Market Operations Weekly Report - Week Ended 6 September 2026

Overview

Last week saw continued inflows across the motu. As a result national hydro storage lakes continued to fill, now sitting well above the average for this time of year at 142%.

In this week's insight we look at the new Ancillary Services Cost Allocation System (ASCAS) and new requirements for entering ancillary service equipment outages into our Planned Outage Co-ordination Process (POCP).

Security of Supply

Energy

National hydro storage continued to increase to 142% of the historic mean from 127% the week prior. South Island storage increased from 135% to 152% and North Island storage increased from 72% to 74%.

Capacity

Residuals last week were healthy as demand continued to decline as temperatures warmed across the motu. The lowest residual of 790 MW occurred during the morning of Tuesday 1 September during a period of reduced wind generation and high demand.

The N-1-G margins in the NZGB forecast continue to increase with healthy levels through to the end of October. 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 continued to decrease last week to 799 GWh from 810 GWh the week prior. The highest demand peak occurred at 6:30 pm on Monday 31 August at 6,299 MW.

Weekly Prices

The average wholesale electricity spot price continued to decrease at Ōtāhuhu last week from $43/MWh in the previous week to $22/MWh last week. Prices peaked at $146/MWh at 6:30 pm on Monday 31 August, coinciding with the highest peak demand period of the week. Similar price spikes occurred during high morning and evening peaks on Tuesday 1 September.

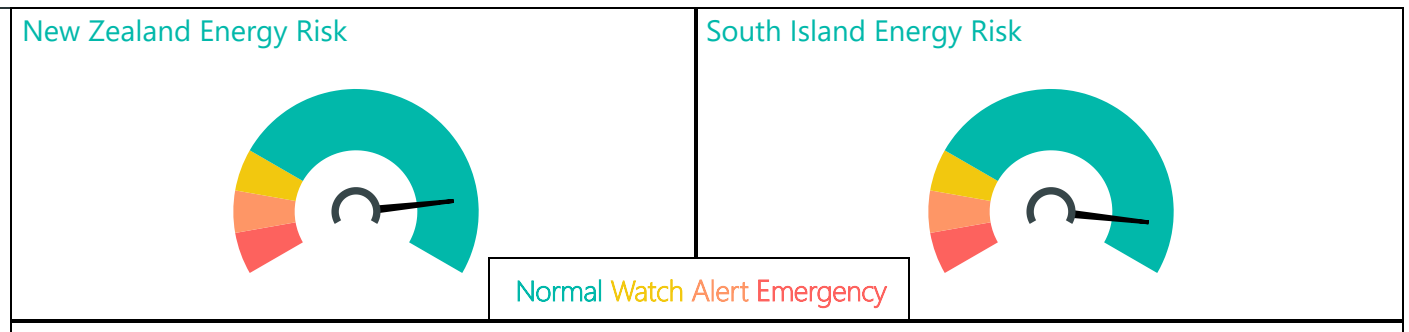
There were also some periods of price separation between the North and South Islands during the week as no reserves were dispatched in the South Island.

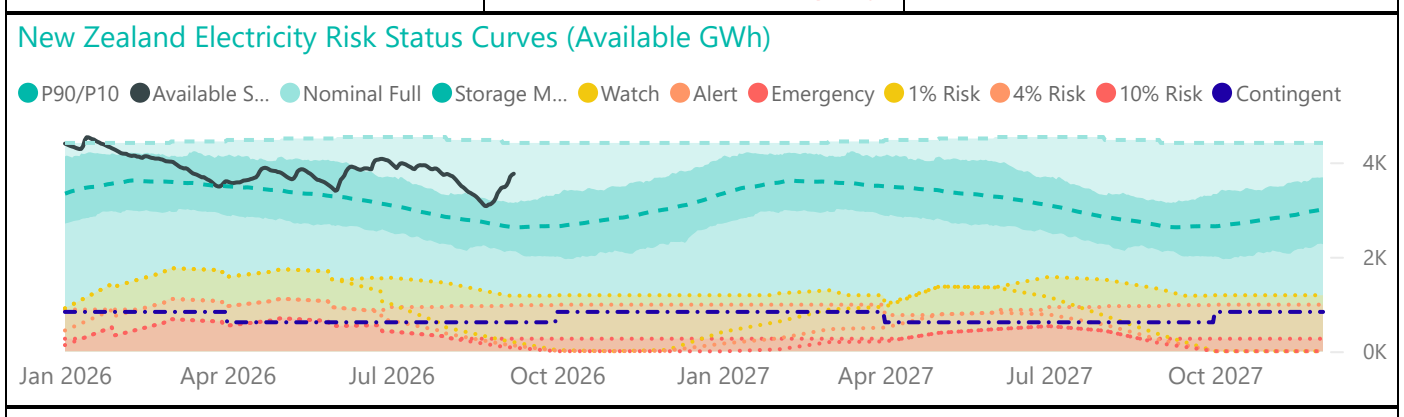
Generation Mix

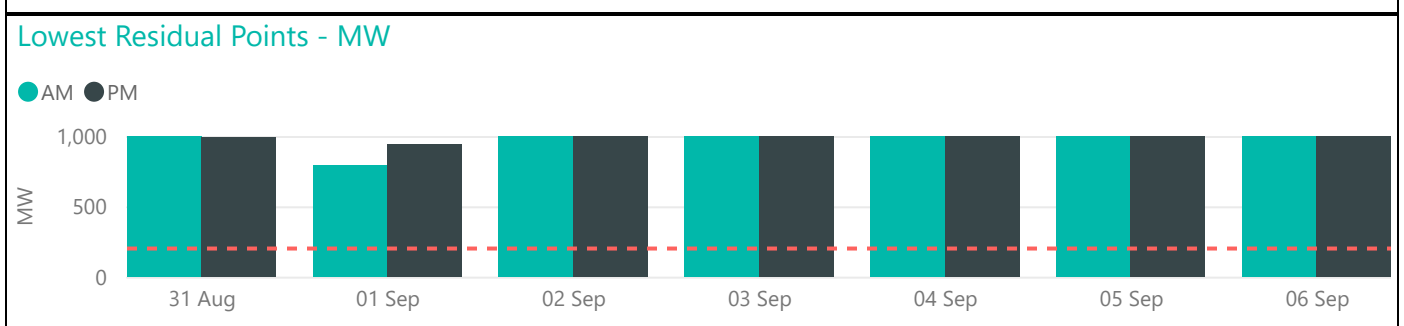
Wind generation was above its yearly average last week while both hydro and thermal generation fell below theirs. Hydro generation decreased marginally to 55% of the mix. Wind and geothermal generation both increased to 17% and 25% respectively. Thermal generation dropped to below 1% of the mix, just below co-gen and solar contributions which were both marginally above 1%.

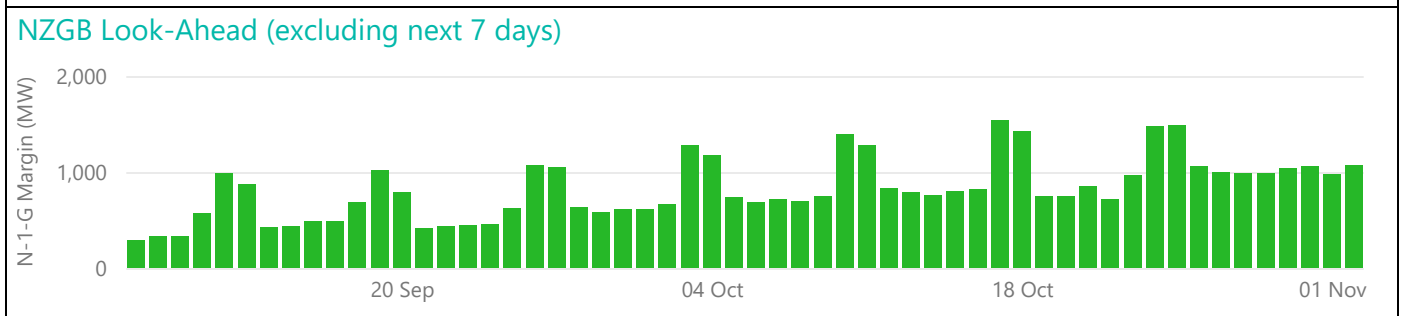
HVDC

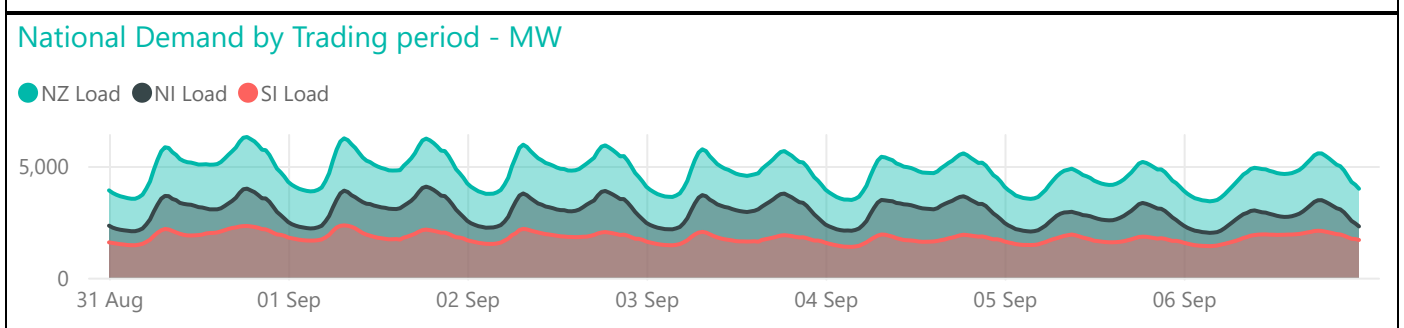
HVDC flows last week was entirely northward. In total 89 GWh was transferred north.

