

Market Operations Weekly Report - Week Ended 14 June 2026

Overview

Hydro storage remains healthy, with the national storage level sitting at 120% of the historical mean for this time of year. North Island storage continues to be exceptionally high at 165% of the historical mean, while South Island storage sits at 116% of the mean.

This week's insight looks at the generation mix during the highest demand period this week and how this mix may continue to evolve over time.

Security of Supply

National hydro storage has increased slightly to 120% of historical mean at the end of last week from 119% the week prior. South Island storage increased from 114% to 116%, and North Island storage decreased from 180% to 165%.

Capacity

Residuals were lower than usual during some morning and evening peaks last week. The lowest residual of 334 MW occurred during the morning of Thursday 11 June, which coincided with the highest demand peak of the week and low wind generation.

The N-1-G margins in the NZGB forecast remain healthy but are trending downwards into winter with tighter spots appearing; 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 from 760 GWh to 824 GWh last week due to colder temperatures than in the week prior. The highest demand peak of 6,590 MW occurred at 7:30am on Thursday 11 June.

Weekly Prices

The average wholesale electricity spot price at Ōtāhuhu last week increased to \$43/MWh from \$31/MWh the week prior. Wholesale prices spiked to \$497/MWh at 7:30am on Thursday 11 June. This spike was driven by low wind generation coinciding with high demand requiring higher cost thermal generation during the peak.

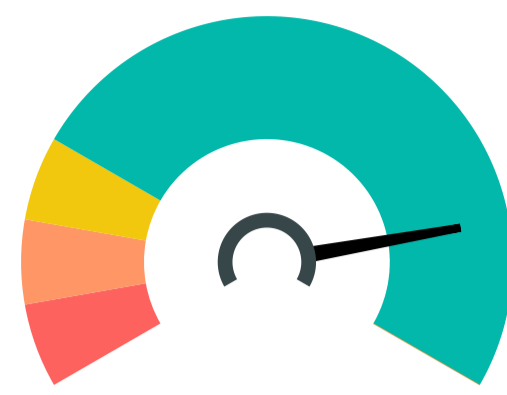
Generation Mix

Wind generation was 9% of the generation mix last week, in line with its annual average. Hydro generation contributed 59%, slightly below its yearly average. Thermal generation was 6% of the mix last week, above its annual average of 5% as thermal capacity was brought online at times to meet peak demand during the week. Geothermal generation remained at 25% of the mix above its annual average of 23%.

HVDC

HVDC flows last week were predominantly northward with very brief periods of southward flow overnight. Overall, 132 GWh was transferred north, while 3 GWh was transferred south during the week.

New Zealand Energy Risk

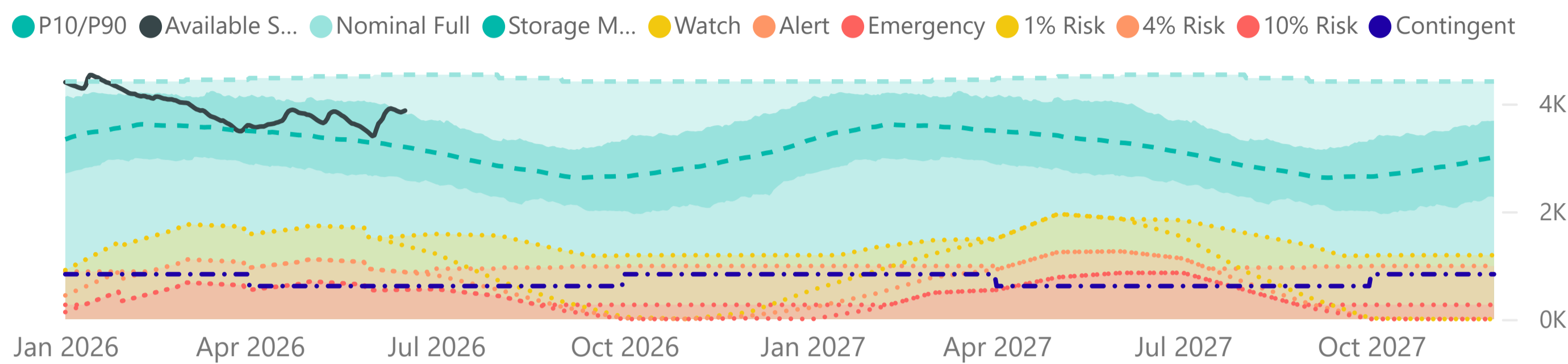


South Island Energy Risk

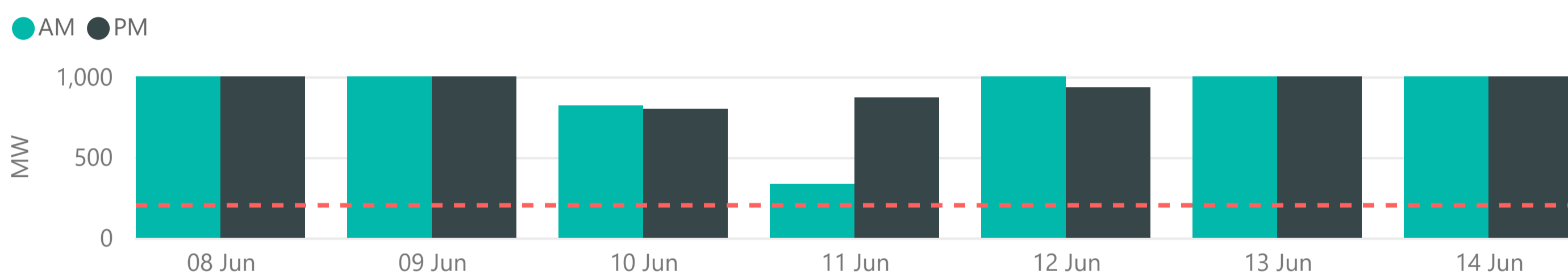


Normal Watch Alert Emergency

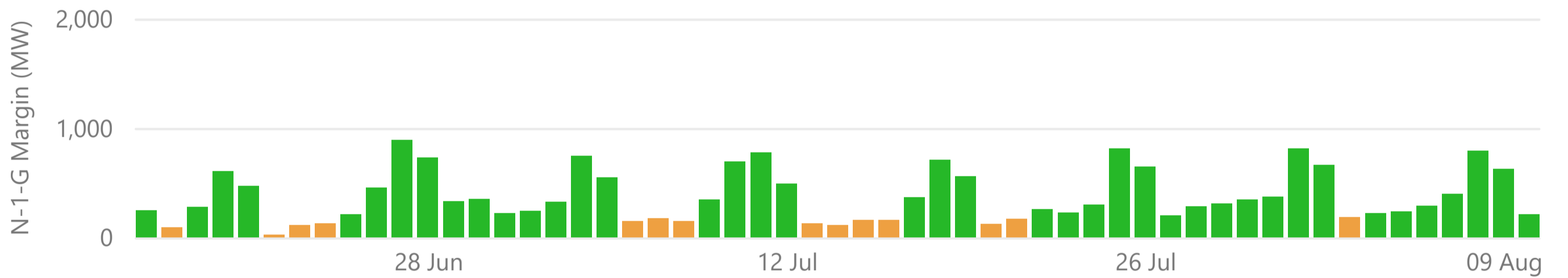
New Zealand Electricity Risk Status Curves (Available GWh)



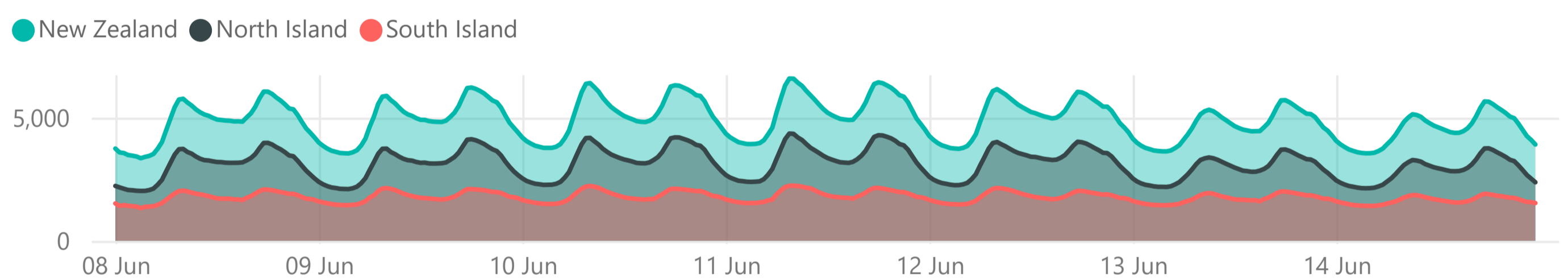
Lowest Residual Points - MW



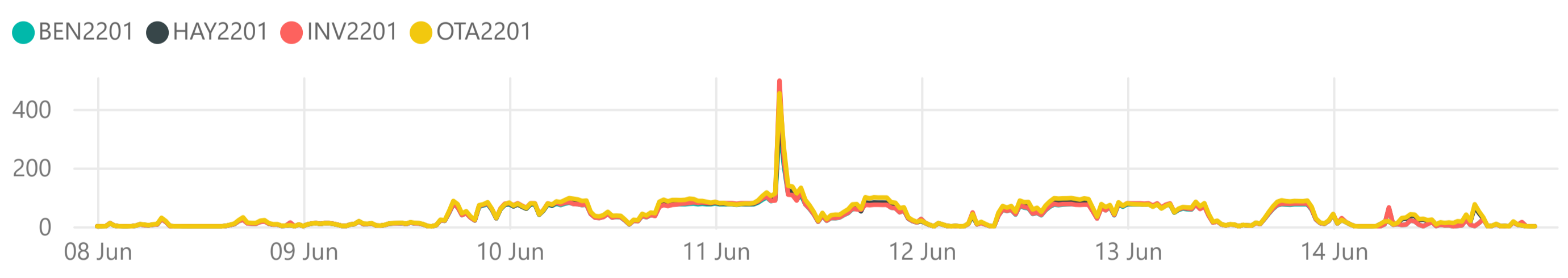
NZGB Look-Ahead (excluding next 7 days)



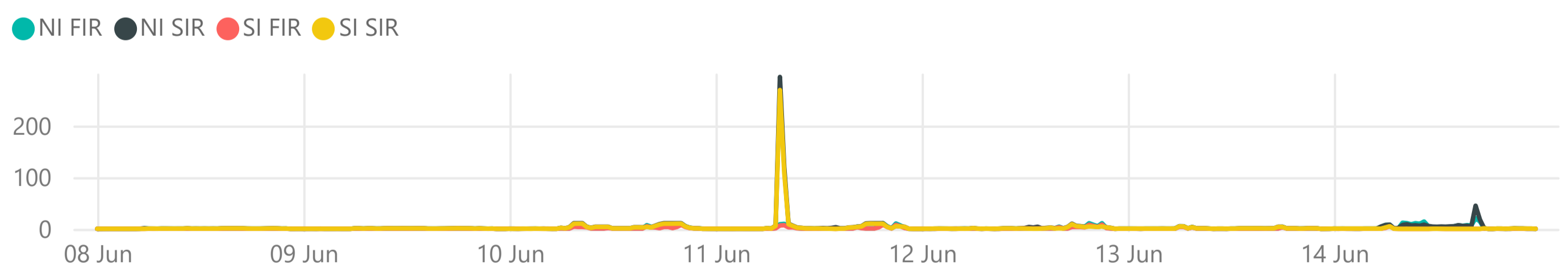
National Demand by Trading period - MW



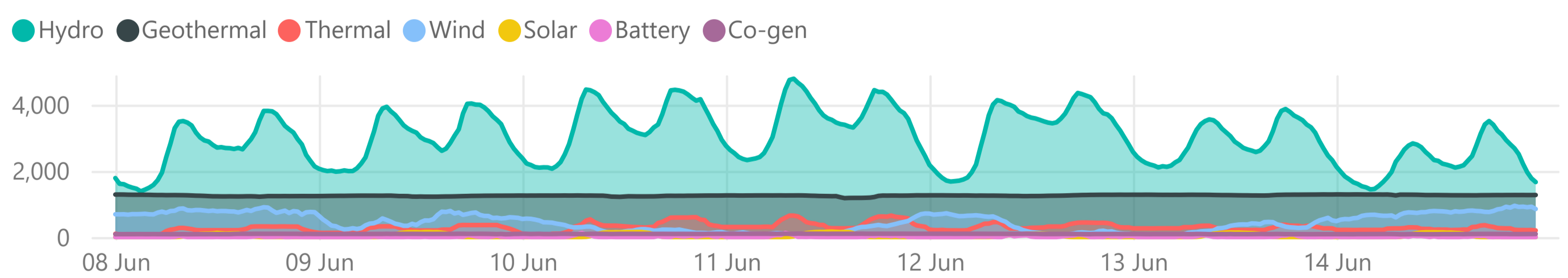
Energy Prices - \$/MWh



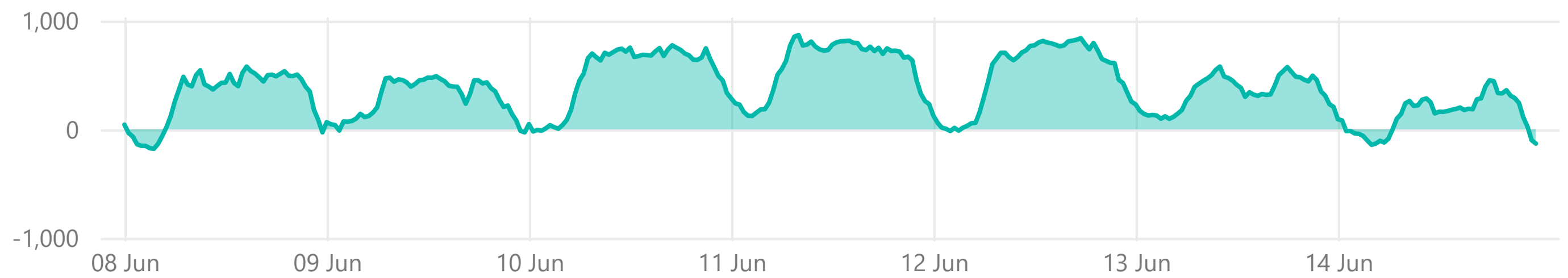
Reserve Prices - \$/MW



Generation - MW



Net HVDC Transfer - MW (Northward positive)



Weekly Insight - Generation mix during high demand peak last week

As colder temperatures began to take hold across the motu, national demand reached a peak of 6,590 MW during the morning peak on Thursday 11 June, coinciding with a period of low wind generation. This resulted in an energy price spike, as more expensive thermal (including peaking) generation was required to meet demand. This event highlights how the supply mix is continuing to evolve, with recent capacity additions like battery storage and increased geothermal playing a more visible role in supporting the system during peak periods.

