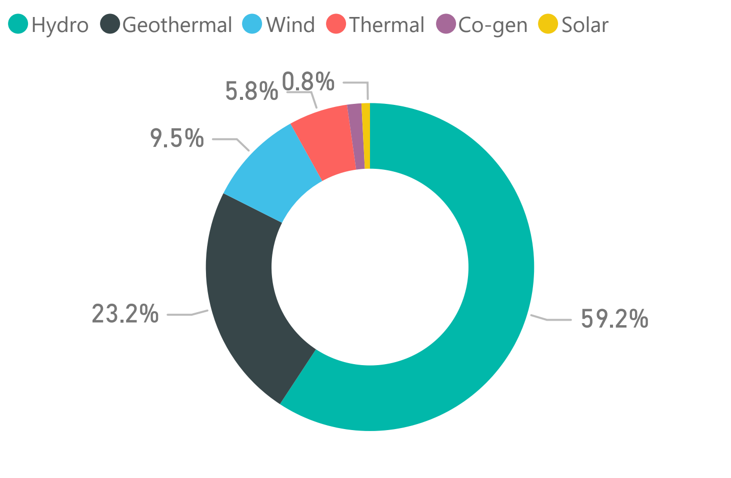
Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*



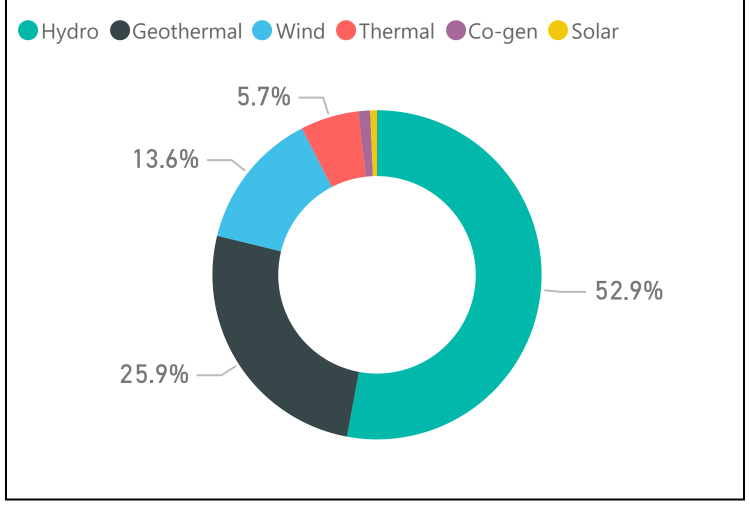
TRANSPOWER

Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



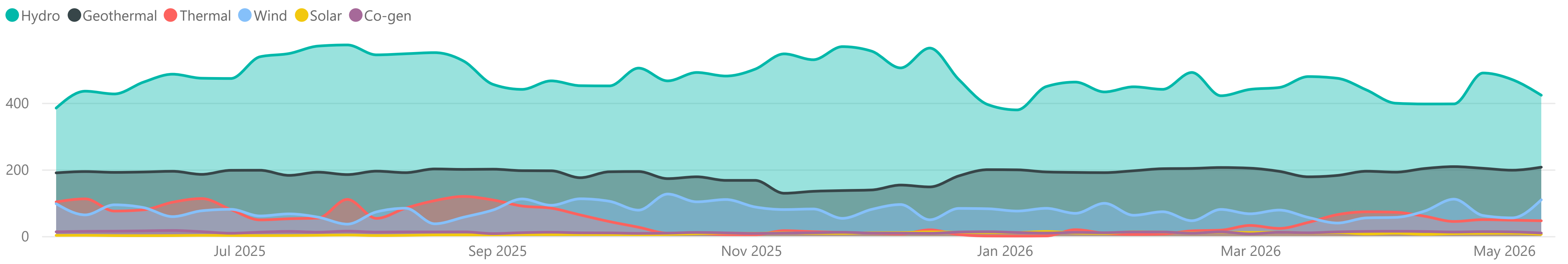
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
93%	41,564	52.0