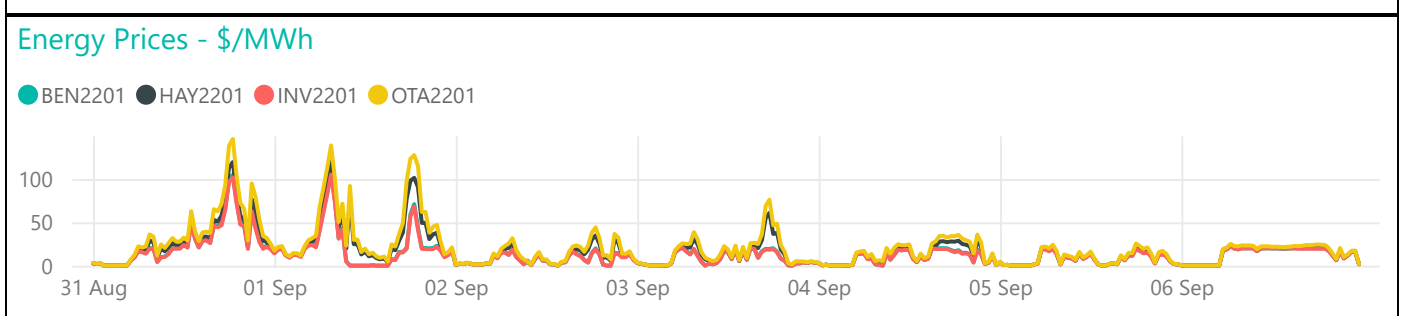


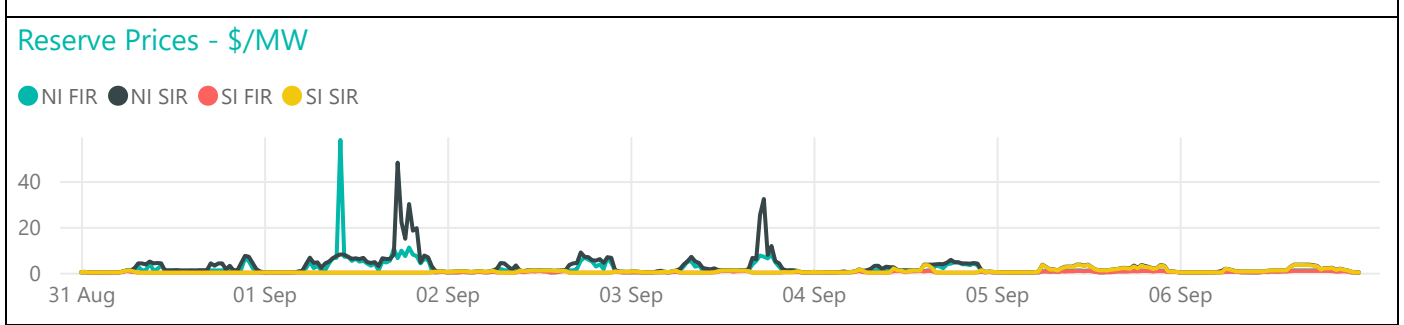


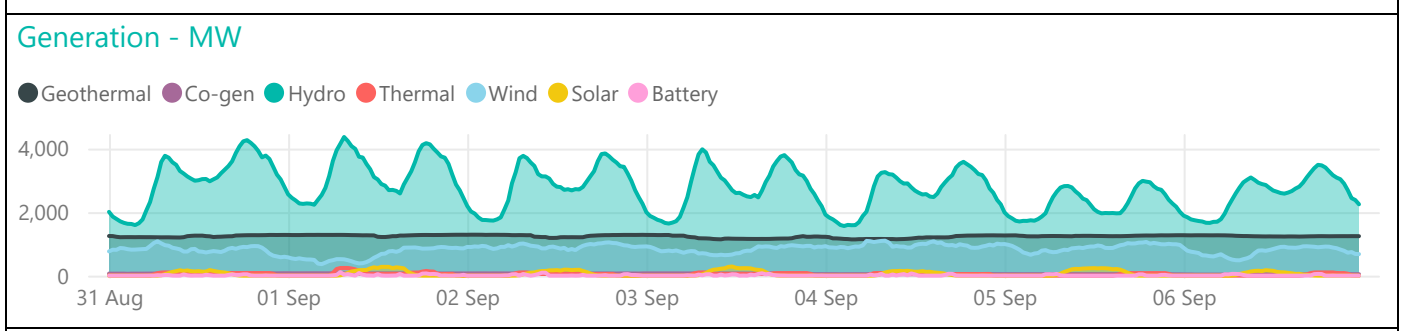


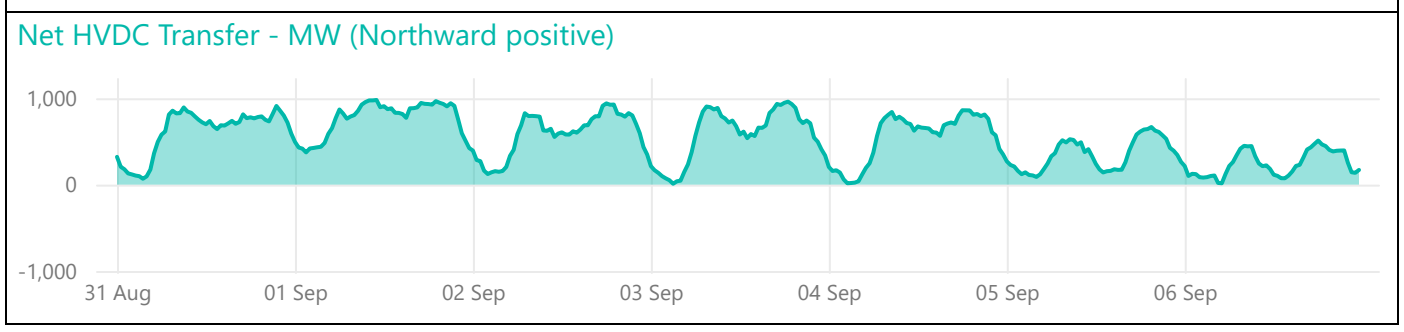












Weekly Insight - ASCAS preparing for go-live on 28 September

With ancillary services evolving to support a changing power system, the launch of our new Ancillary Services Cost Allocation Tool (ASCAS) is a timely step forward, replacing older tools and manual processes with a more structured, adaptable system that better supports current needs and enables future enhancements. Our investment in ASCAS has a critical role in ensuring our ancillary services function can continue to support the stability, reliability, and security of New Zealand's power system as the power system transition progresses.

What is ASCAS?

ASCAS is a purpose-built system that brings together the processes used to calculate ancillary service costs, manage input data, and provide reporting to key external parties including NZX (as the Clearing Manager) and the Electricity Authority.

As a more integrated system for managing ancillary services data, it also improves traceability and auditability by retaining published output versions, supporting wash-ups as new versions, and allowing users to manage and track data changes through the application.

Integration with POCP

Certain ancillary services; over frequency reserve, back-up single frequency keeping and black start have a monthly availability payment component. ASCAS uses Planned Outage Co-ordination Process (POCP) to automatically check whether assets contracted to provide these services were available during the billing period. In addition to the standing Code obligations around outage notification in POCP, ASCAS introduces new expectations on ancillary service agents to provide and update information in POCP in a timely and accurate way, reducing reliance on manual intervention and creating a single authoritative source of outage data.

New outage block codes for black start auxiliary equipment and for back-up single frequency keepers.

To capture outages of black start auxiliary equipment and back-up single frequency keeping equipment, ancillary service agents are being asked to use a new outage block code format for all outages of the equipment. More information will be published closer to go-live.

Data provision to NZX

ASCAS is designed to exchange data with the Clearing Manger (NZX) through secure system-to-system channels, including final monthly cost allocation outputs, constrained-on and constrained-off amount datasets and wash-up files where required.

Reporting to the Authority

Data provided to the Electricity Authority will be generated directly from ASCAS, replacing manual processes. The Authority will have access to a more structured and granular dataset across relevant ancillary services and participants, allowing costs that were previously aggregated to be reported separately where appropriate. This provides the Authority greater visibility of ancillary services costs and the underlying data used in the allocation process.