This insight takes a closer look at how the supply mix changed during the morning peak on 11 June, including higher supply from batteries and lower supply from thermal generation compared to historical high demand peaks.

Figure 1 shows demand ramping up ahead of the morning peak, alongside a corresponding increase in generation (note that in Figure 1 the y-axis has been cropped to show values from 2000 MW upwards, meaning hydro generation below 2000 MW is not fully visible within the columns, Figure 2 shows the generation mix during the highest demand trading period at 7.30am.

Figure 1: Generation during AM Peak on 11 June 2026

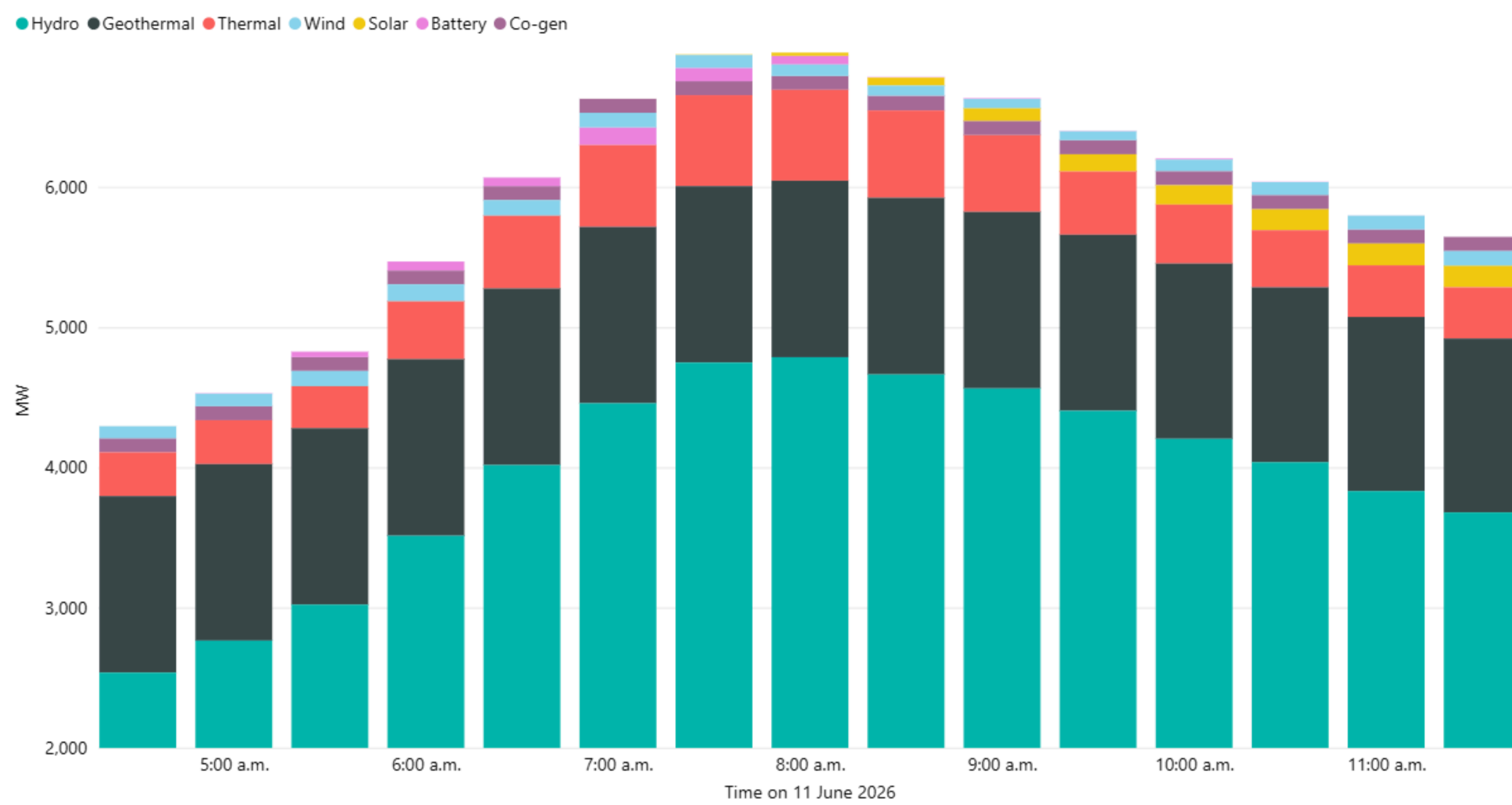
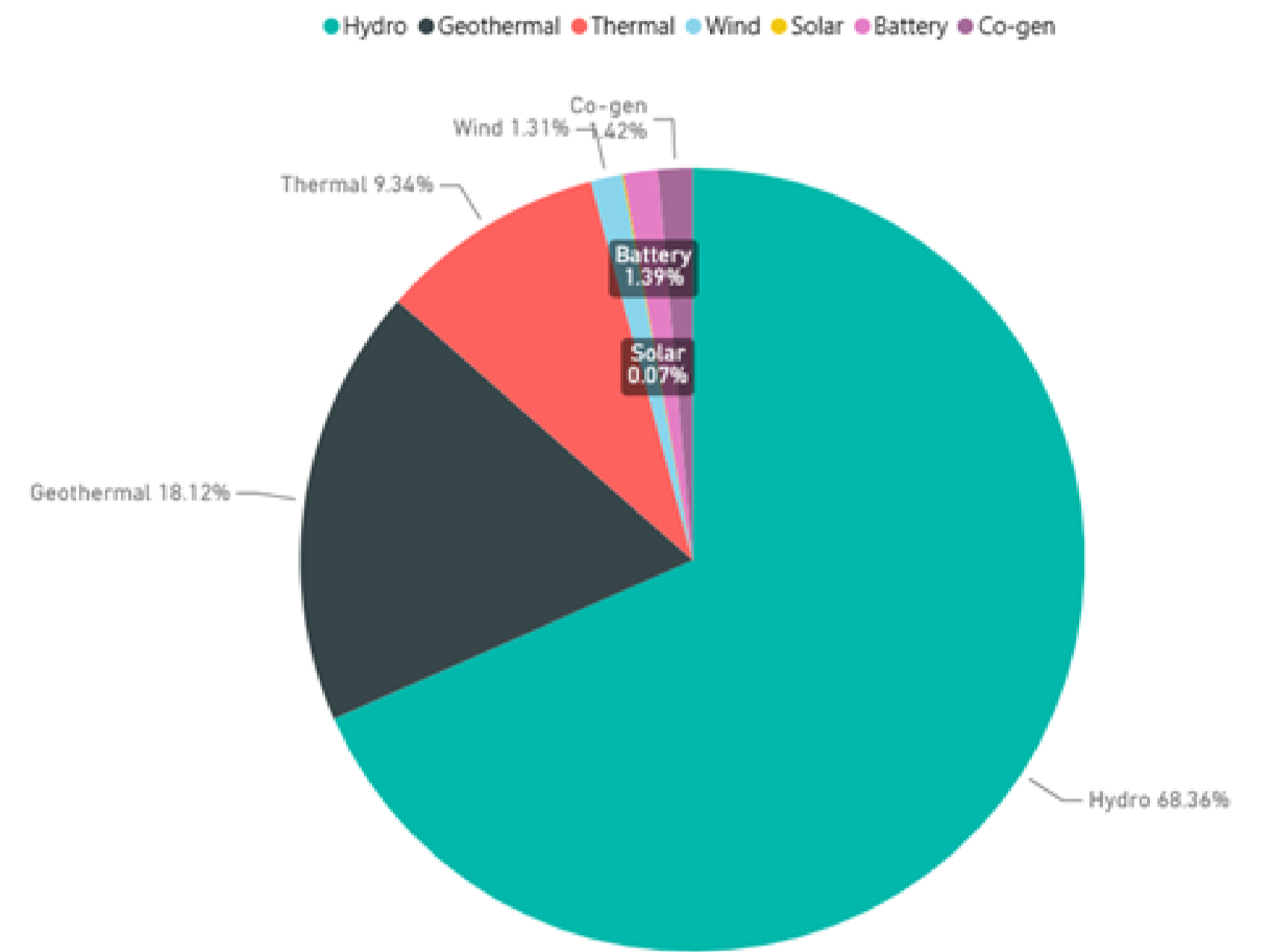


Figure 2: Generation Mix % during 7.30am trading period on 11 June 2026



The column chart in Figure 1, sorted from highest (bottom of each column) to lowest generation by trading period, highlights the changing supply mix during the ramp to the morning peak. Wind and solar generation remain low throughout the peak period, while hydro and thermal generation increase in response to rising demand, including the dispatch of peaking generation, and geothermal continued to provide stable baseload supply.

Interesting changes are observed in the upper portions of the columns, where battery injection becomes visible from the 05:30 trading period and increases into the peak. In some trading periods, battery output exceeds both wind and co-generation. From 08:30 onwards, Battery output decreases due to reduced energy offers and solar generation began to increase as daylight conditions improved, coinciding with a reduction in demand following the morning peak.

Despite low wind availability (~1% of the generation mix) during the 7.30am trading period, the system met peak demand with thermal generation only making up around 9% of the generation mix. Figure 3 shows that historically thermal contribution ranges around 15-27% during the highest demand peaks, as outlined in the [Security of Supply Winter 2025 review](#).

Figure 4 shows new build capacity in recent years. Recent capacity additions are becoming more evident in system operations. Battery storage can provide some support during peak demand periods, improving flexibility and at times when intermittent generation is limited. An increase in geothermal capacity continues to help strengthen baseload supply and wind and solar generation can meaningfully contribute to growing demand when conditions are favourable. Supplying peak demand, however, also depends on energy offers being sufficient in volume and kept up to date, ensuring that available capacity can be effectively dispatched when needed.

These changes demonstrate the growing capability of the power system to manage winter peaks using a broader mix of renewable and flexible resources, consistent with a diverse array of recent capacity additions.