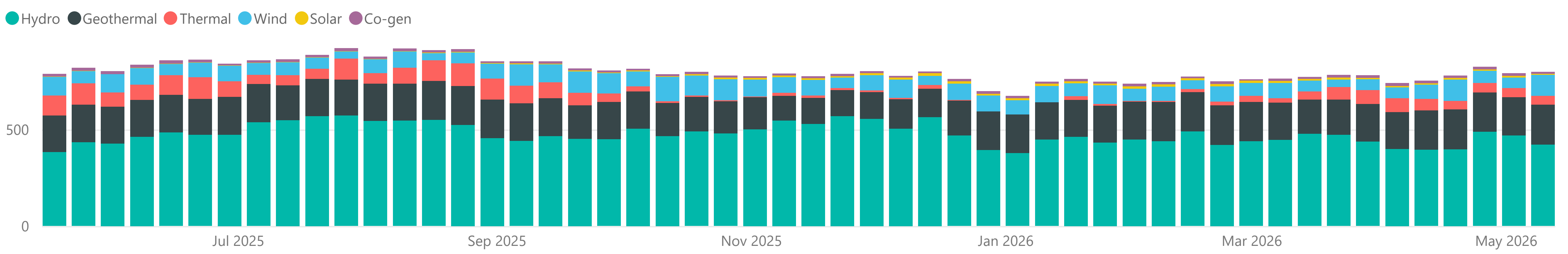
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
93%	43,632	53.1