Ancillary service agents should:

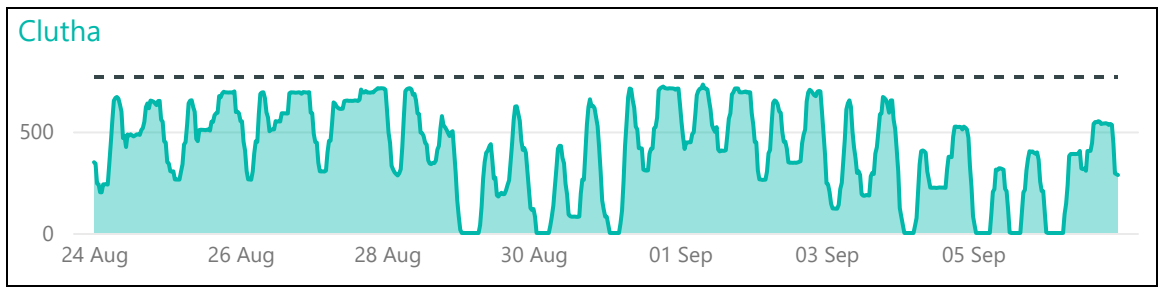
- Ensure all planned outages affecting contracted ancillary service assets are entered into POCP.
- Maintain outage information throughout the outage lifecycle, including updates to outage timing, duration and scope where circumstances change.
- Review existing internal processes to ensure POCP submissions remain accurate and up to date.
- Ensure nominated contacts responsible for outage coordination and ancillary service obligations are aware of these requirements.
- Use new outage block codes for auxiliary diesel generators and/or auxiliary hydro plant that is on outage and is contracted to provide black start service.
- Use new outage block codes for back-up single frequency keeping units that that is on outage and are contracted to provide back-up single frequency keeping.

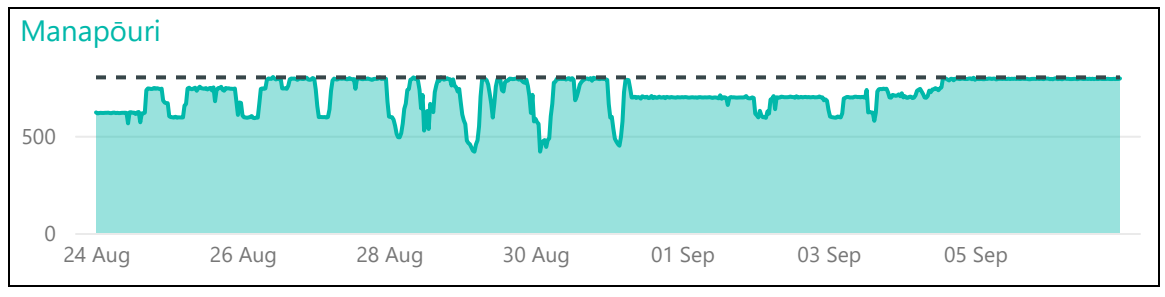
Save the date

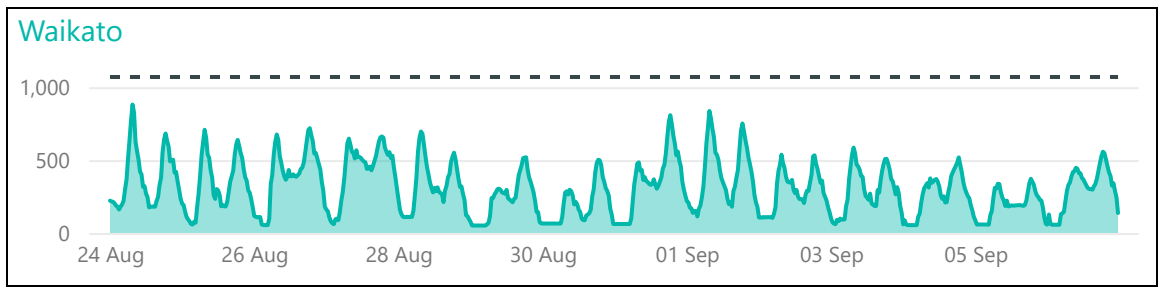
ASCAS is currently moving into its final go-live stage, with preparations underway to transition key data into the new system in time to complete cost allocation for September. While most industry participants will not be affected and will experience no change, further communications will be sent to specific impacted ancillary service agents in the lead up to the change.

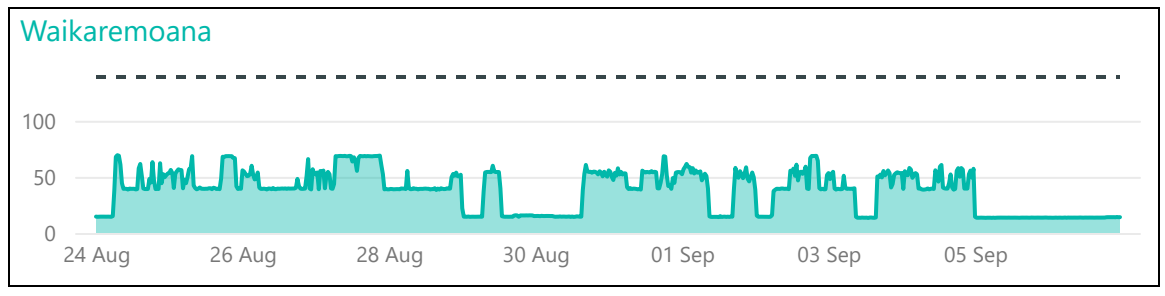
Generation Breakdown - Last Two Weeks

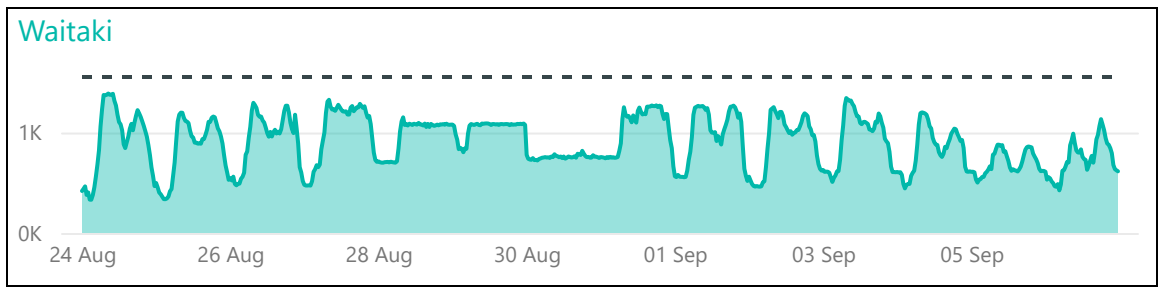
Measured in MW and displayed at trading period level for last 14 days