Figure 3: Generation types that supplied the all-time peaks

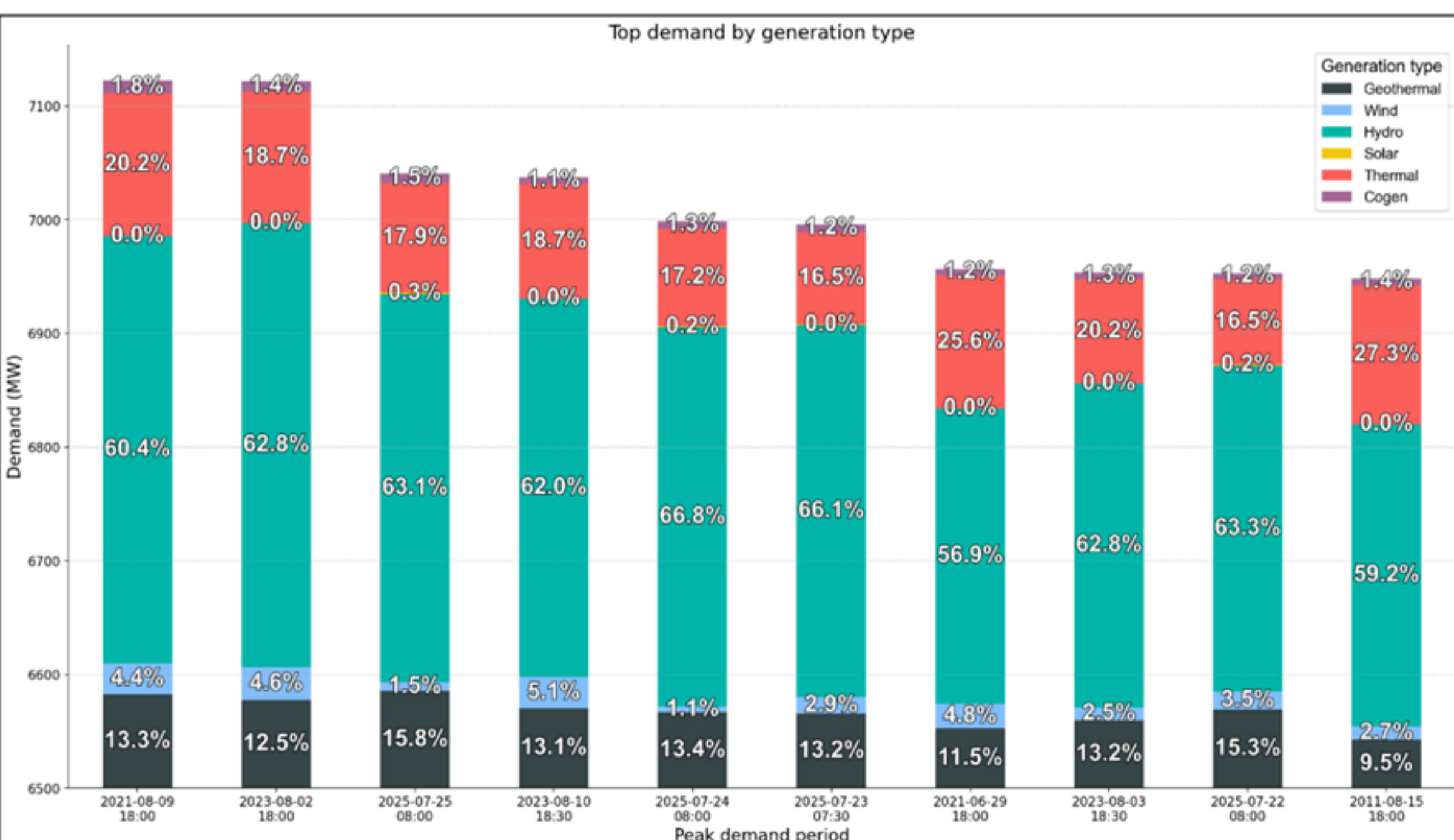
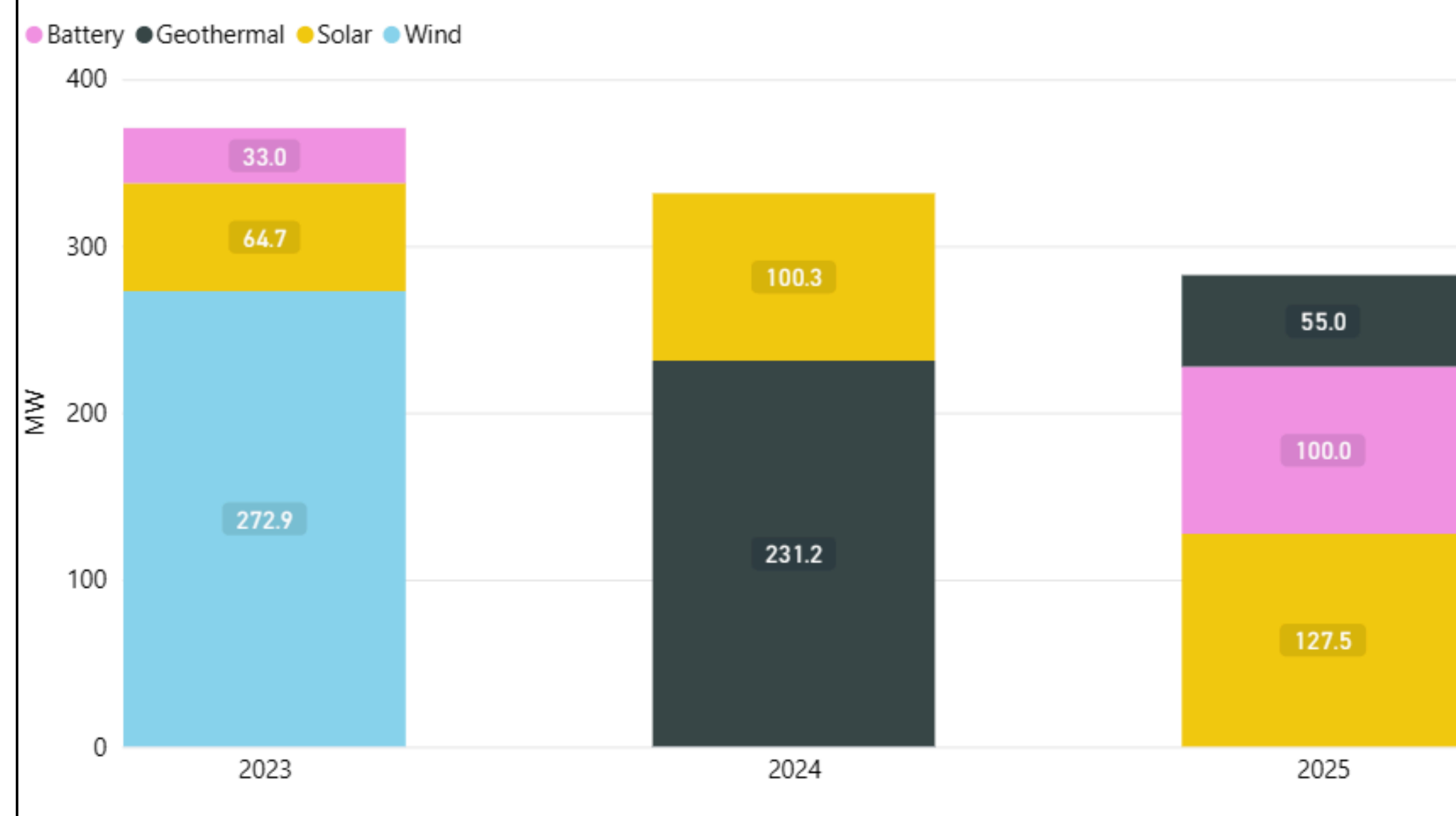
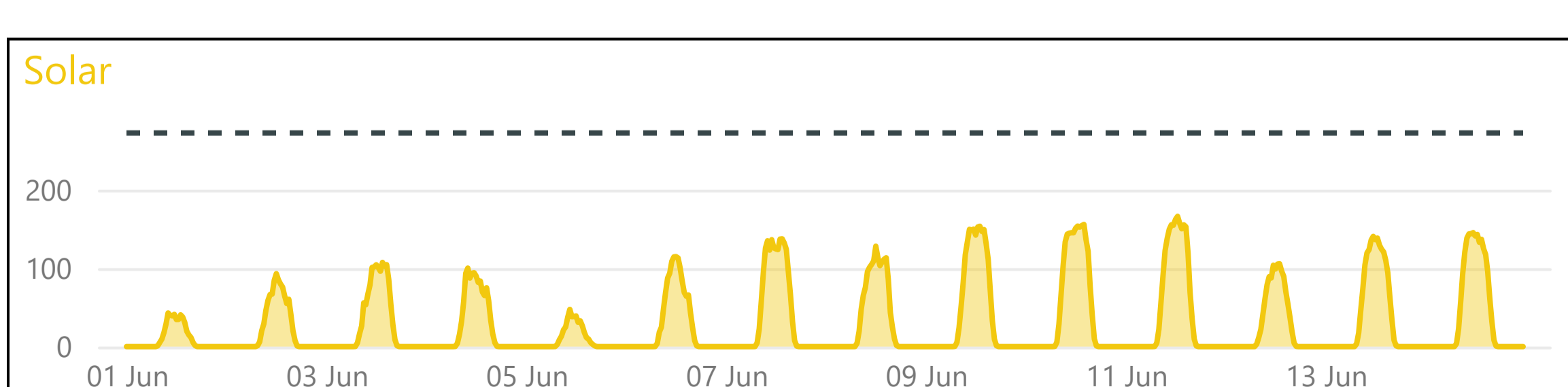
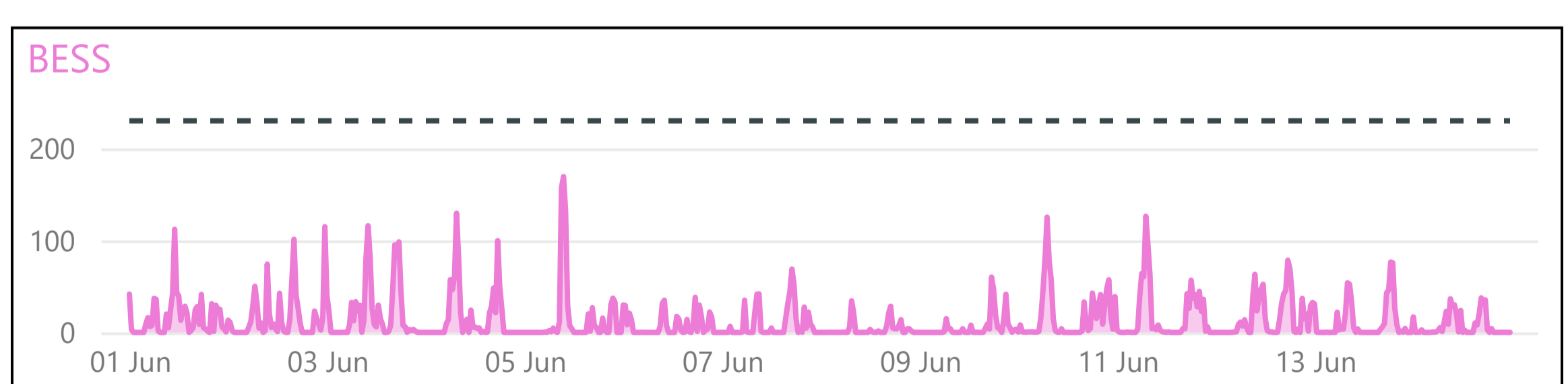
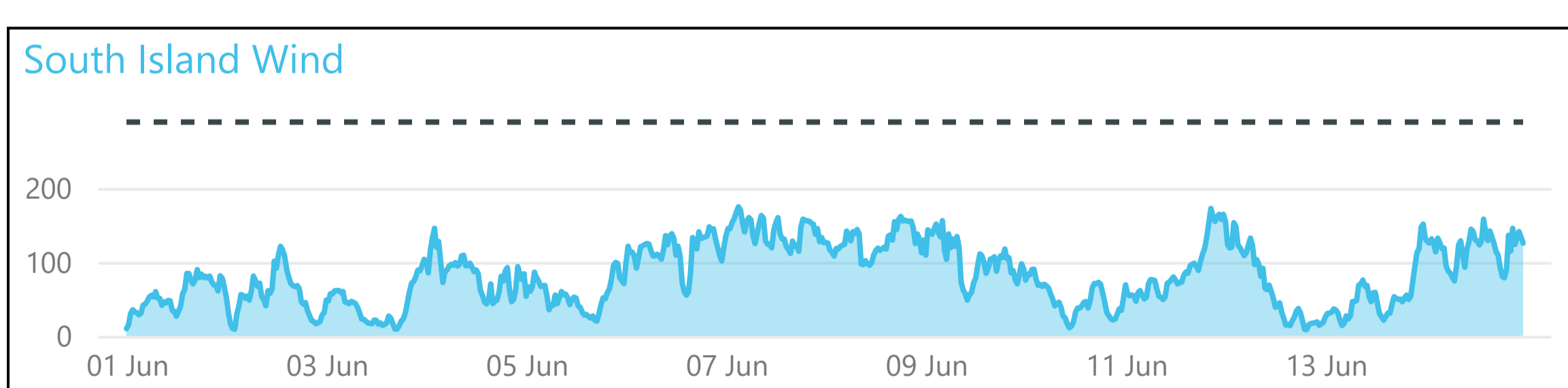
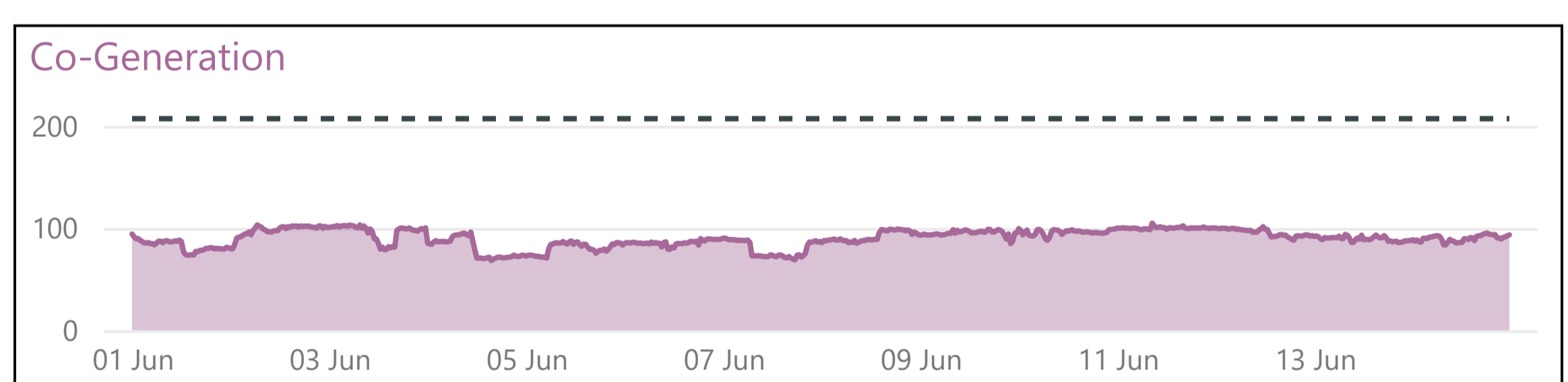
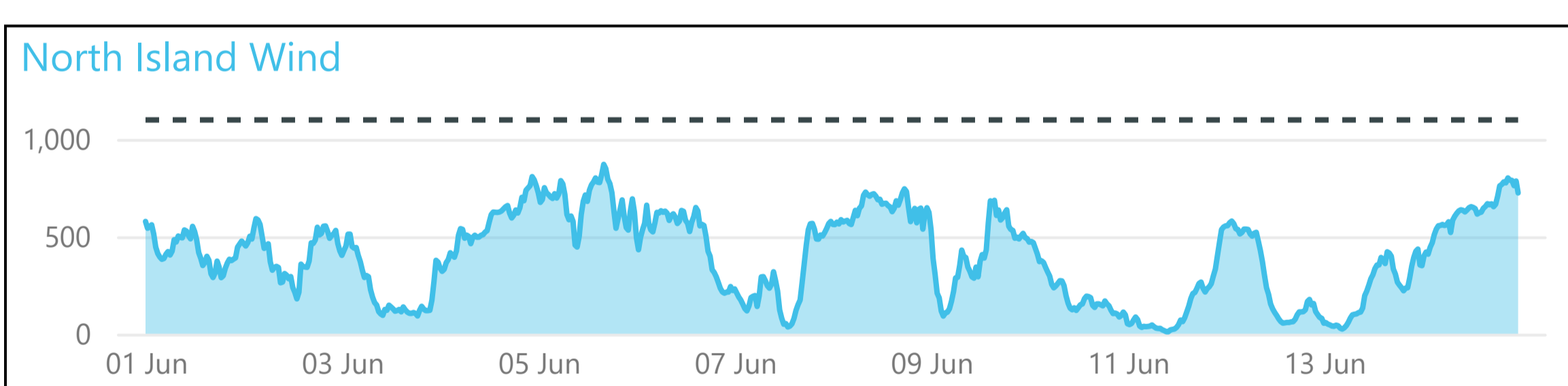
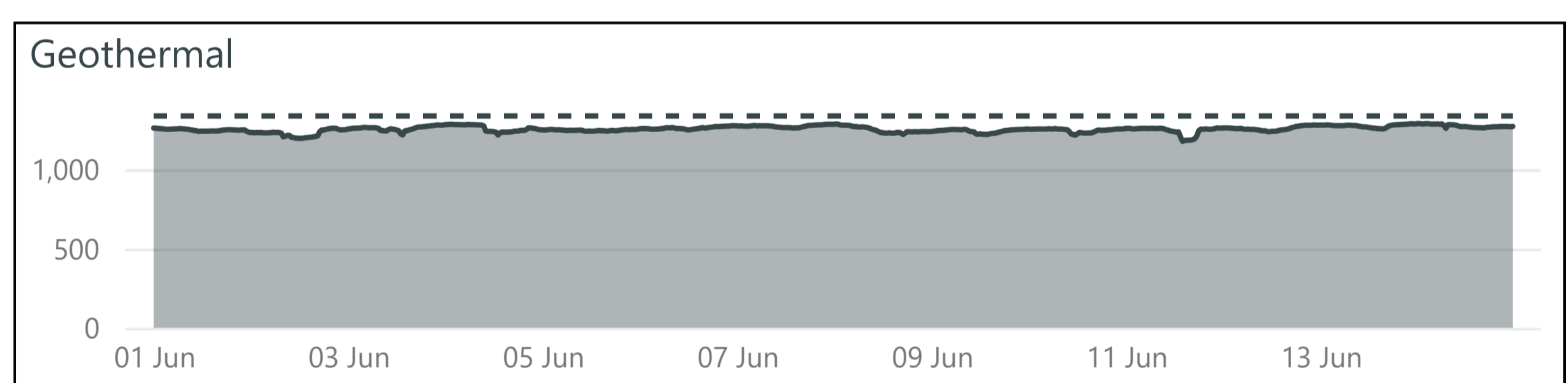
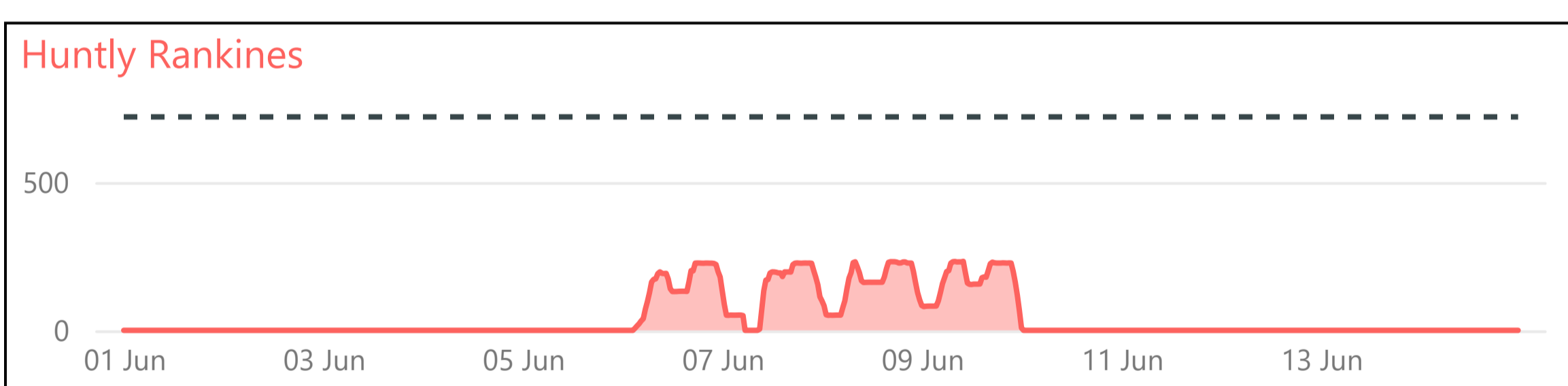