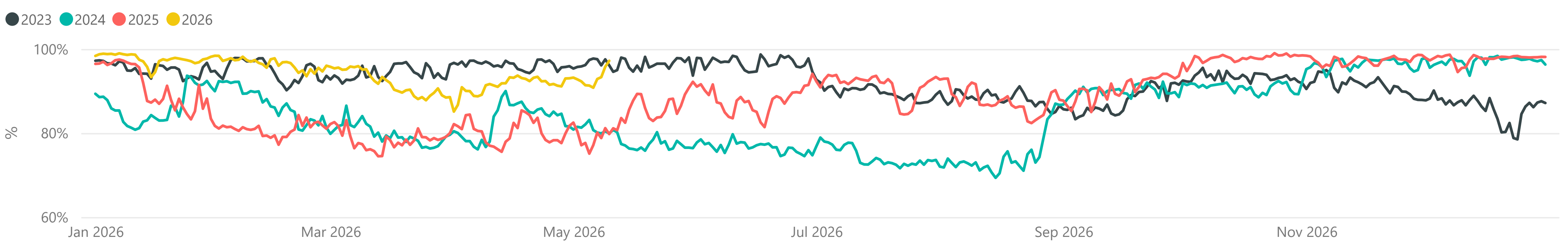
Weekly Generation Mix - GWh



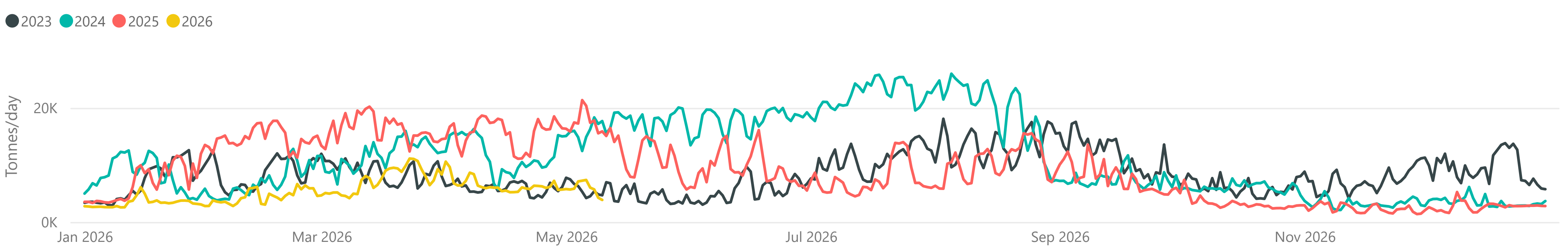
Weekly Generation Mix - GWh