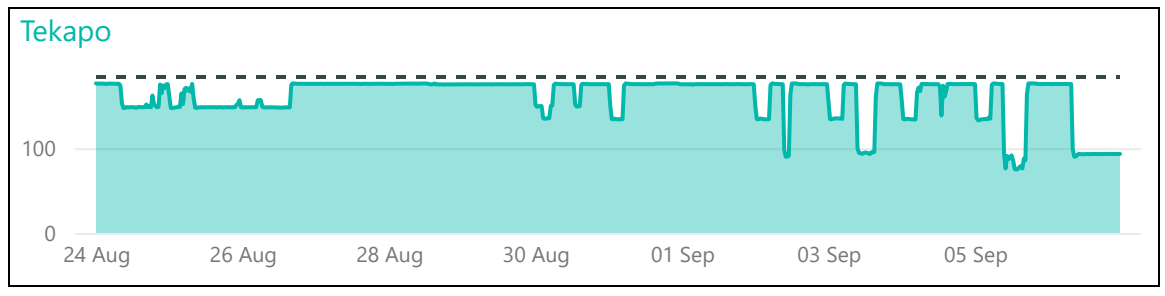


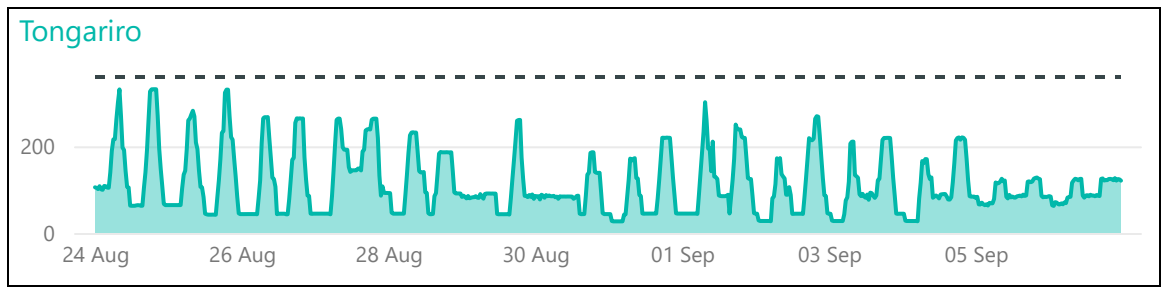


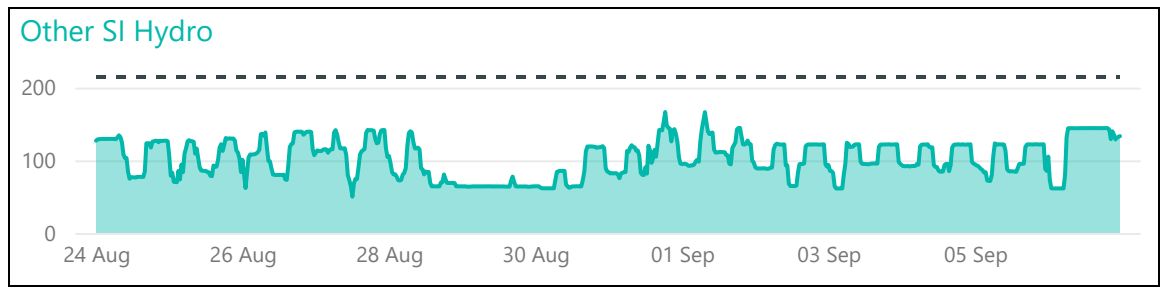


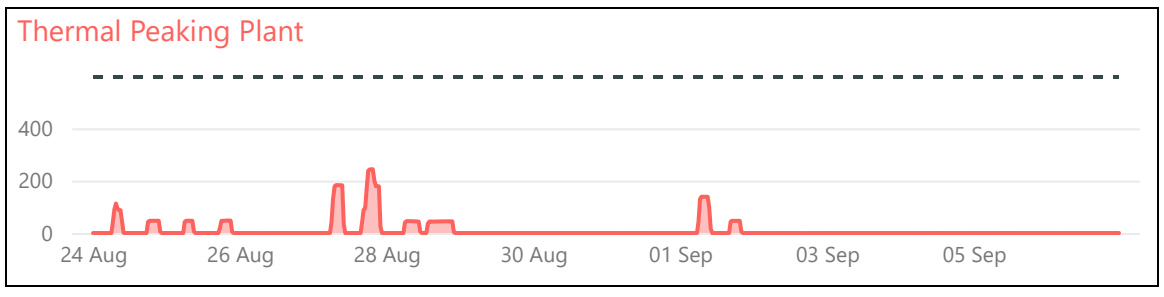


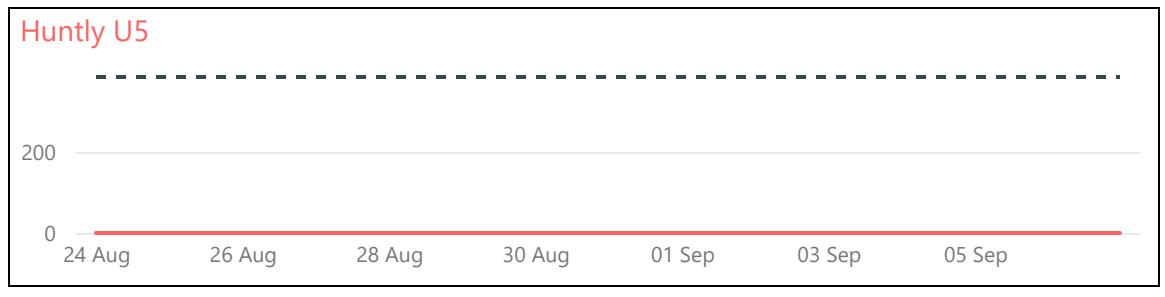


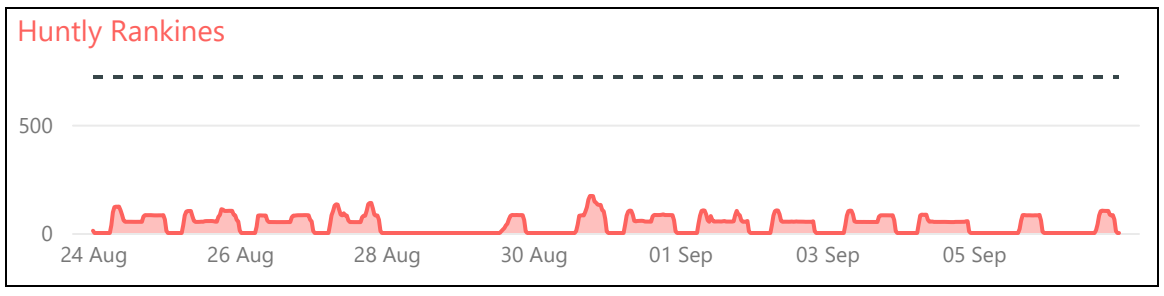


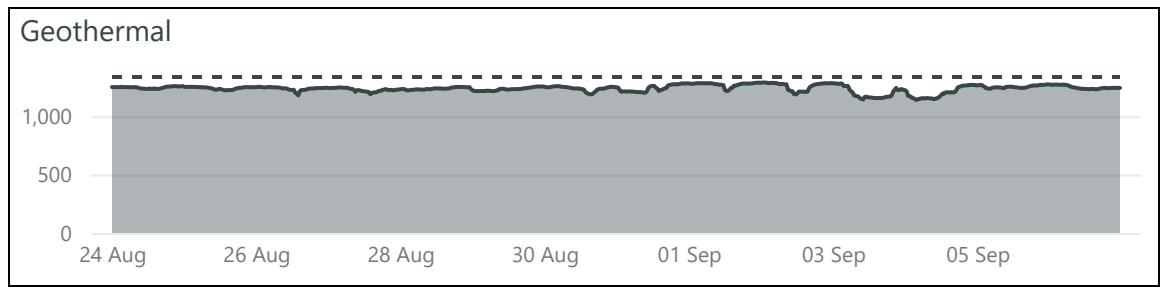


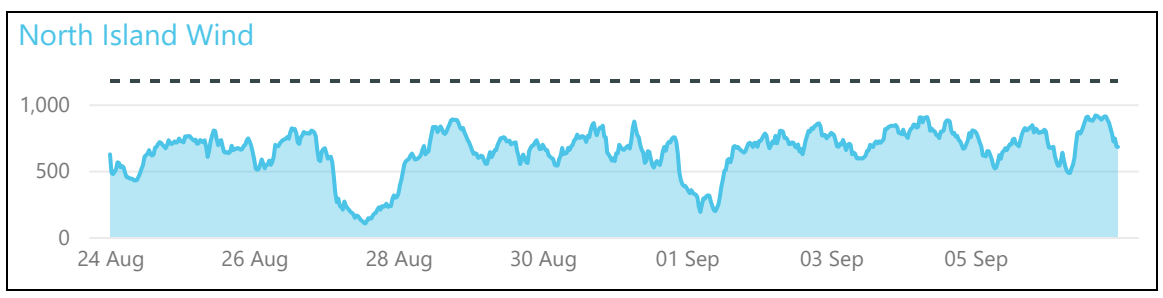


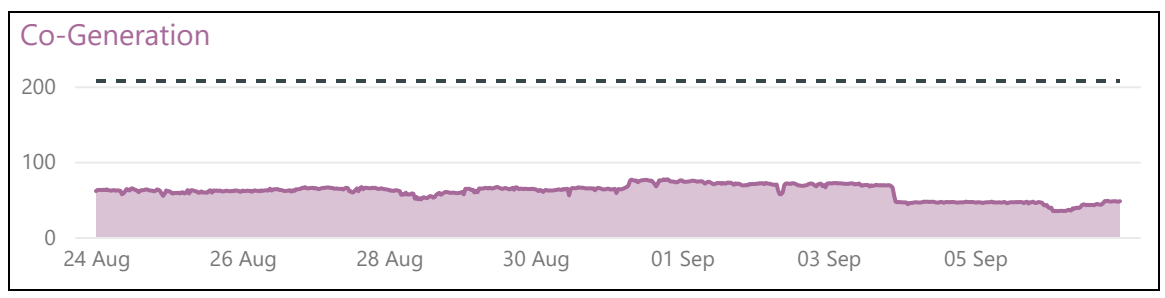


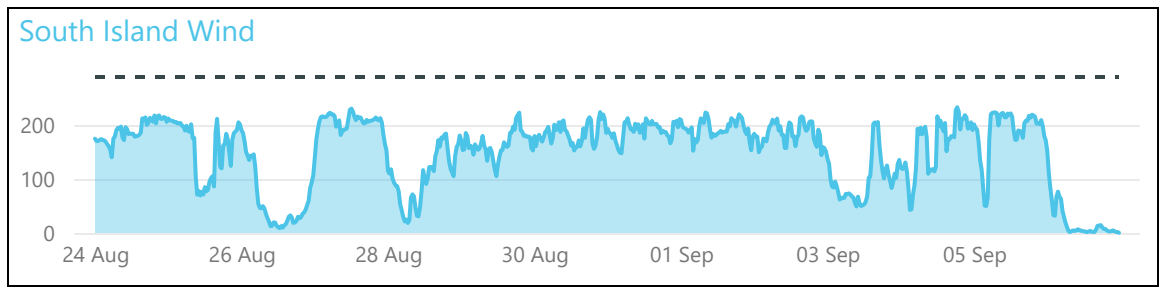


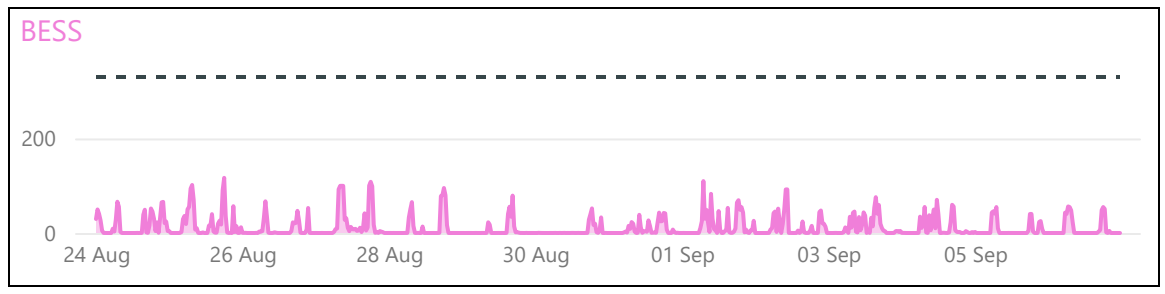