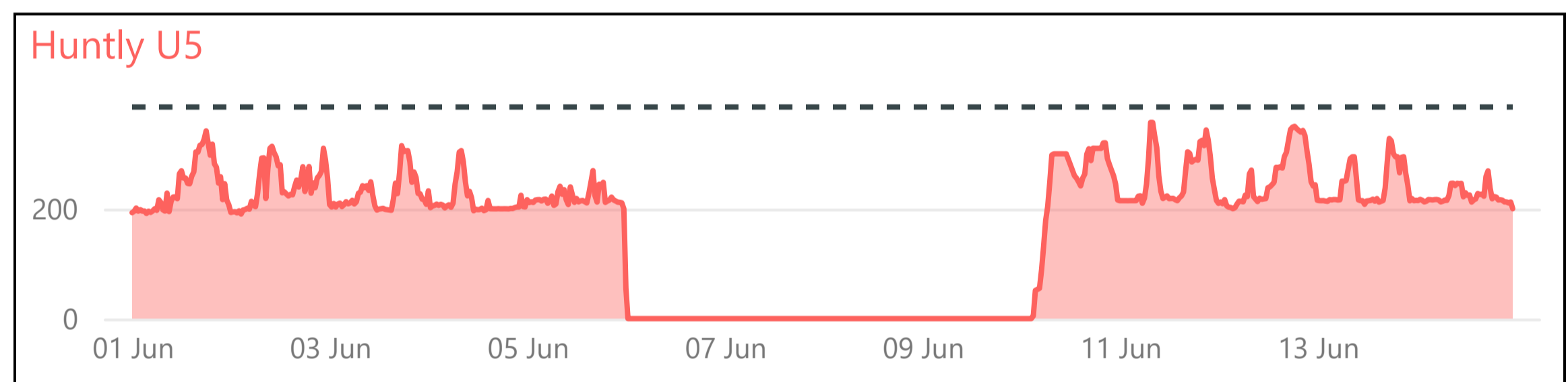
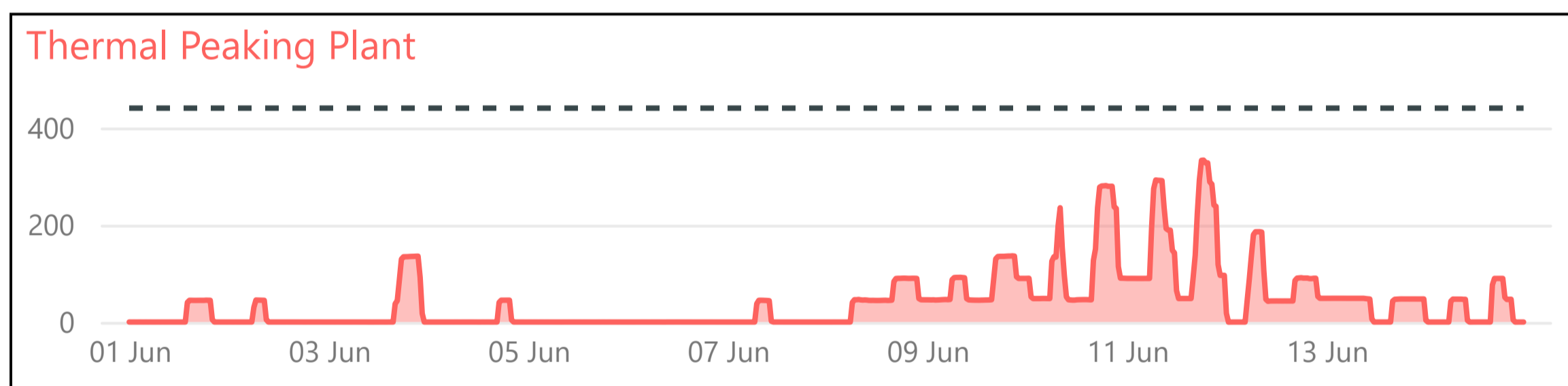
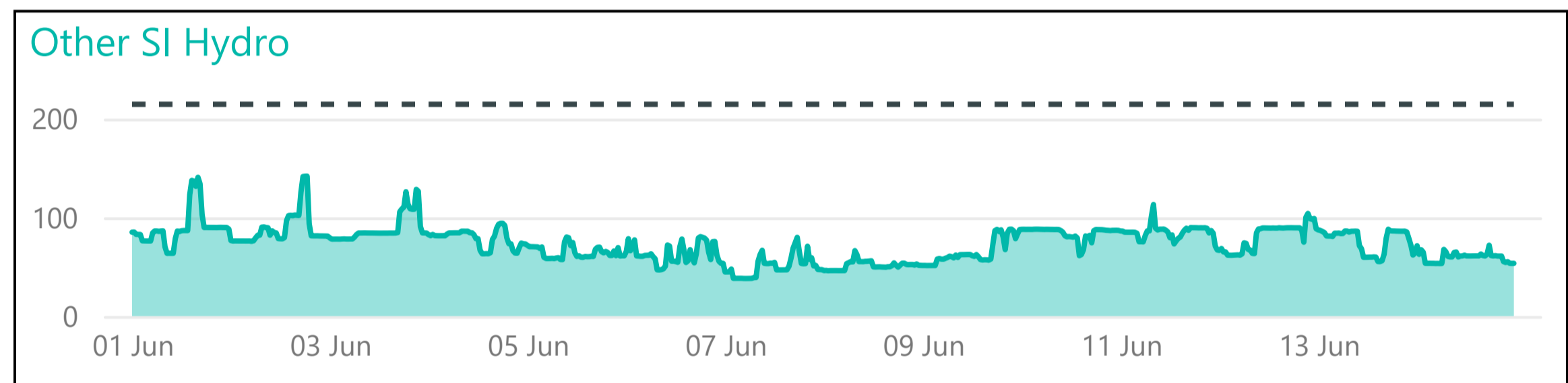
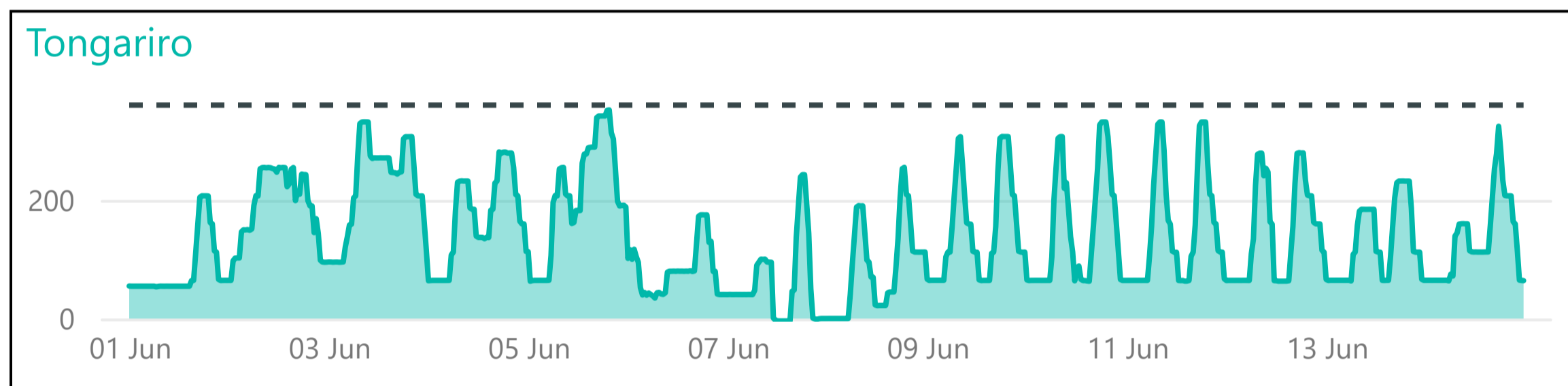
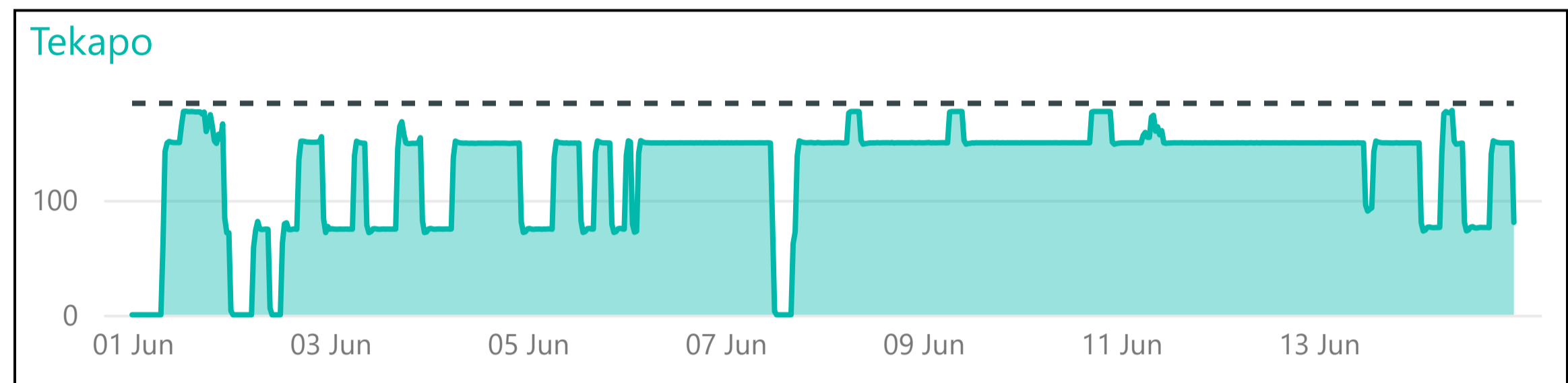
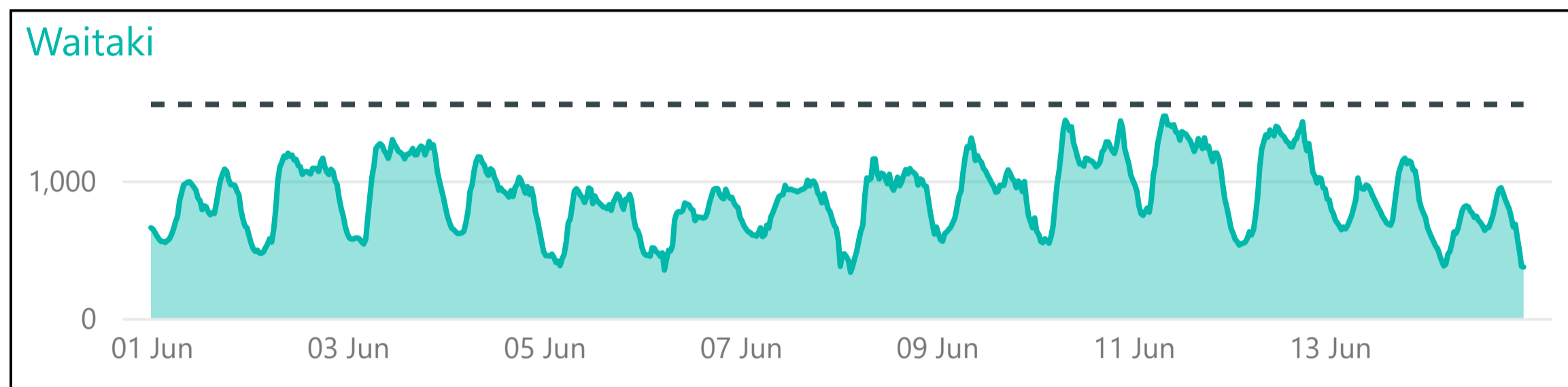
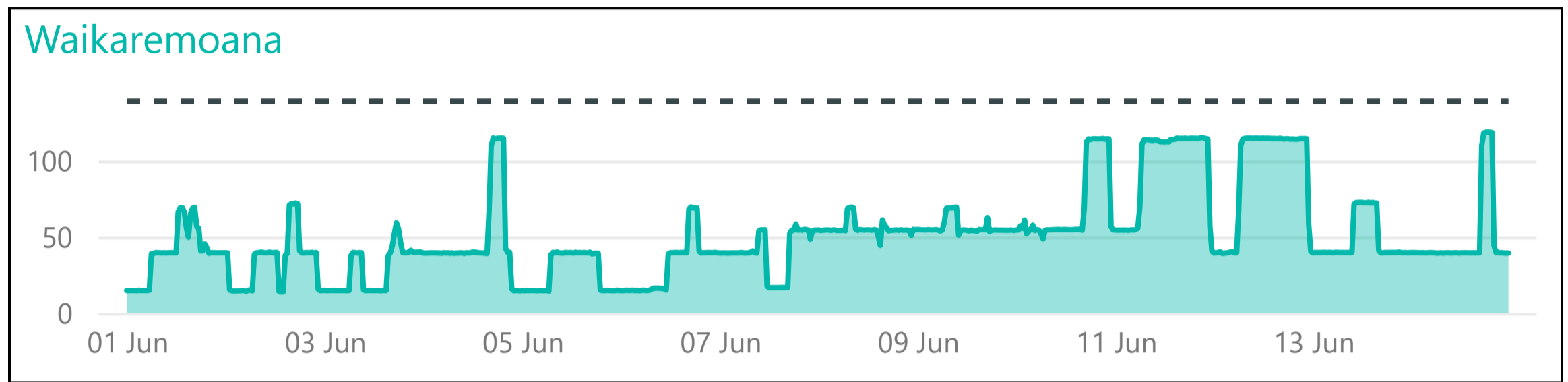
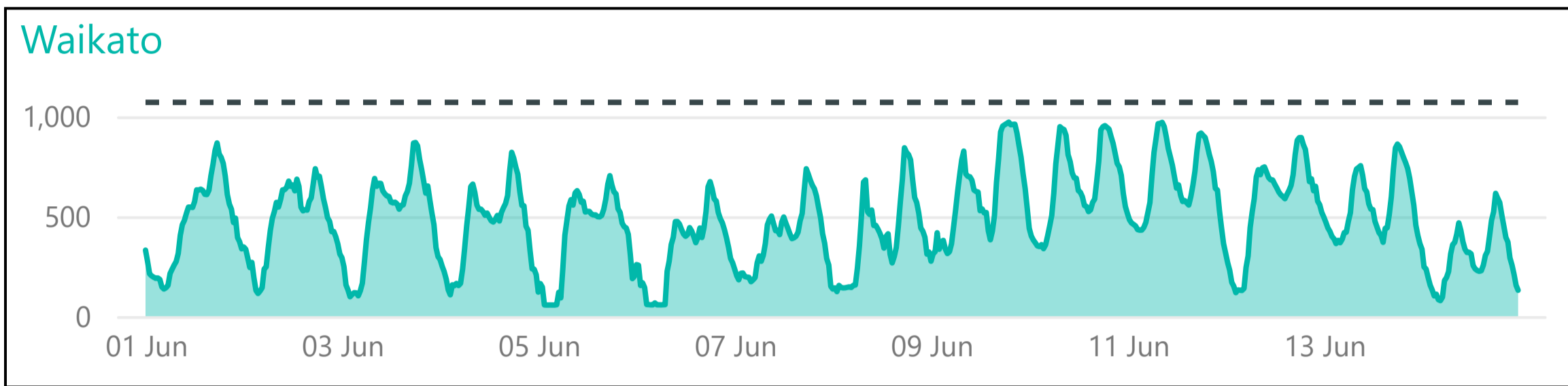
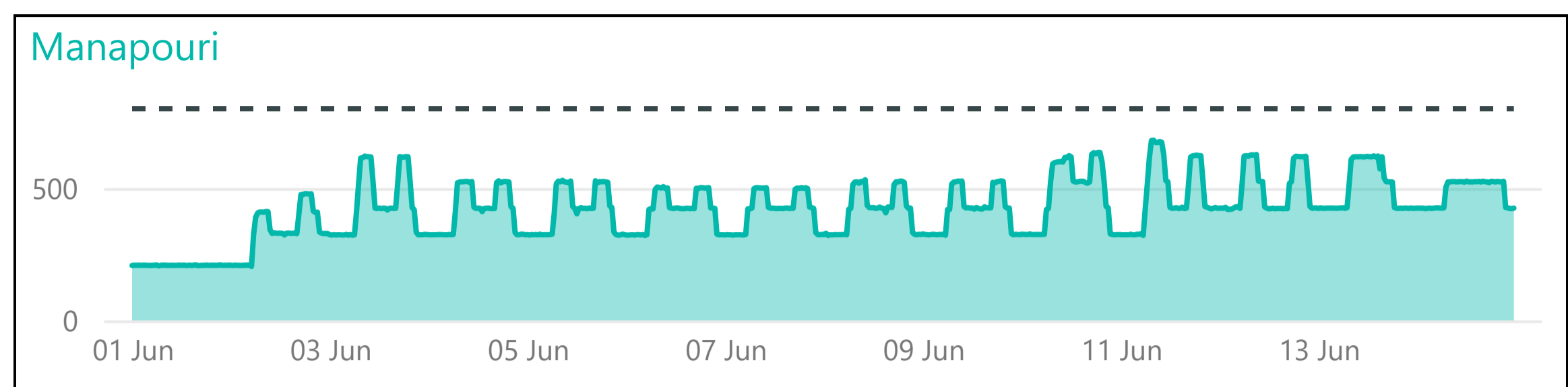
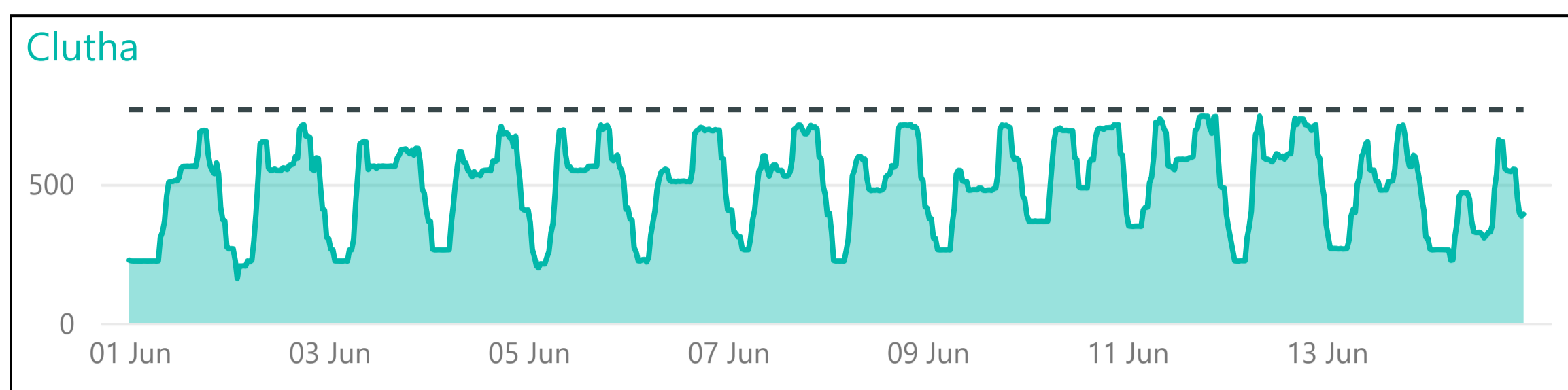