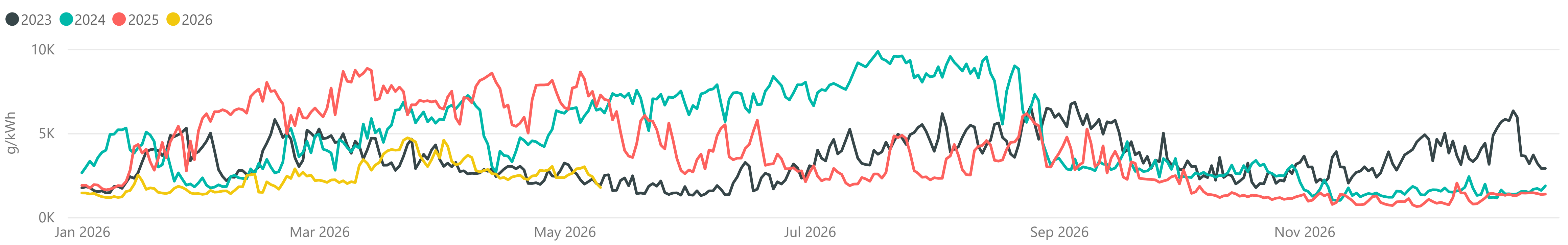
NZ Renewable Percentage



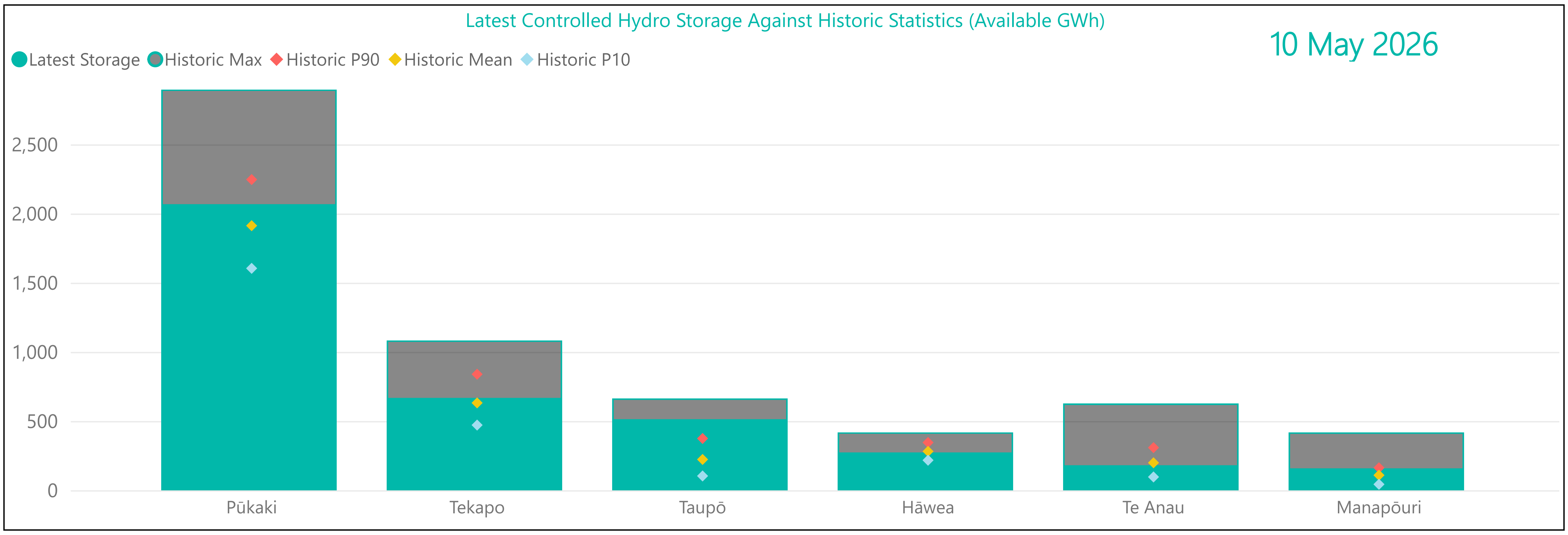
CO2 Tonnes/Day