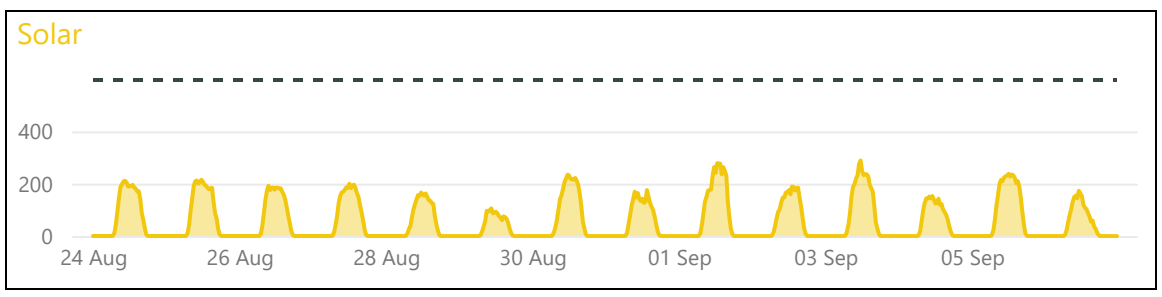






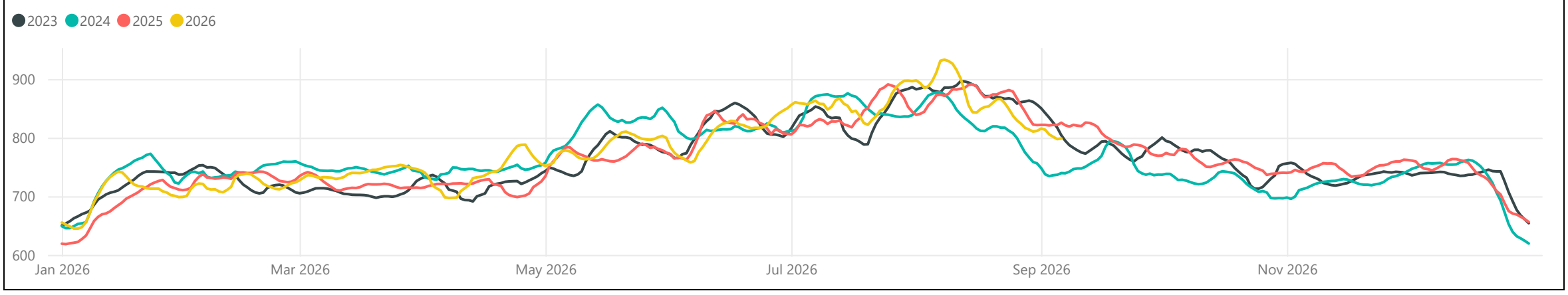




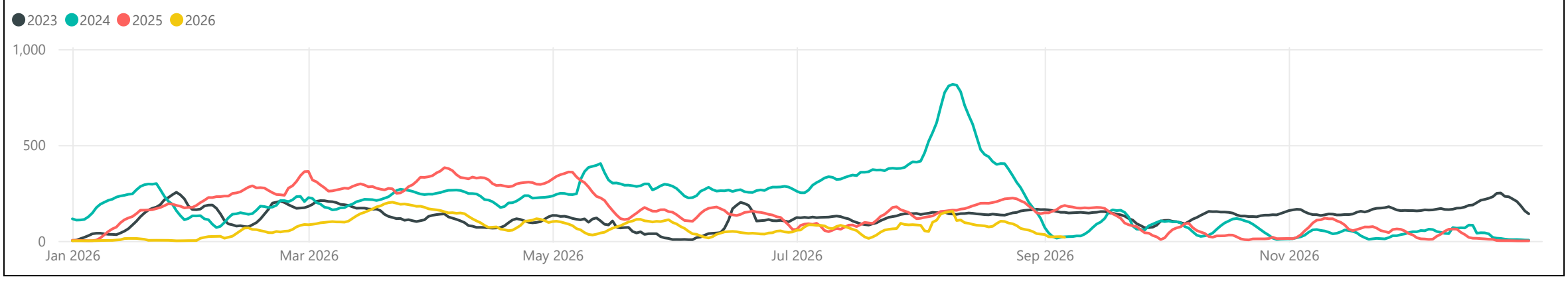


Weekly Profiles

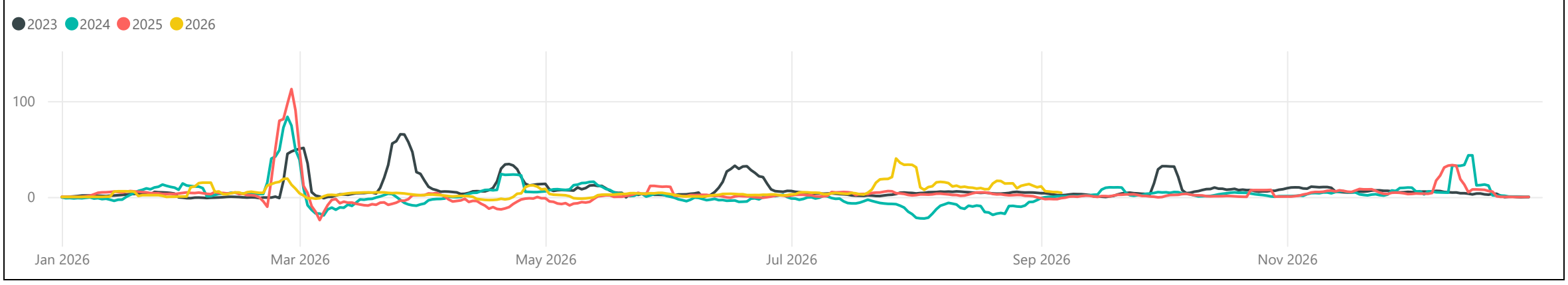
National Weekly Demand - GWh - 7 Day Rolling



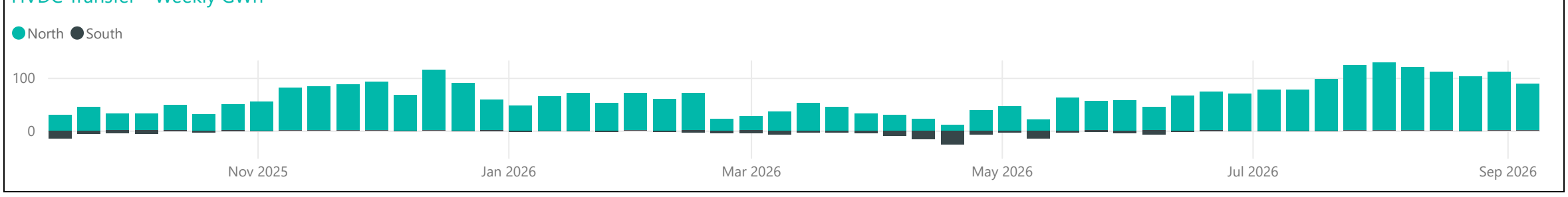
OTA2201 Weekly Rolling Average Spot Price - $/MWh



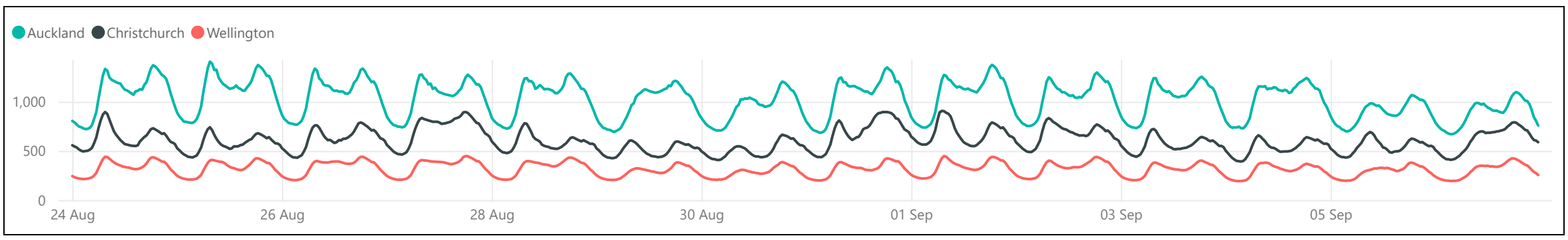
Weekly Rolling Price Separation (HAY2201 - BEN2201) - $/MWh