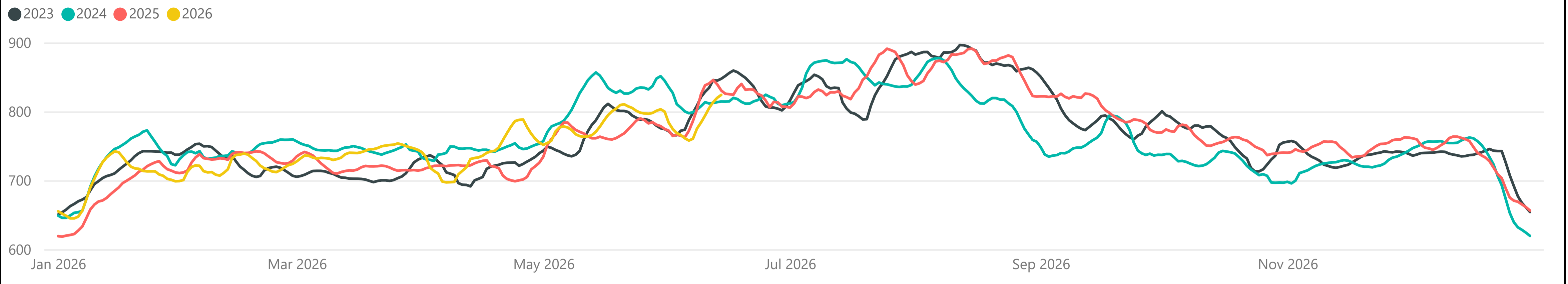
Figure 4: New Capacity MW, 2023-2025



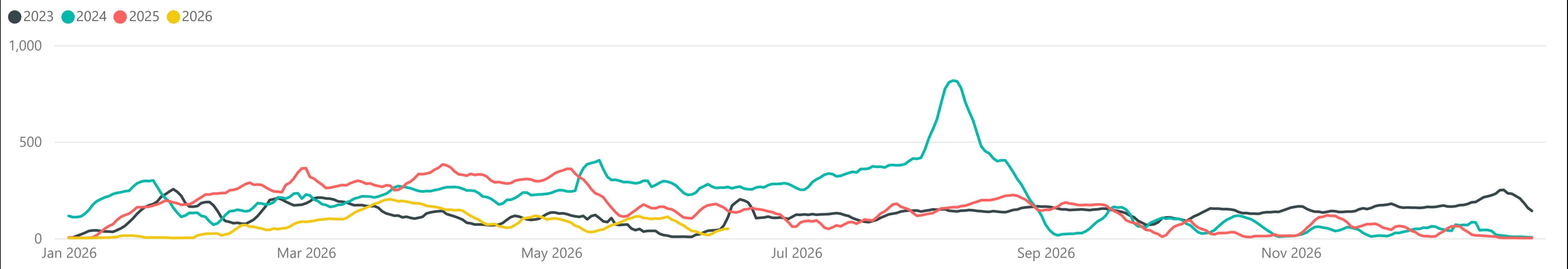
Generation Breakdown - Last Two Weeks *Measured in MW and displayed at trading period level for last 14 days*


Weekly Profiles

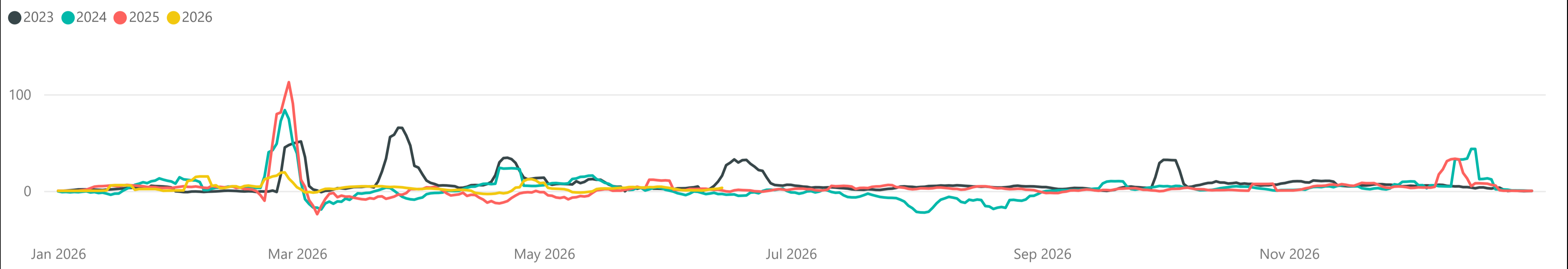
National Weekly Demand - GWh - 7 Day Rolling



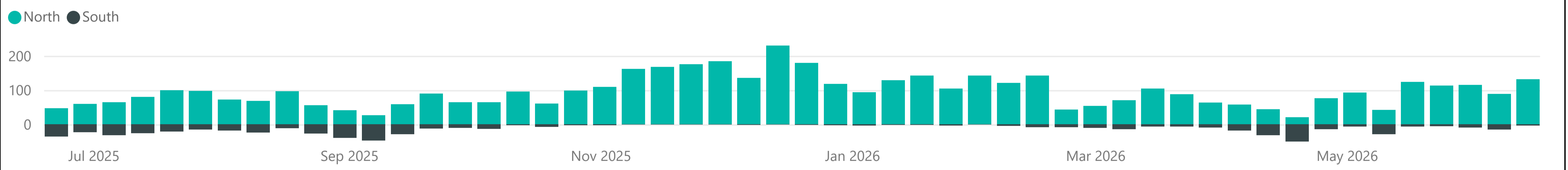
OTA2201 Weekly Rolling Average Spot Price - \$/MWh



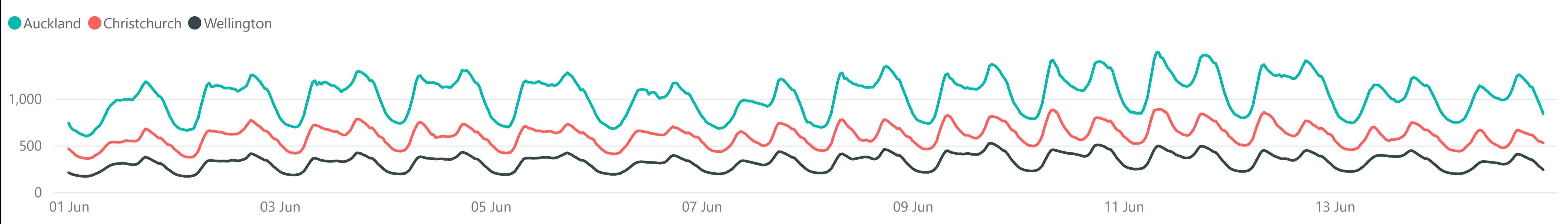
Weekly Rolling Price Separation (HAY2201 - BEN2201) - \$/MWh