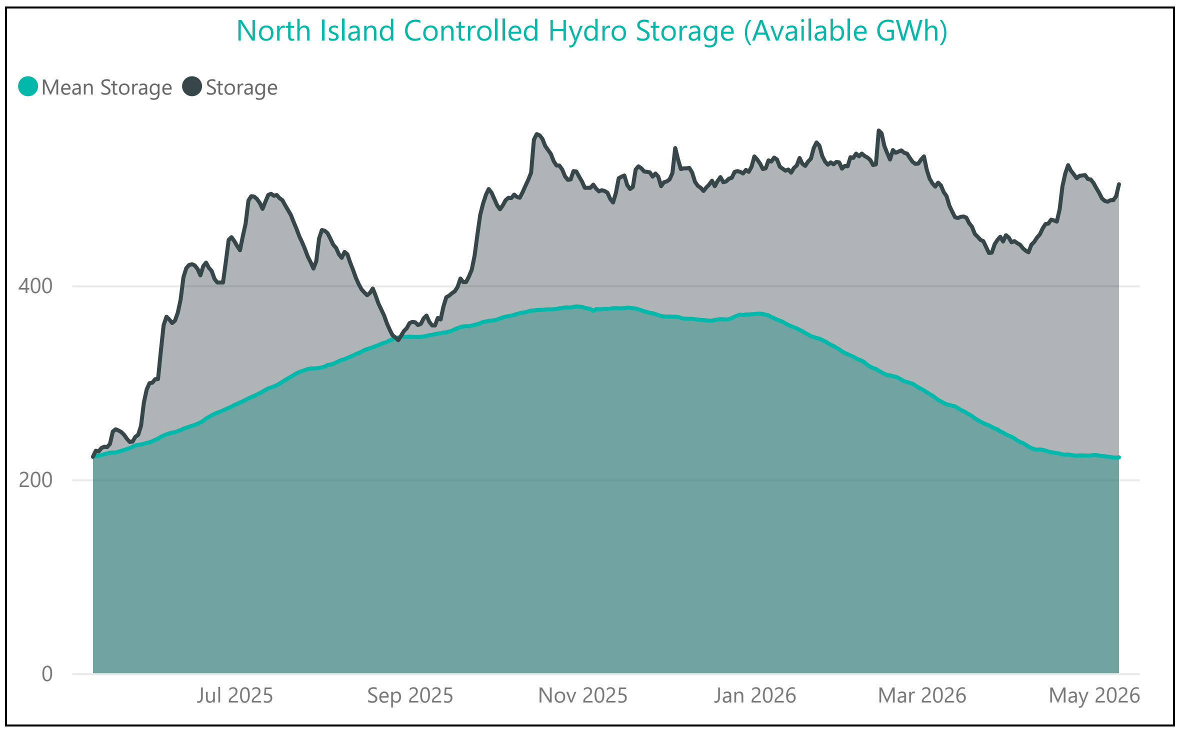


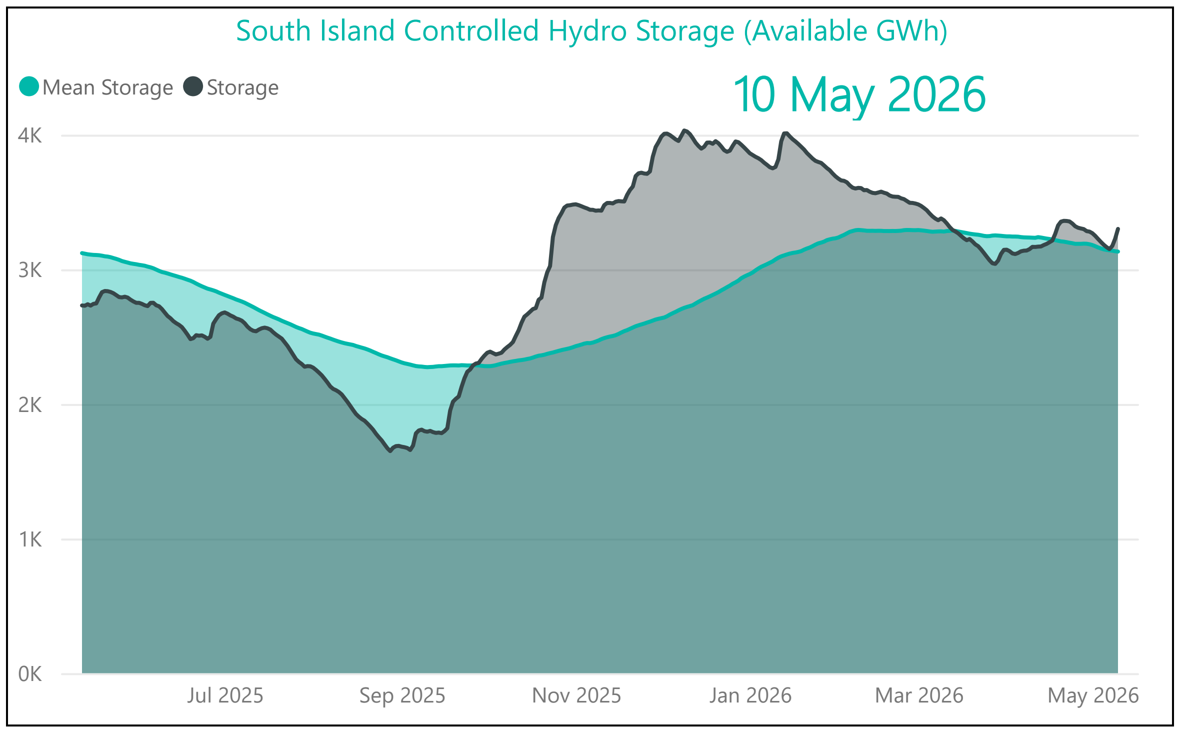
CO2 g/kWh

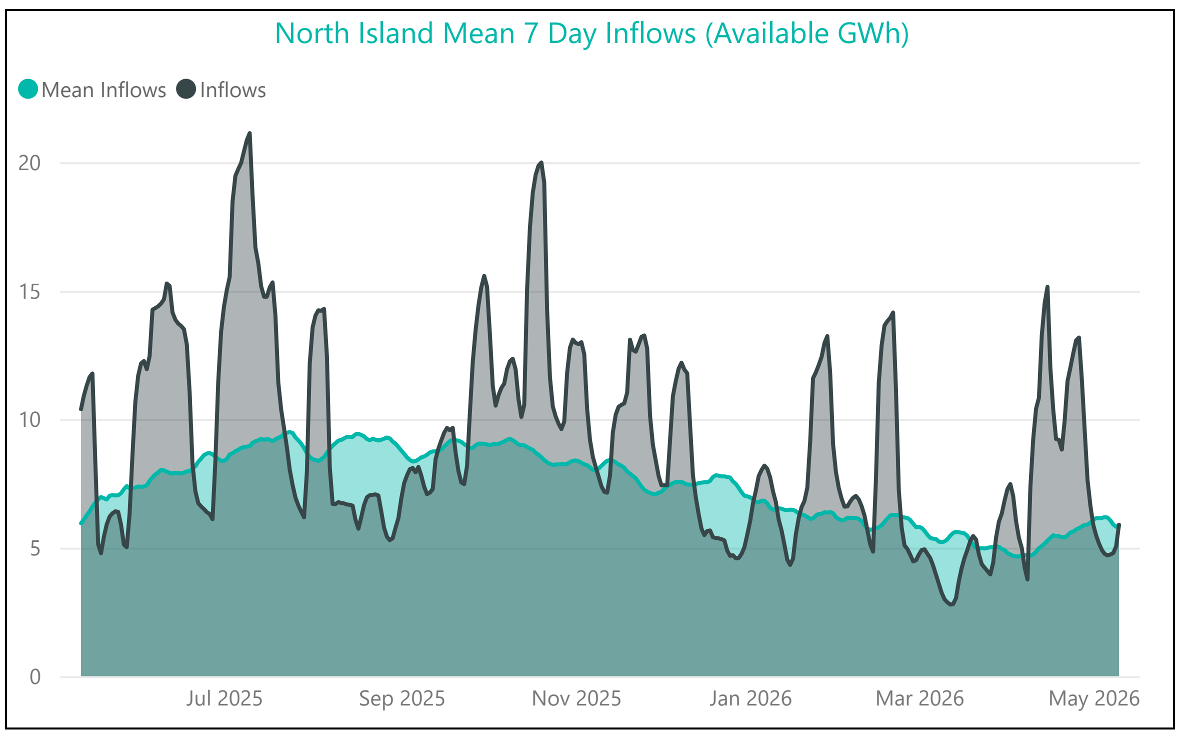