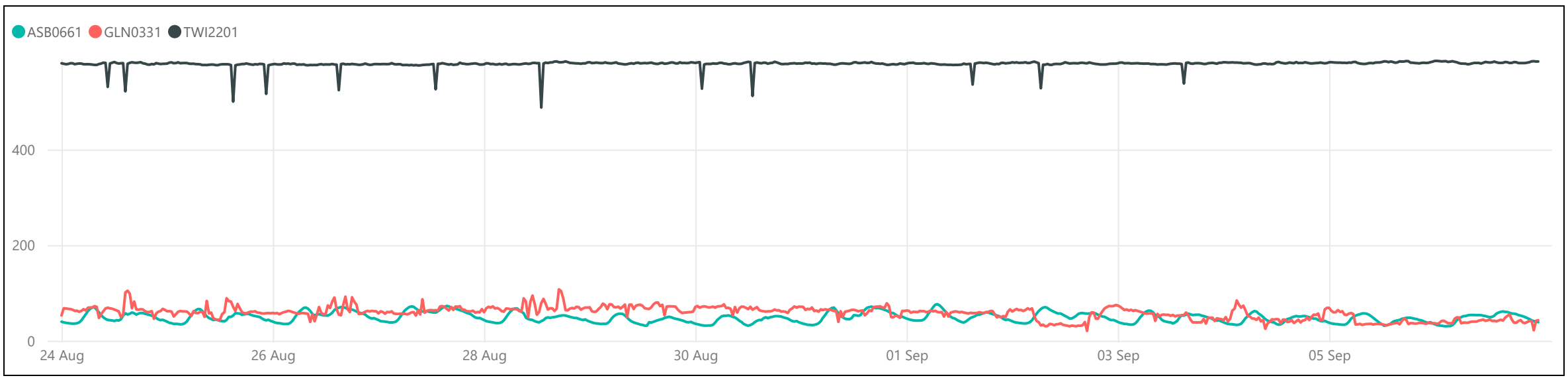
HVDC Transfer - Weekly GWh



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



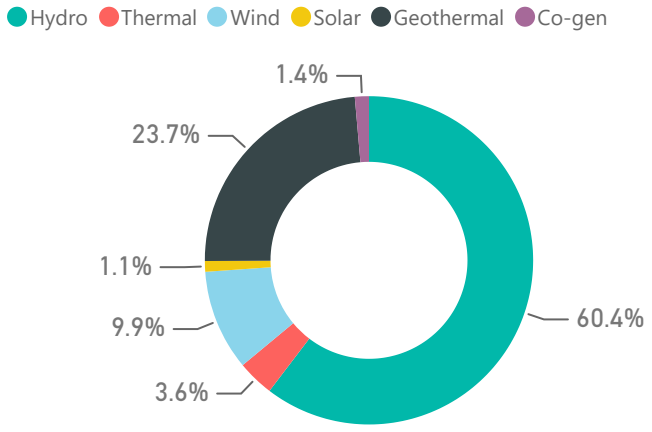
Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*



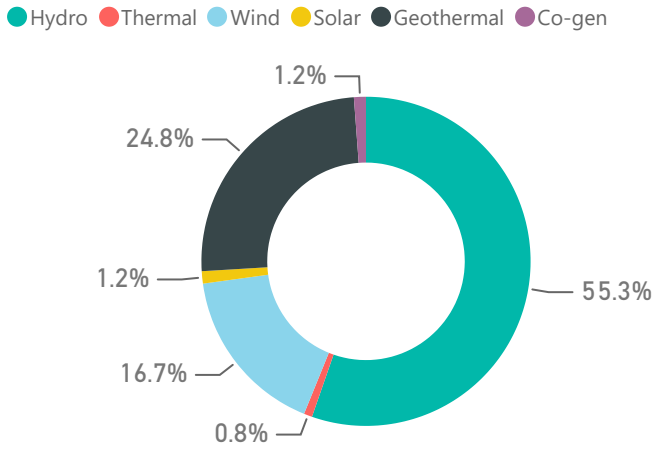
TRANSPOWER

Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



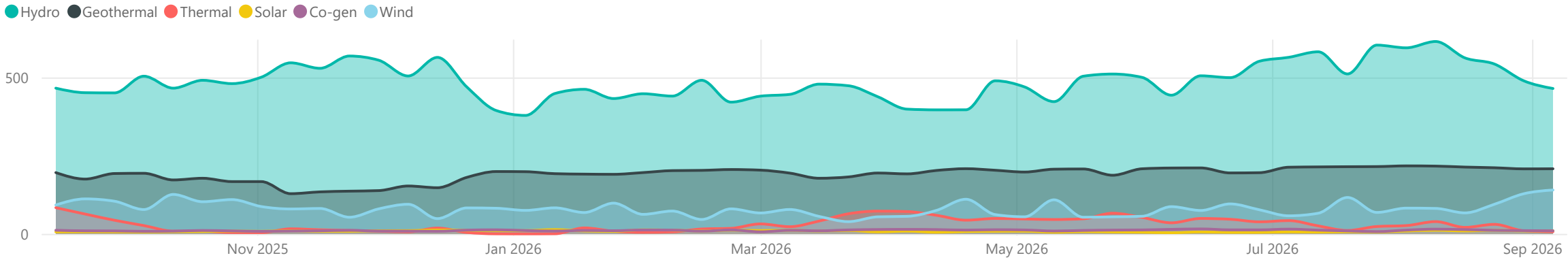
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
98%	26,049	31.0

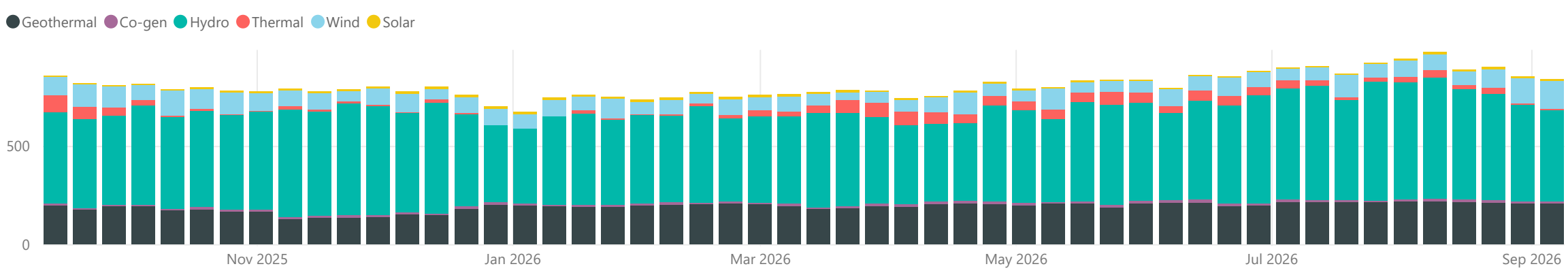
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
95%	35,105	42.9