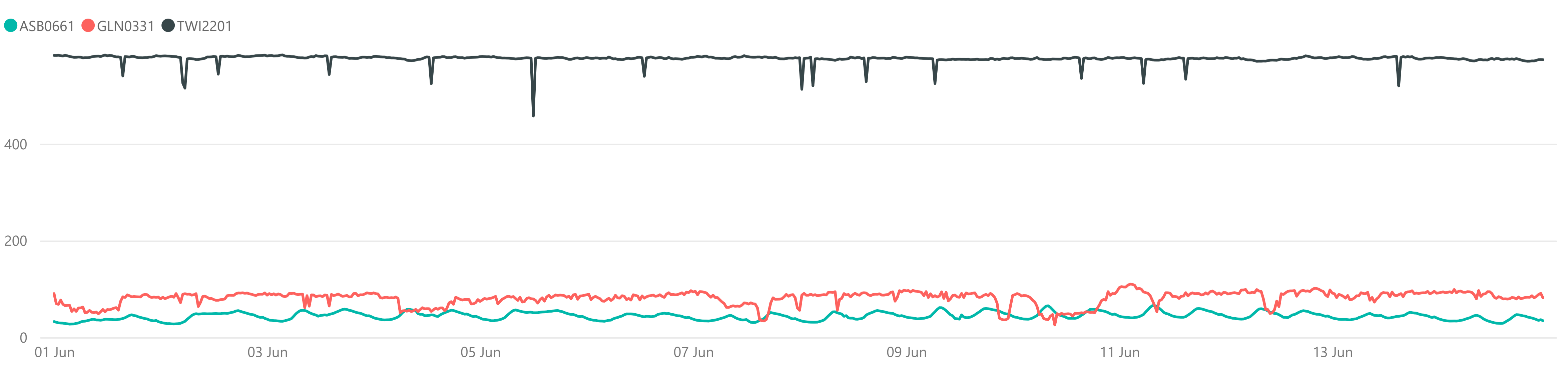
HVDC Transfer - Weekly GWh



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



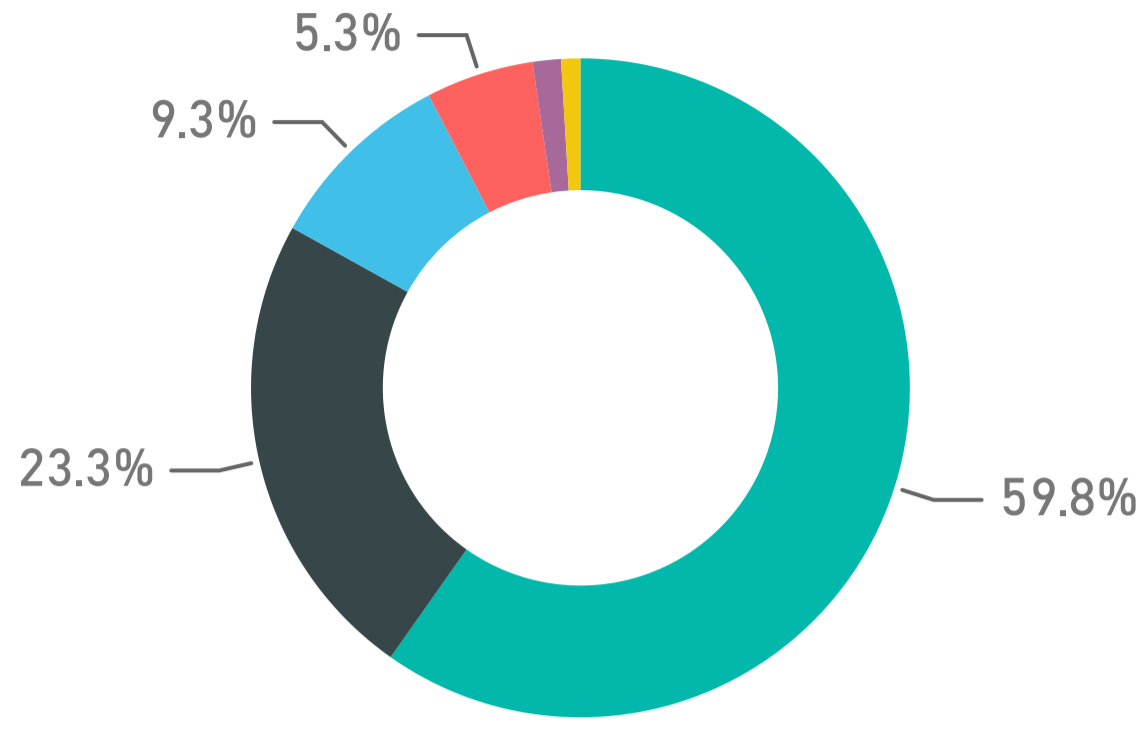
Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*



Generation Mix

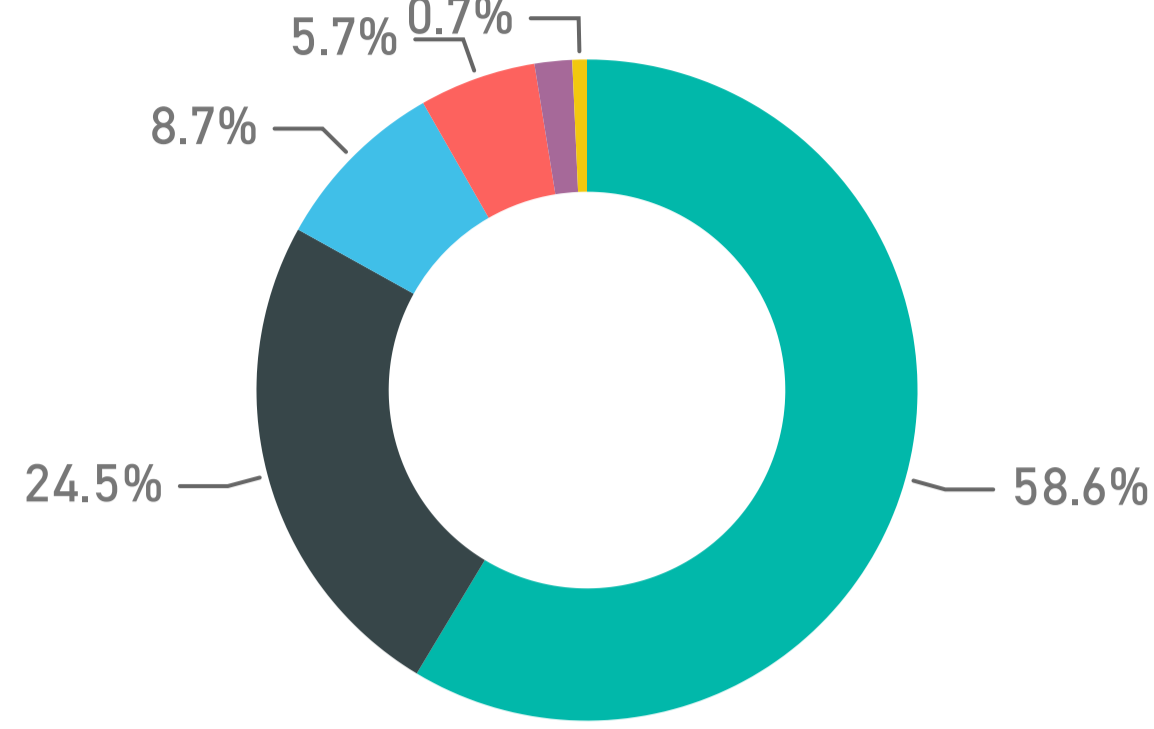
Last 52 Weeks Generation Mix - Weekly GWh

Hydro Geothermal Wind Thermal Co-gen Solar



Last 7 Days Generation Mix - Weekly GWh

Hydro Geothermal Wind Thermal Co-gen Solar



Average Metrics Last 7 Days

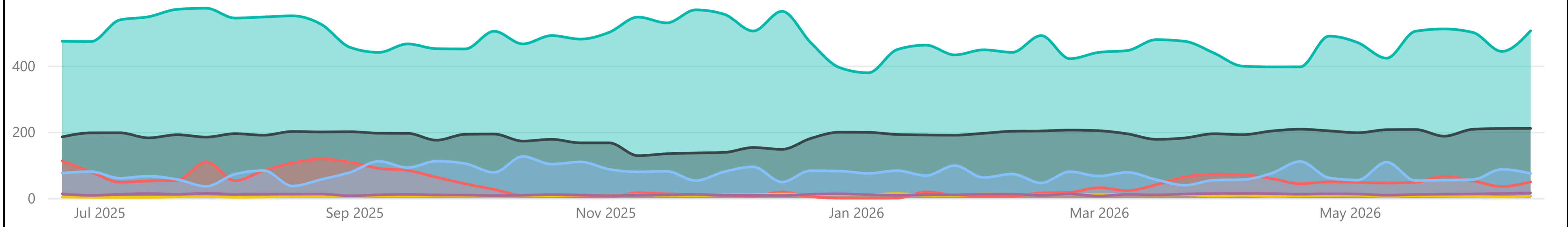
Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
92%	46,281	53.6

Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
93%	40,881	49.7

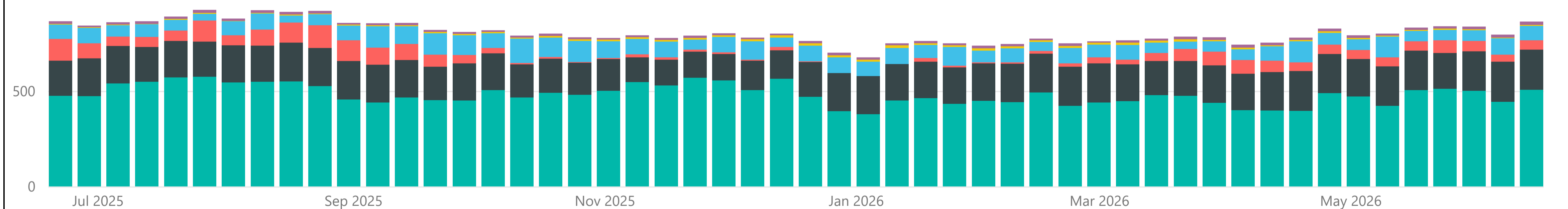
Weekly Generation Mix - GWh

Hydro Geothermal Thermal Wind Solar Co-gen



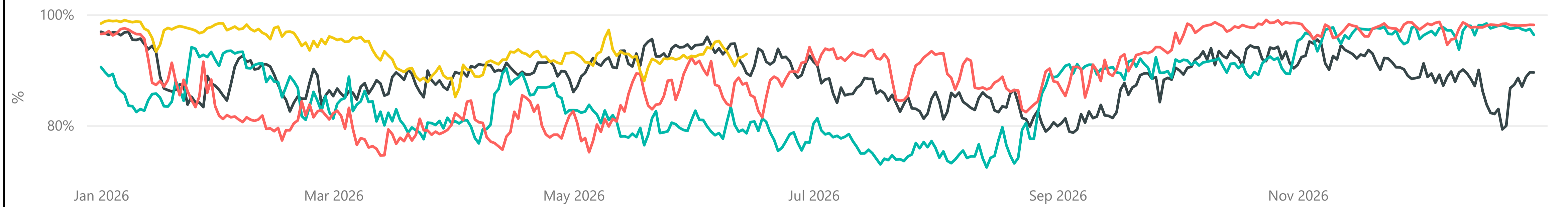
Weekly Generation Mix - GWh

Hydro Geothermal Thermal Wind Solar Co-gen



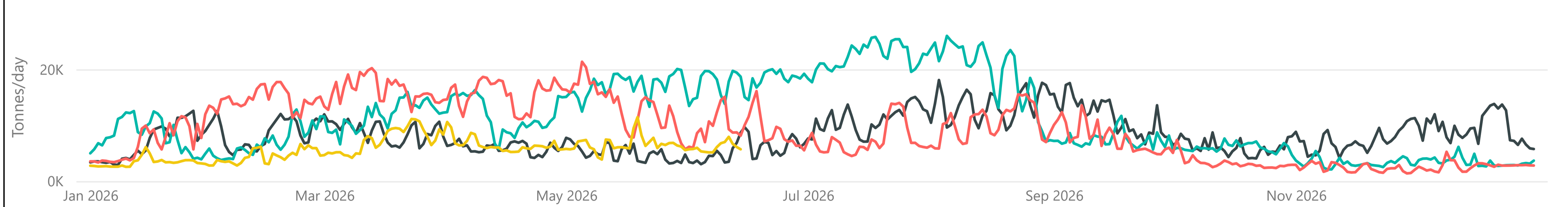
NZ Renewable Percentage

2023 2024 2025 2026



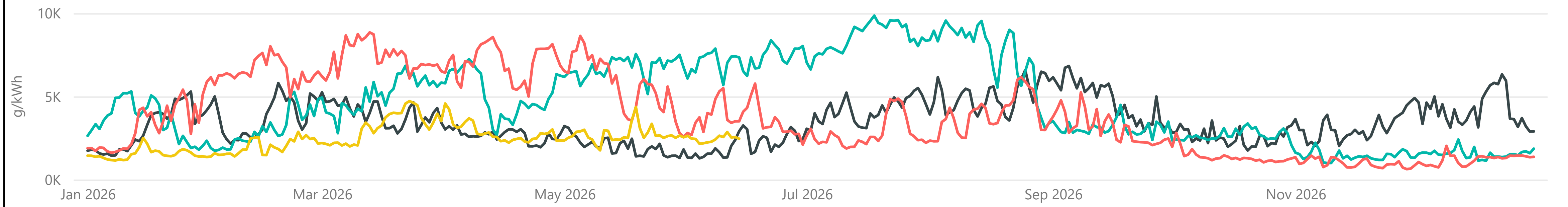
CO2 Tonnes/Day

2023 2024 2025 2026

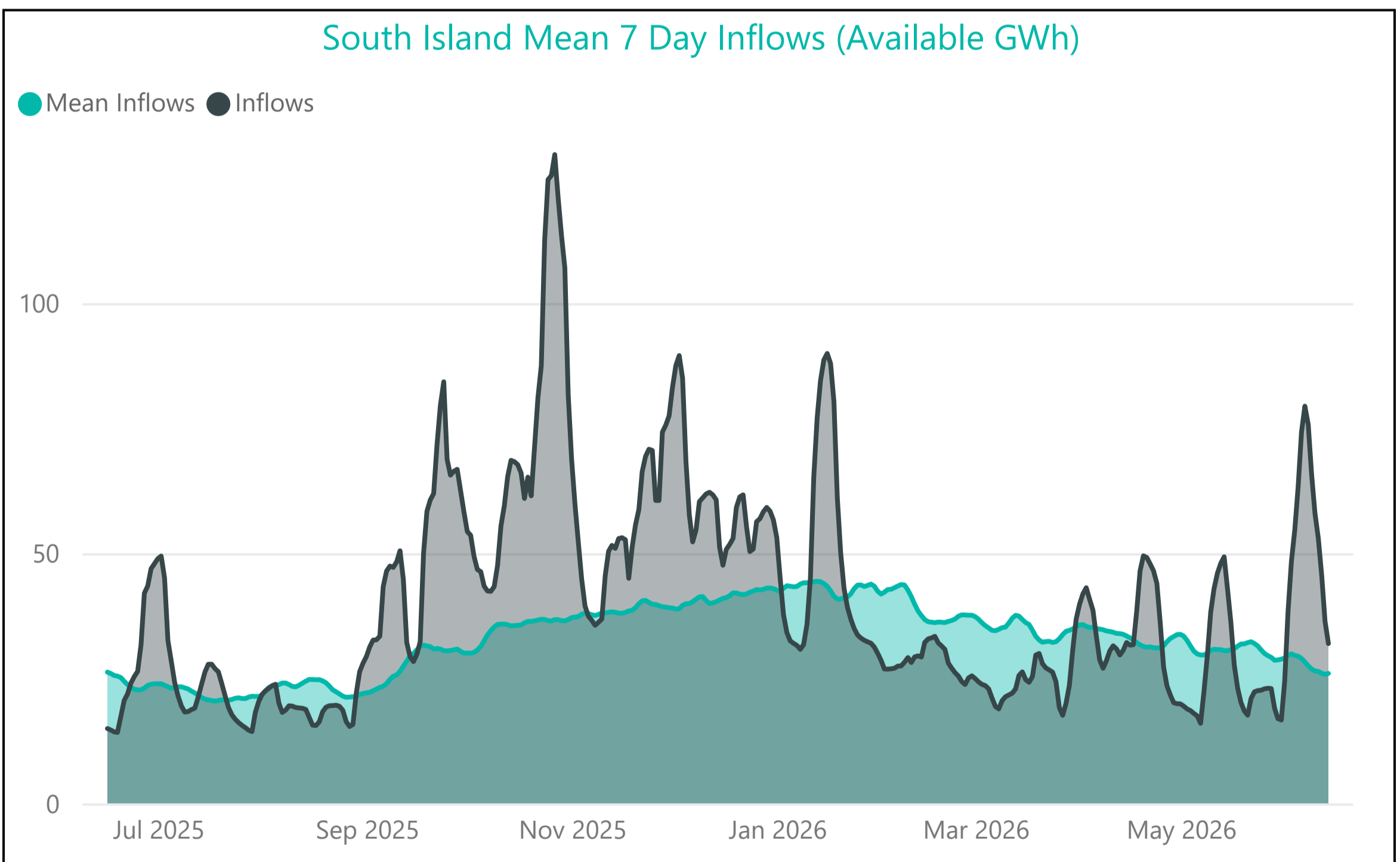
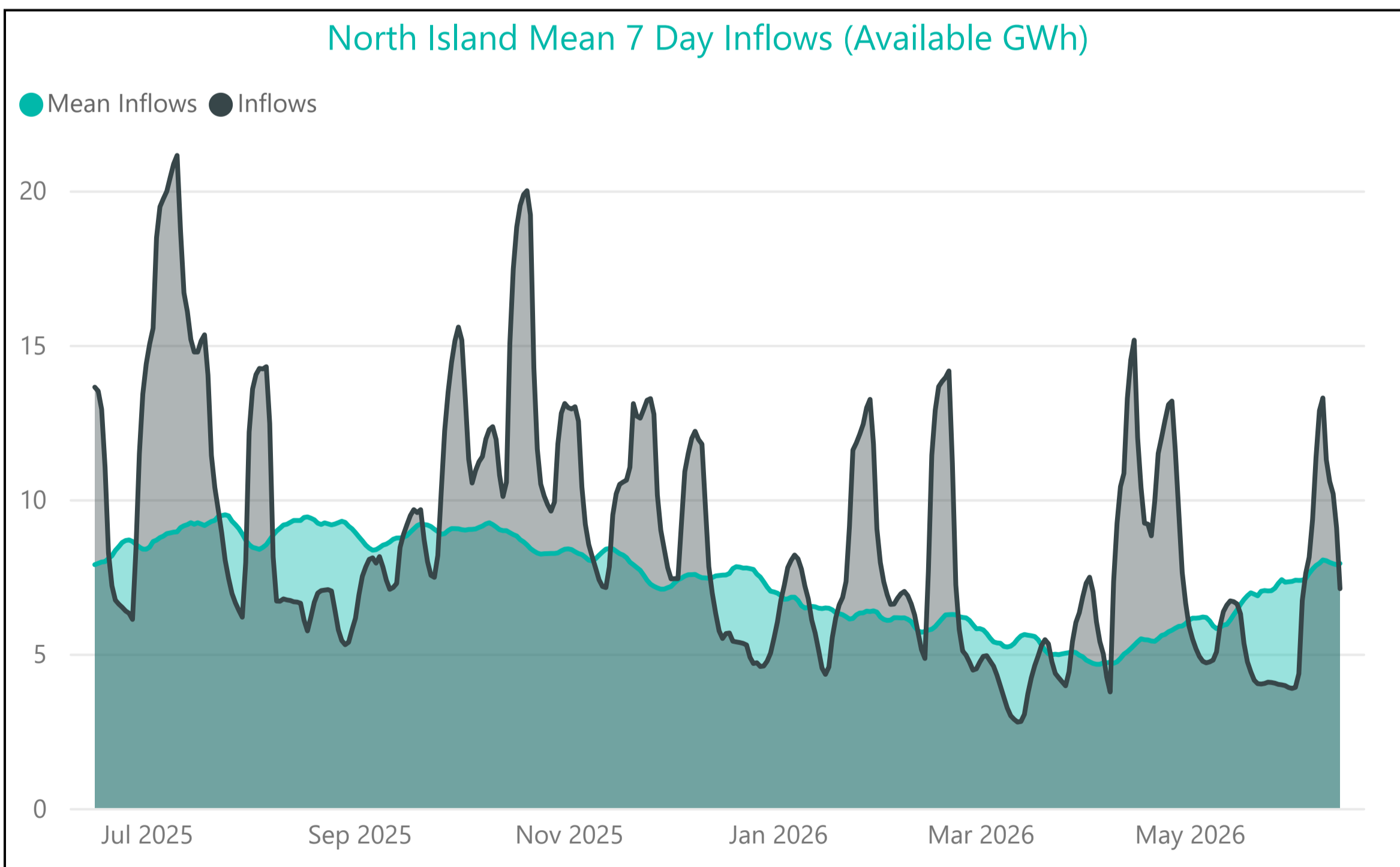
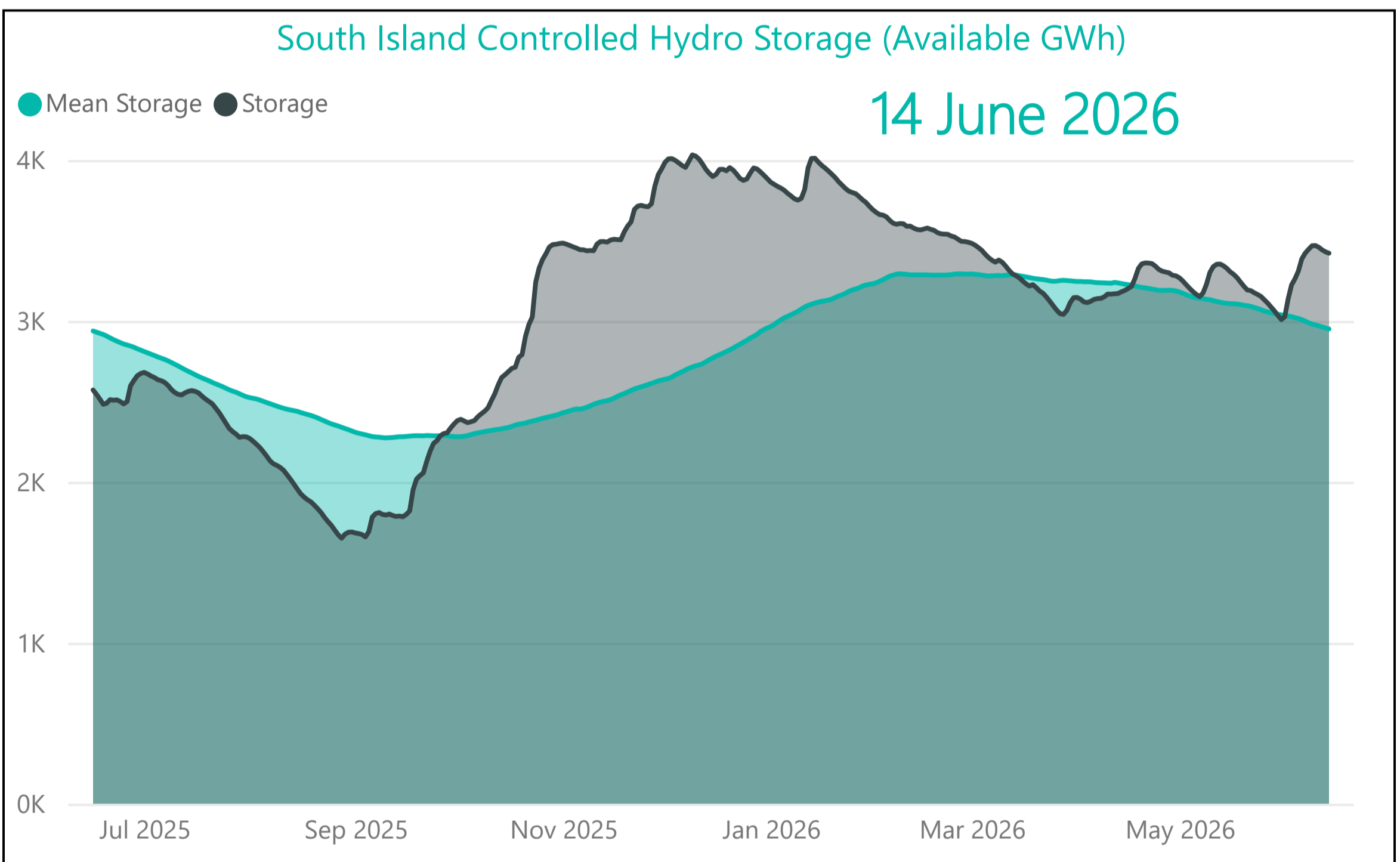
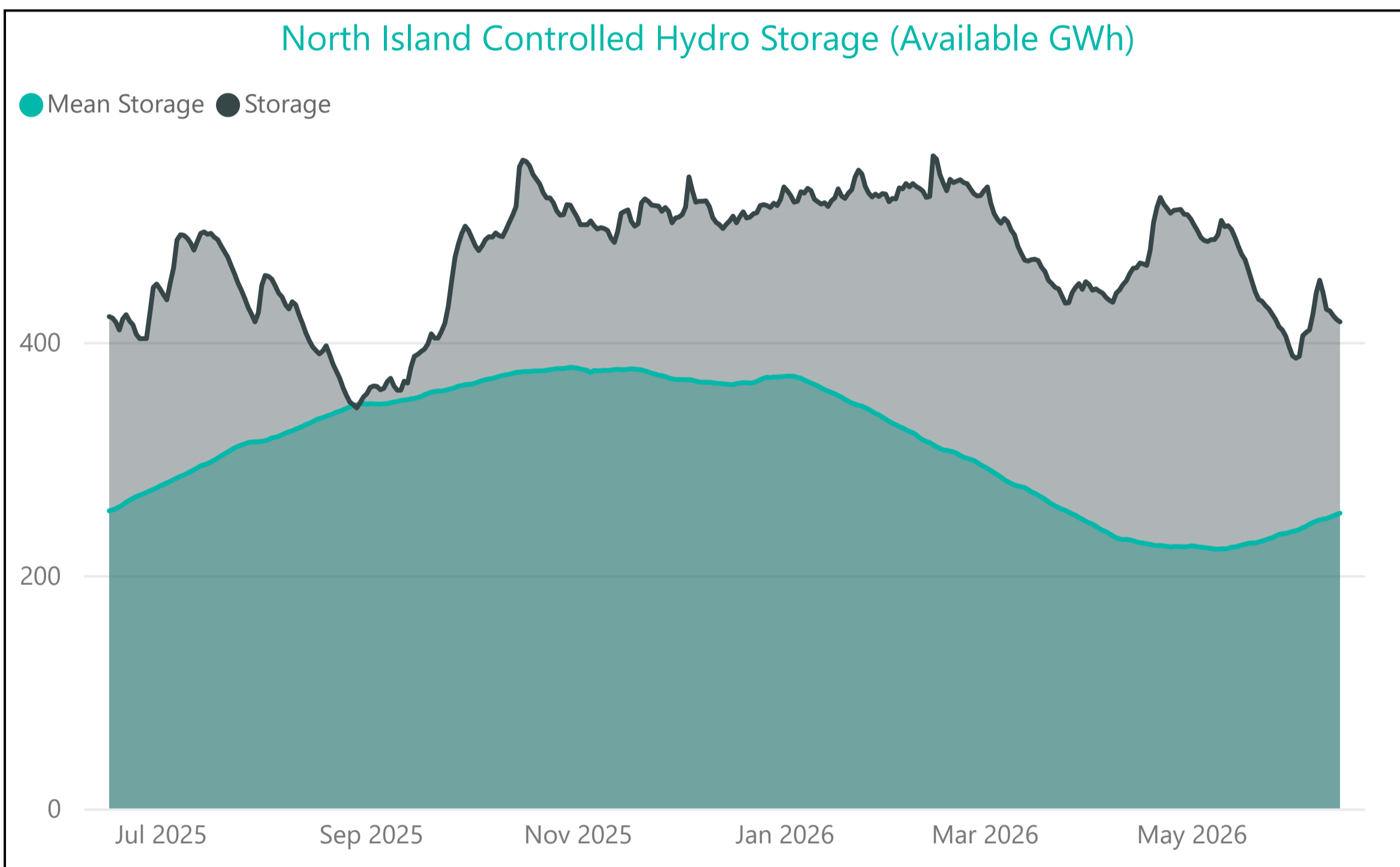
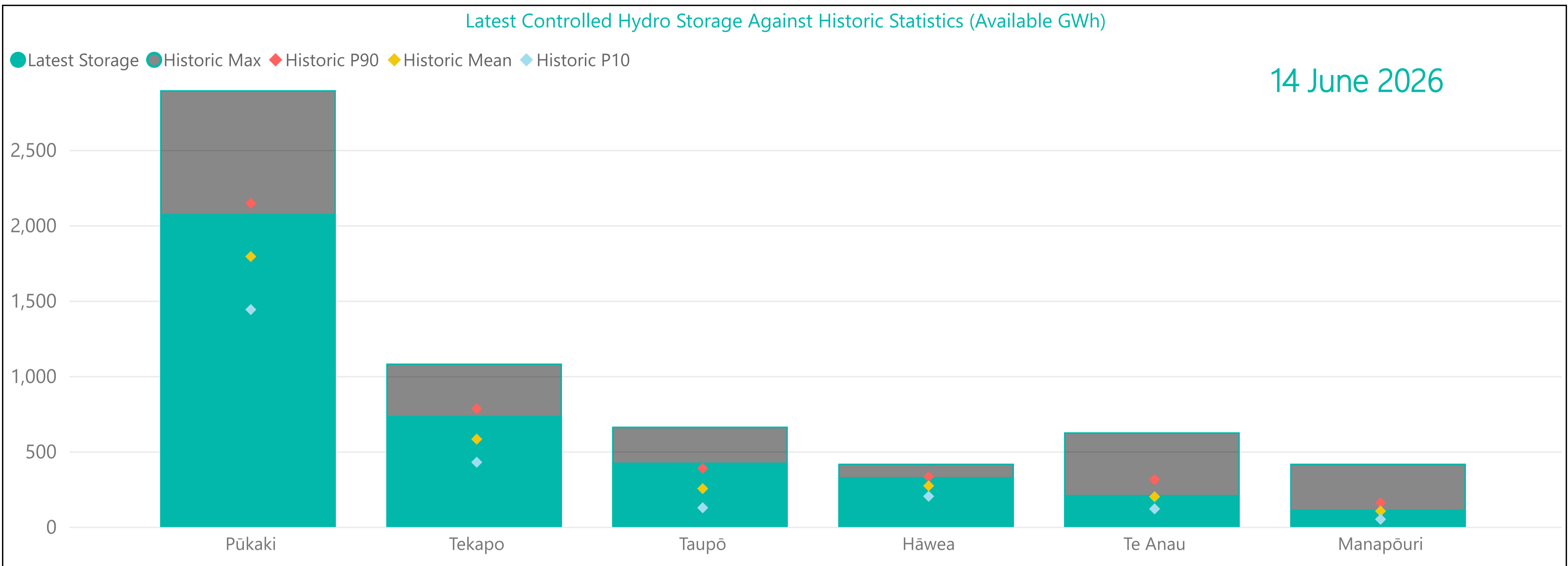