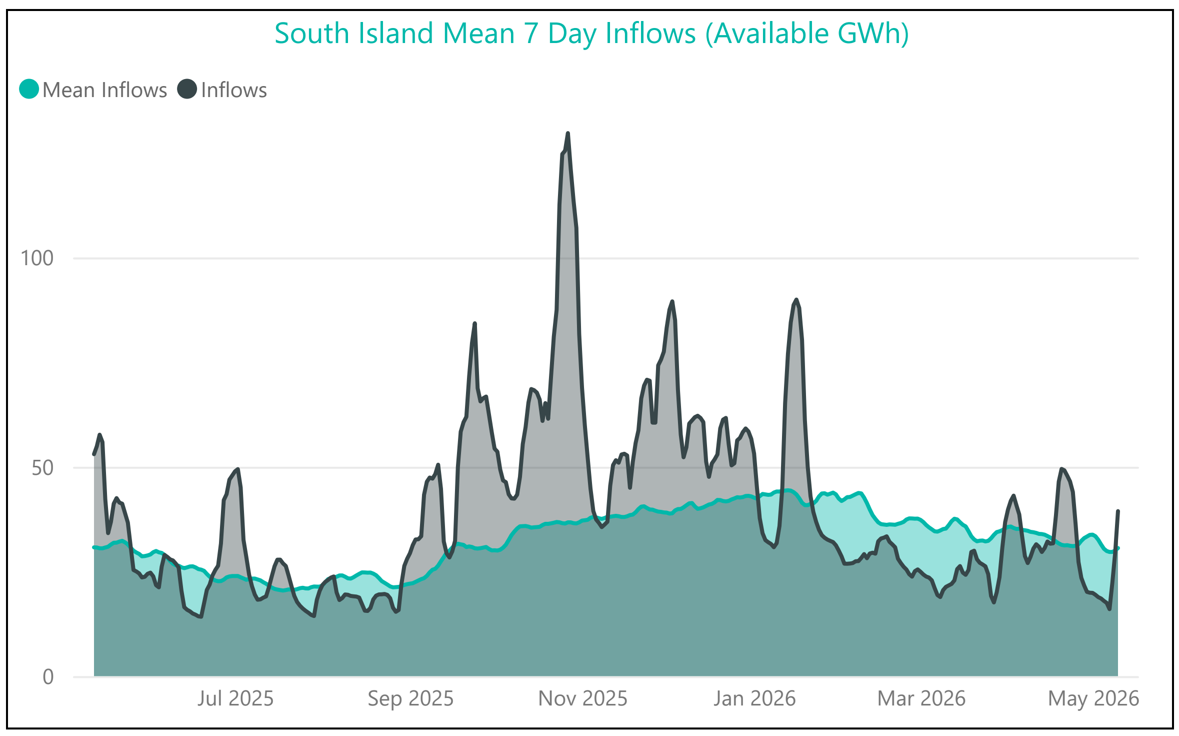
Hydro Storage











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