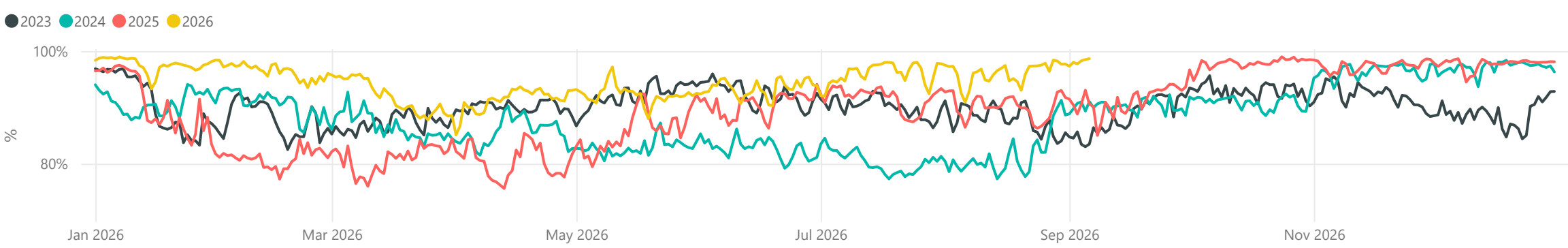
Weekly Generation Mix - GWh



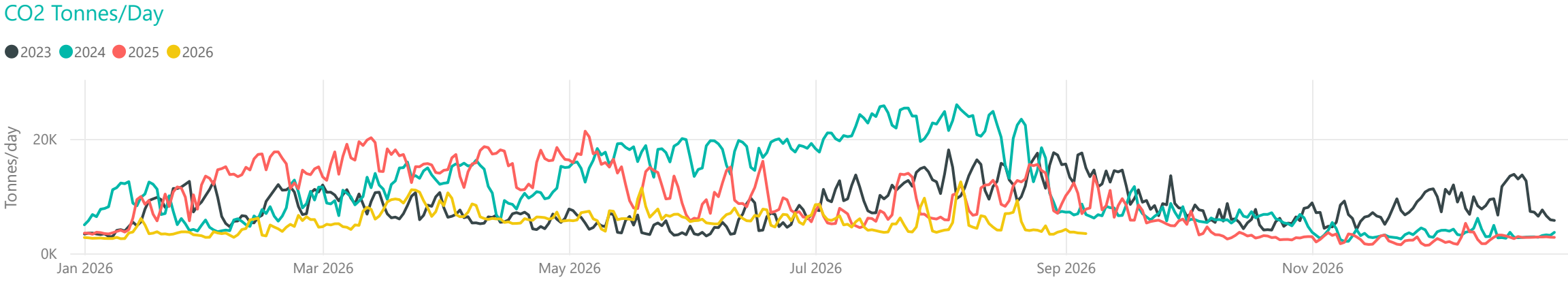
Weekly Generation Mix - GWh



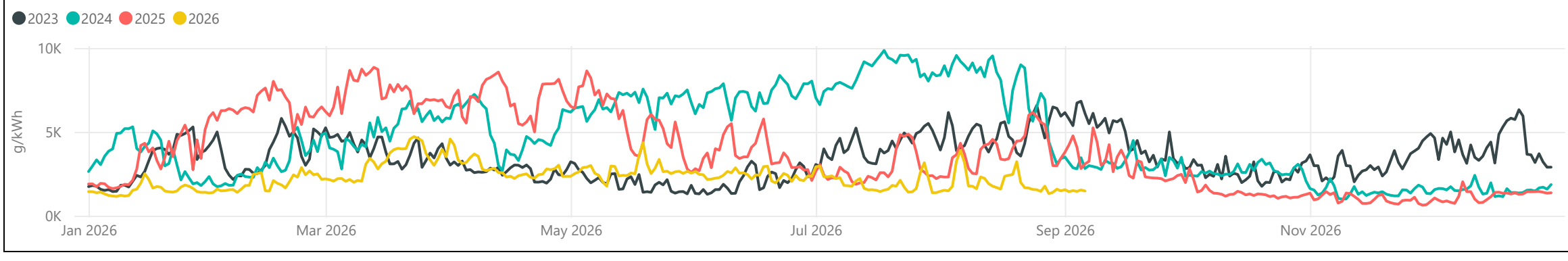
NZ Renewable Percentage



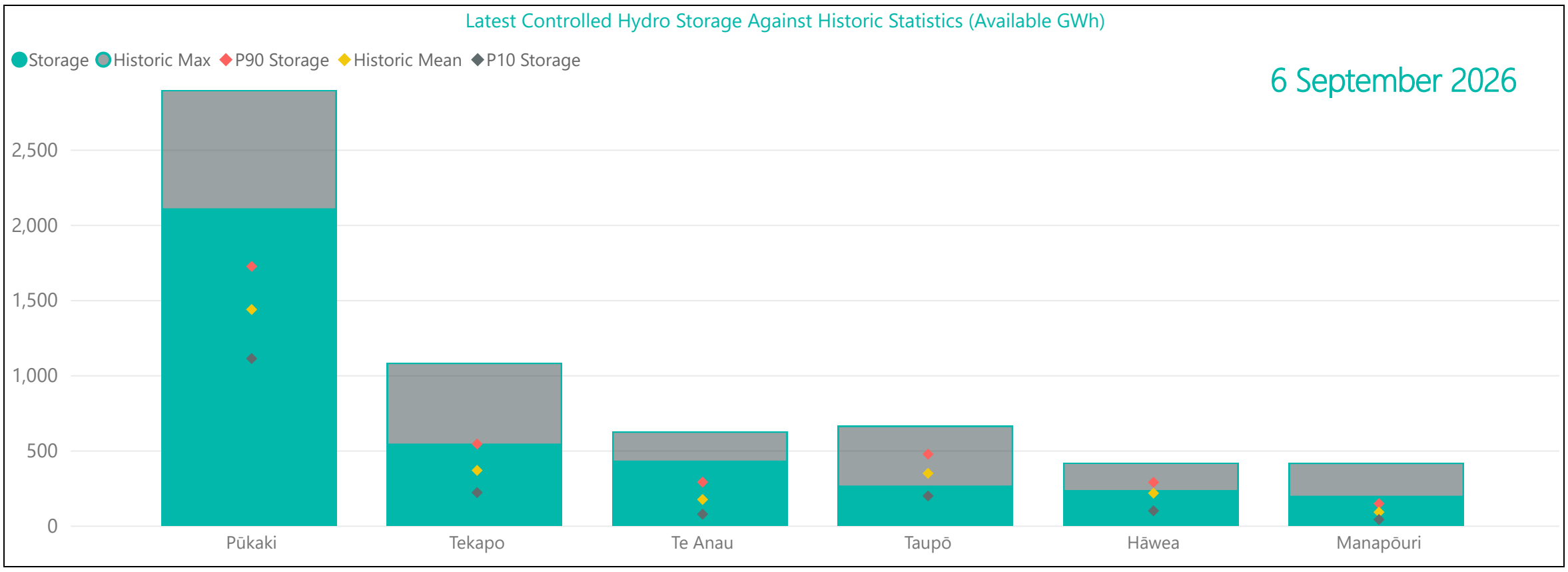
CO2 Tonnes/Day

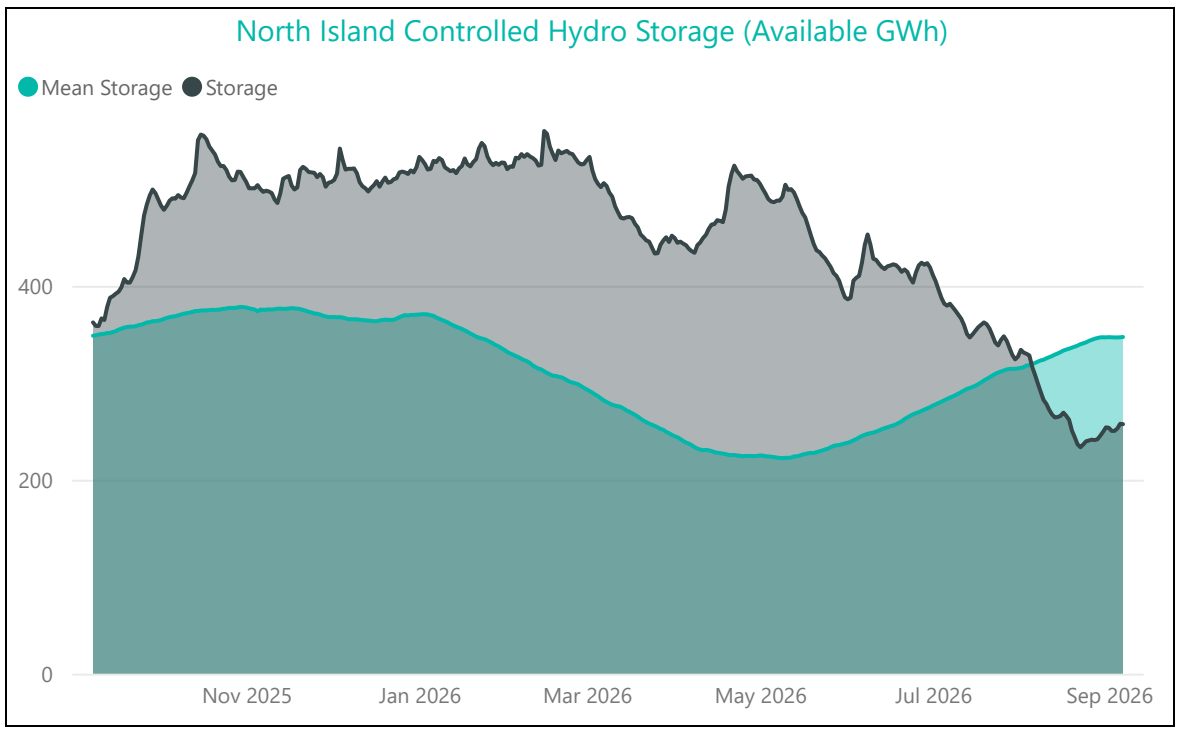