CO2 g/kWh

2023 2024 2025 2026



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

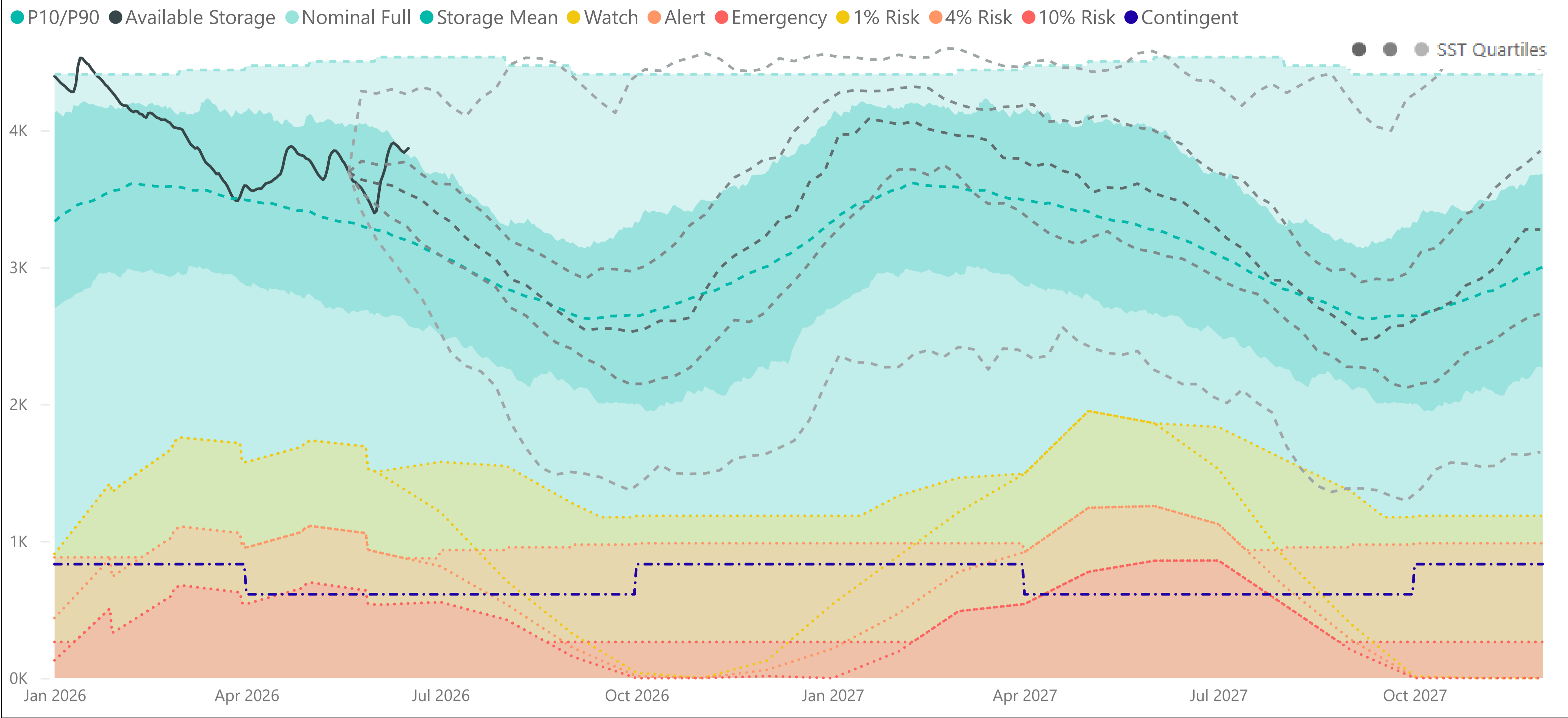
Hydro data used in this report is sourced from [NZX Hydro](https://www.nzx.com/hydro).

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.

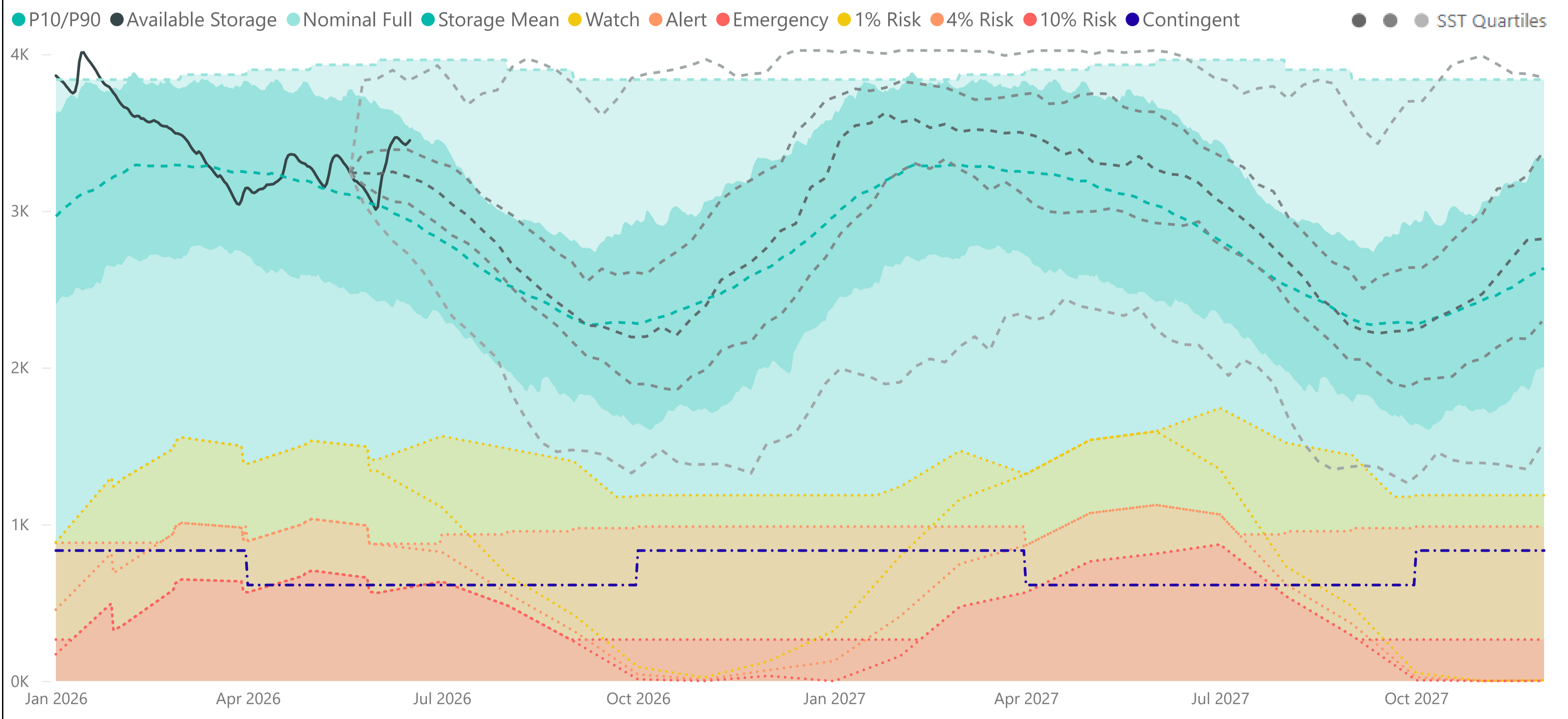
Further information on the methodology of modelling electricity risk curves may be found here: <https://www.transpower.co.nz/system-operator/security-supply/hydro-risk-curves-explanation>

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

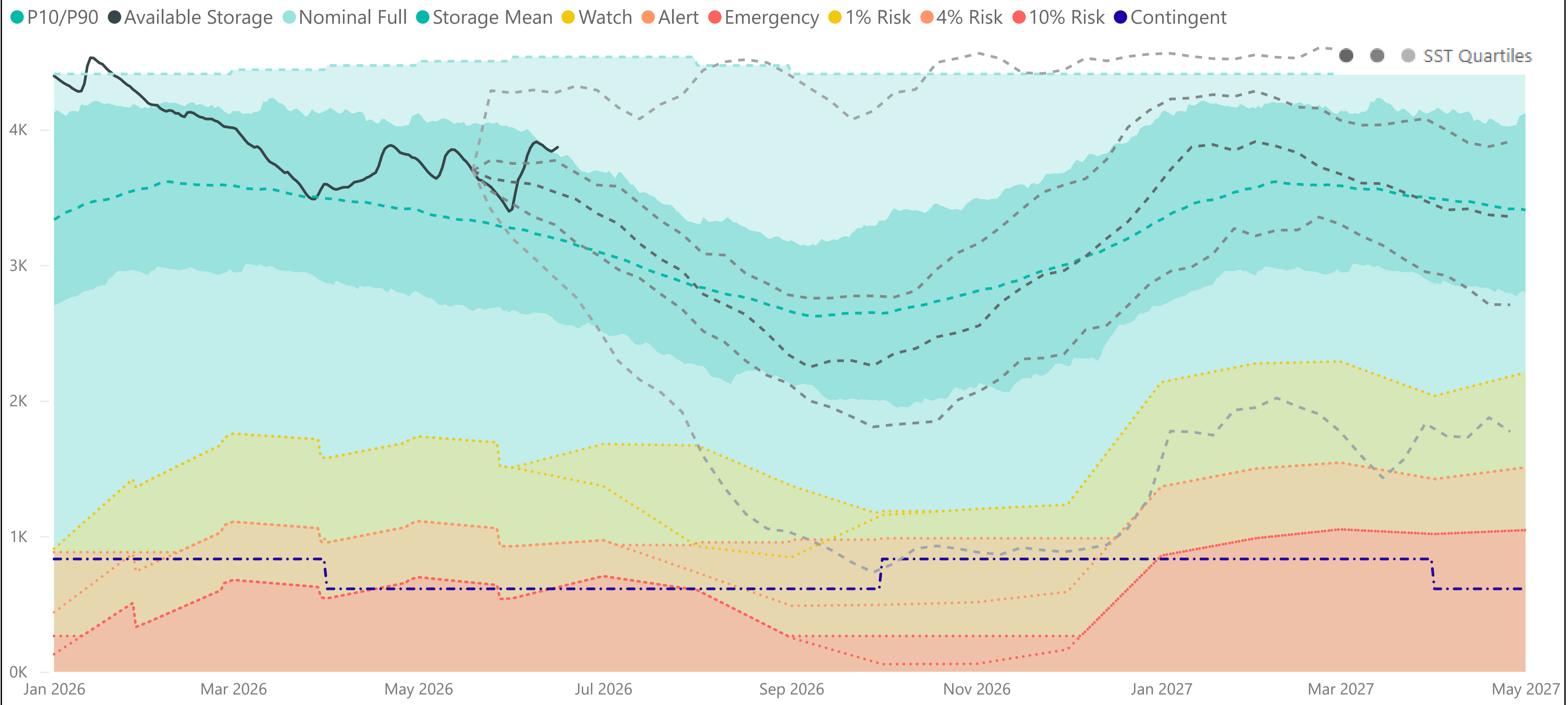
Official Conservation Campaign Stop - The maximum of the eight percent risk curve and the floor and buffer

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.

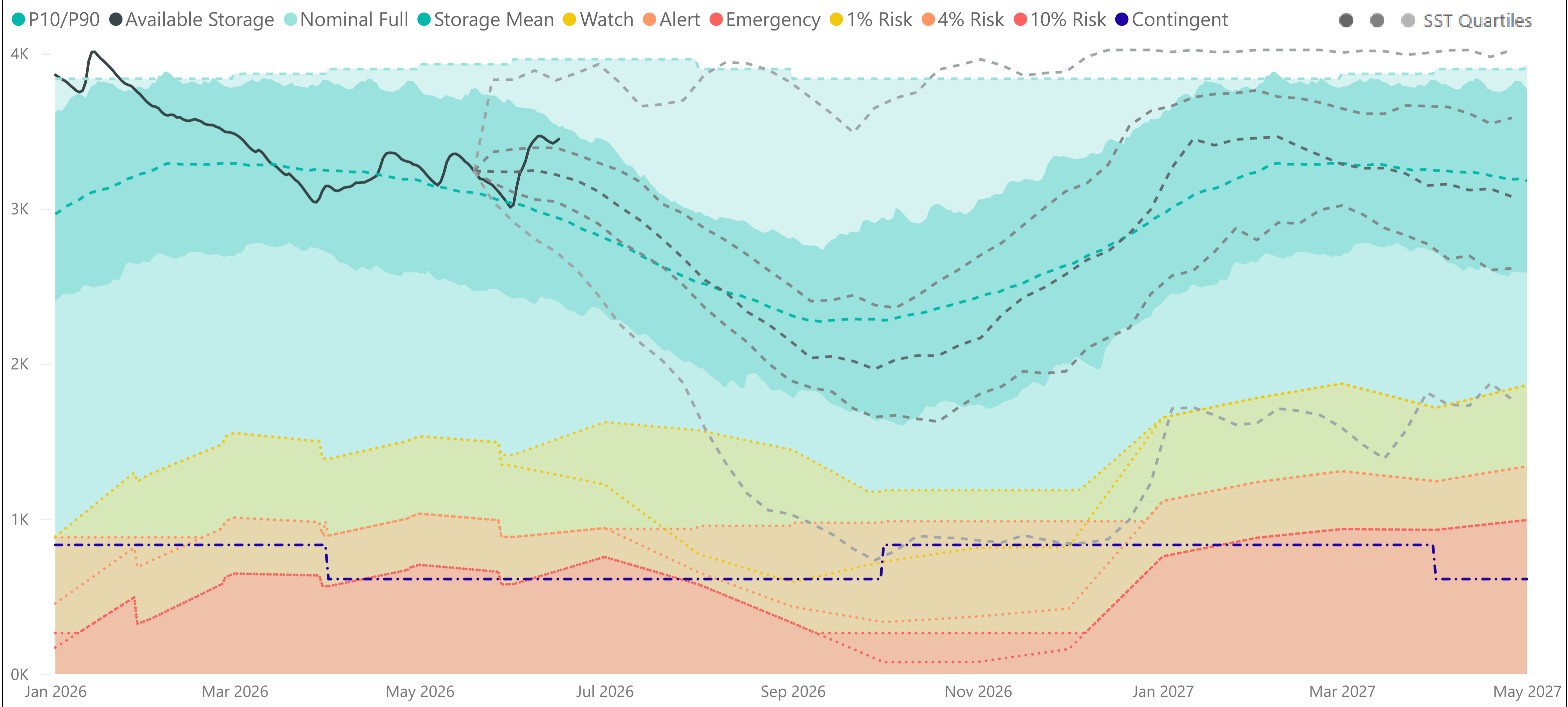
The dashed grey lines represent the minimum, lower quartile, median, upper quartile and the maximum range of the simulated storage trajectories (SSTs). These will be updated with each Electricity Risk Curve update (monthly).

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).