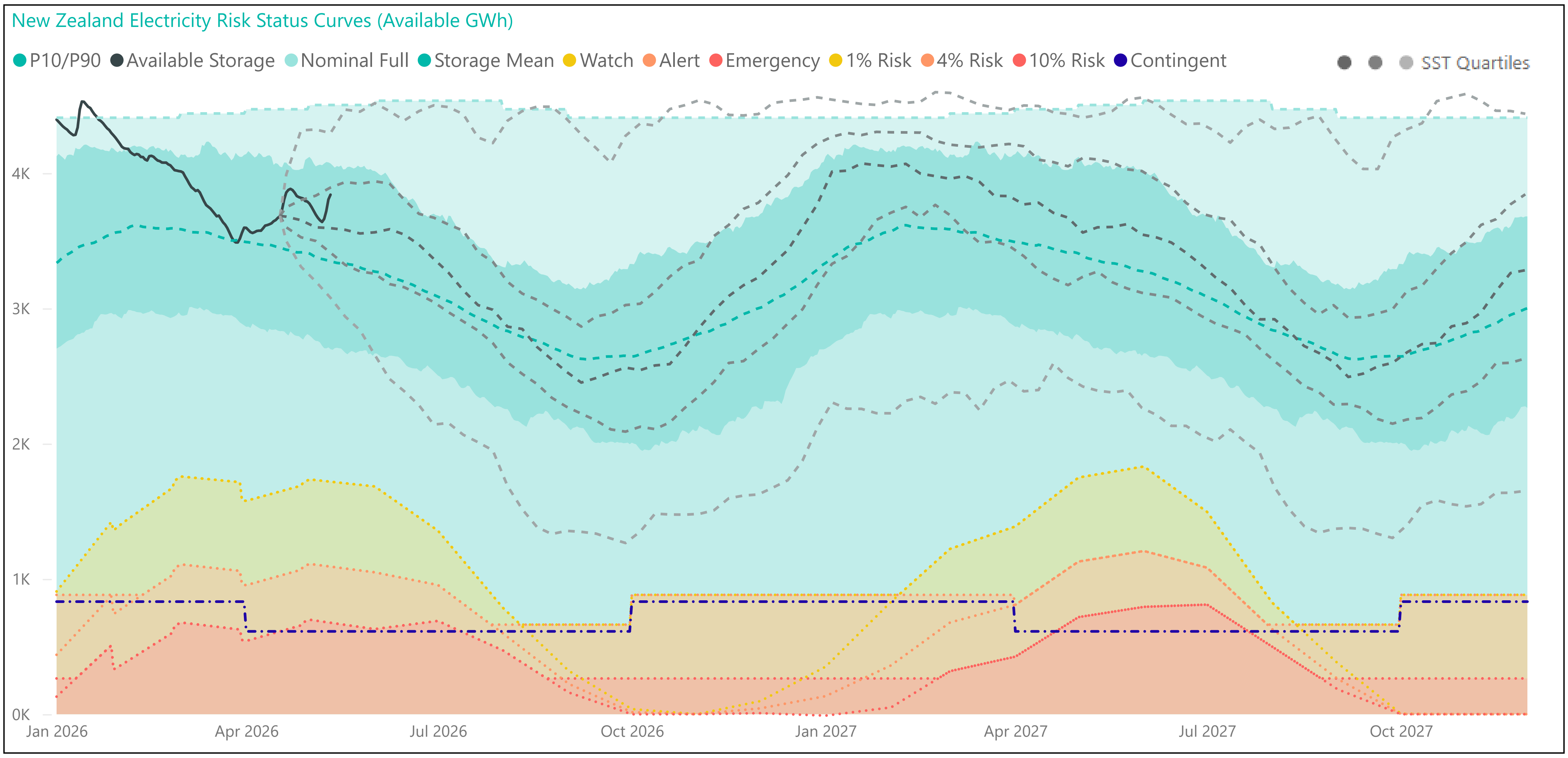
For any inquiries related to security of supply contact market.operations@transpower.co.nz

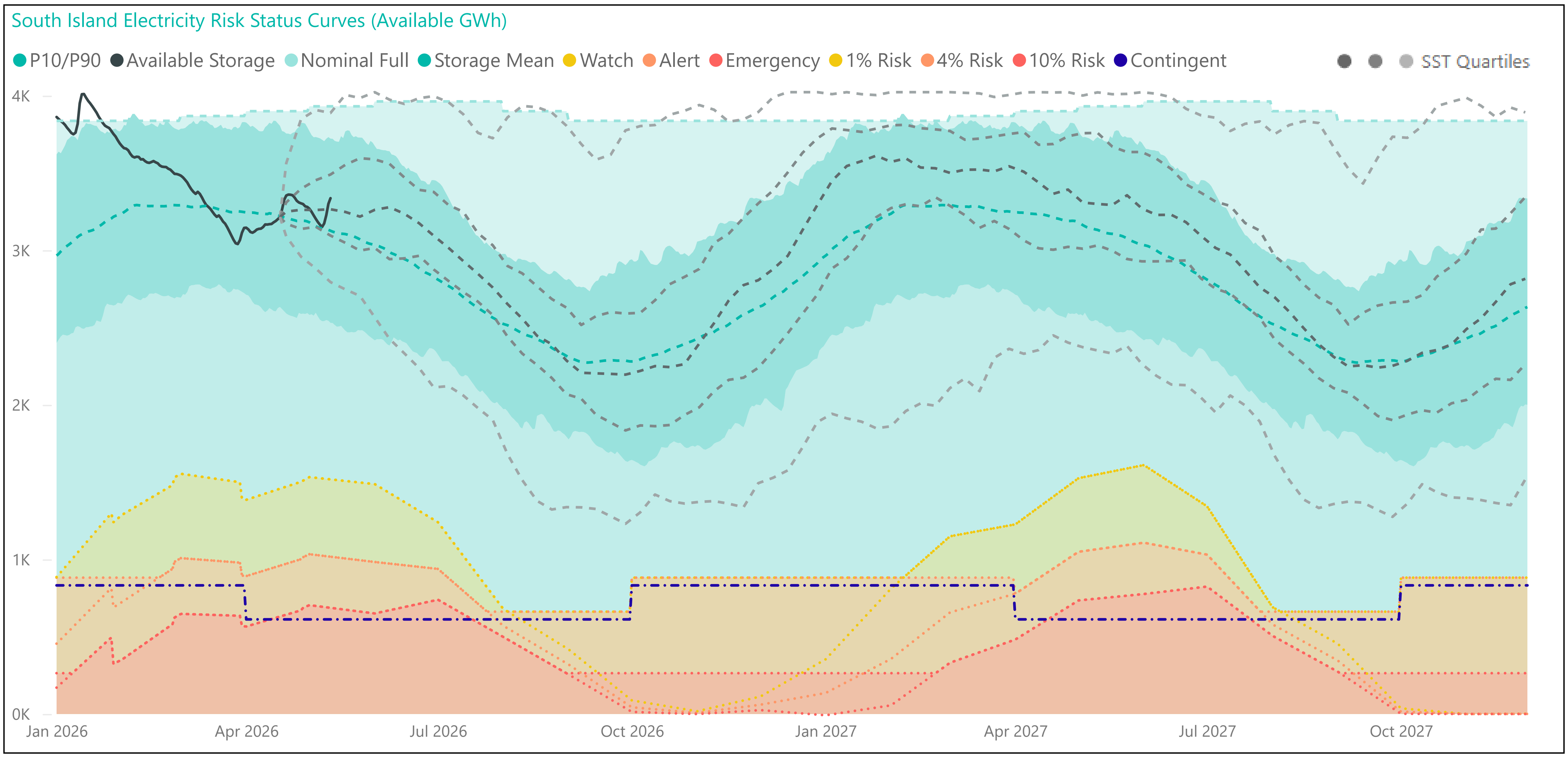
Hydro data used in this report is sourced from *NZX Hydro*.

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





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).