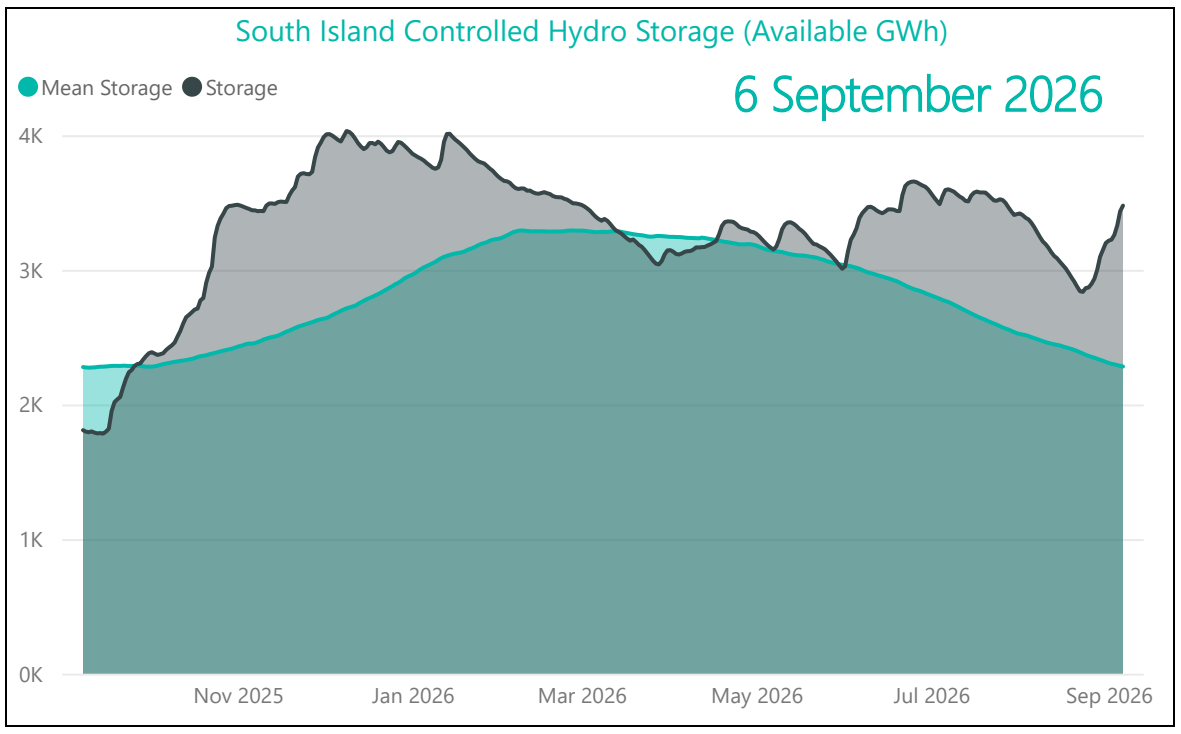
CO2 g/kWh

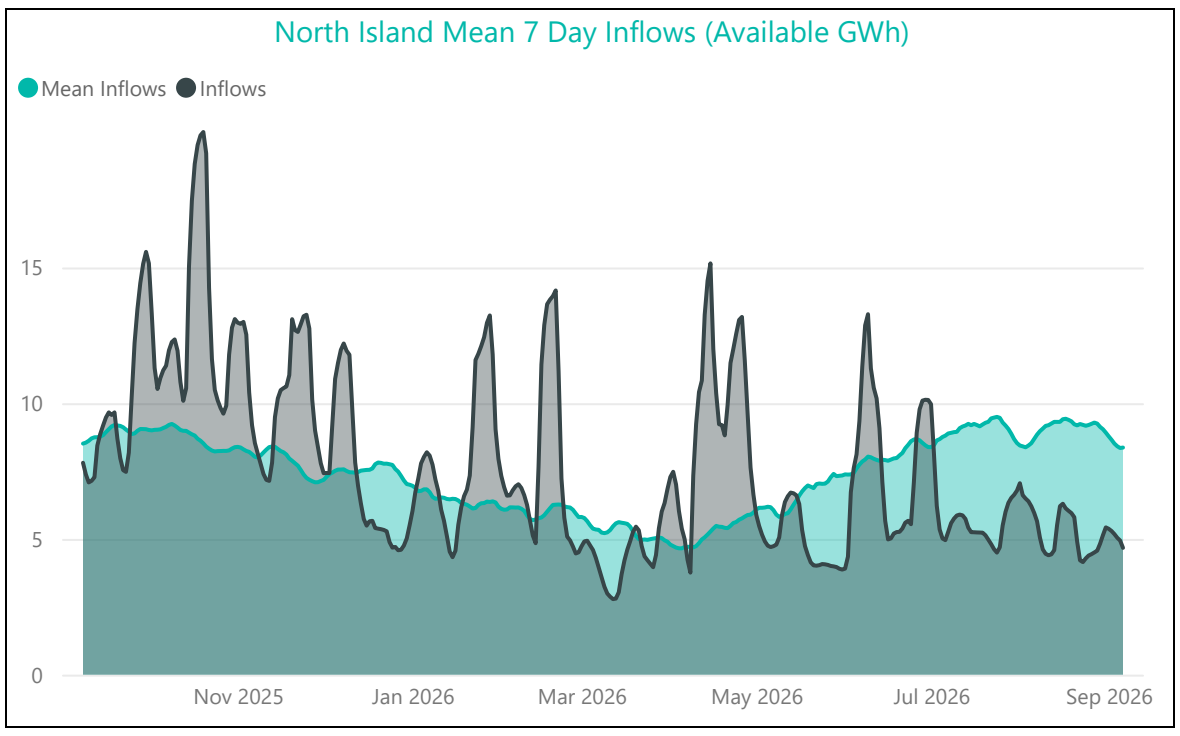


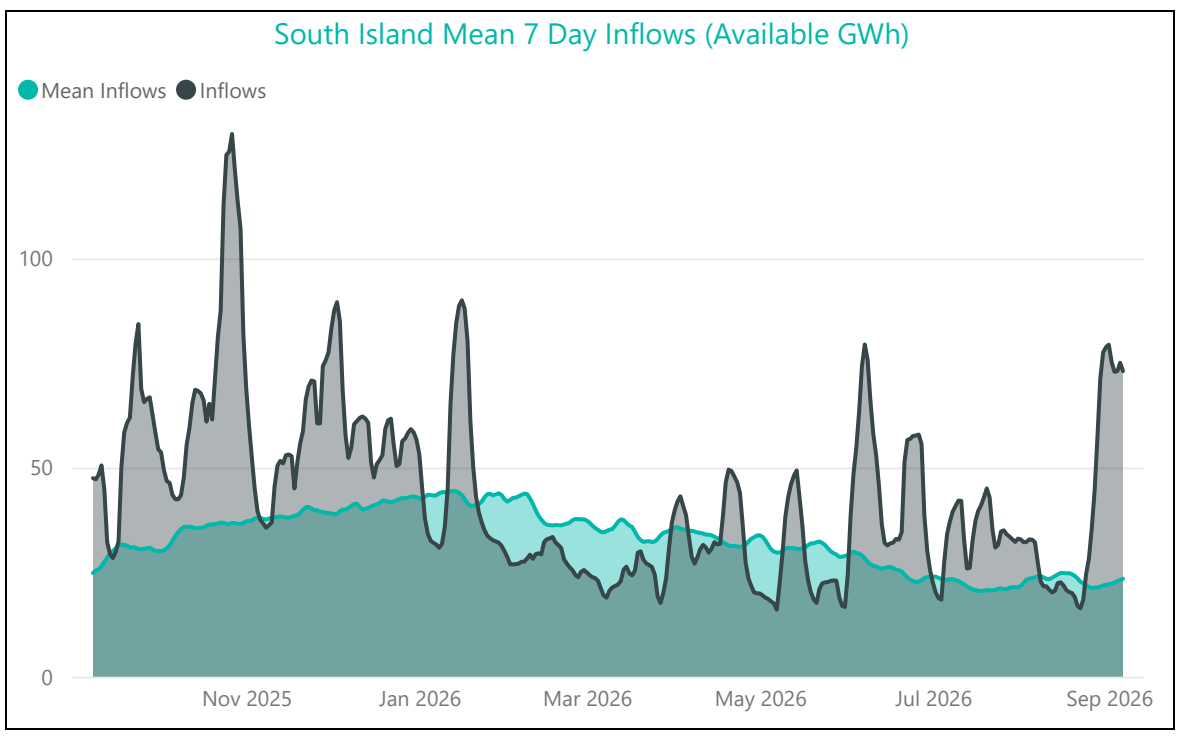
Hydro Storage











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

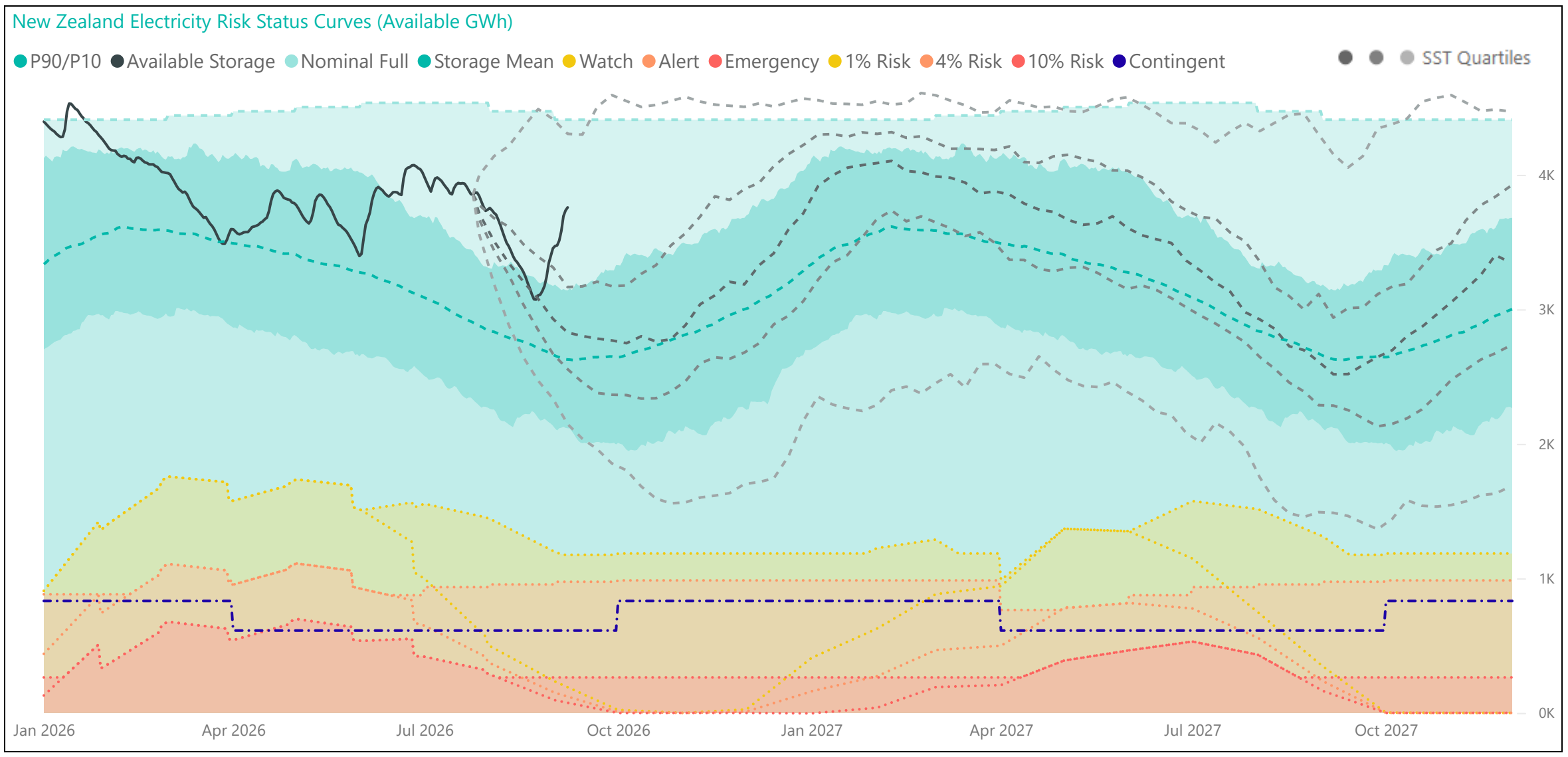
For any inquiries related to security of supply contact market.operations@transpower.co.nz

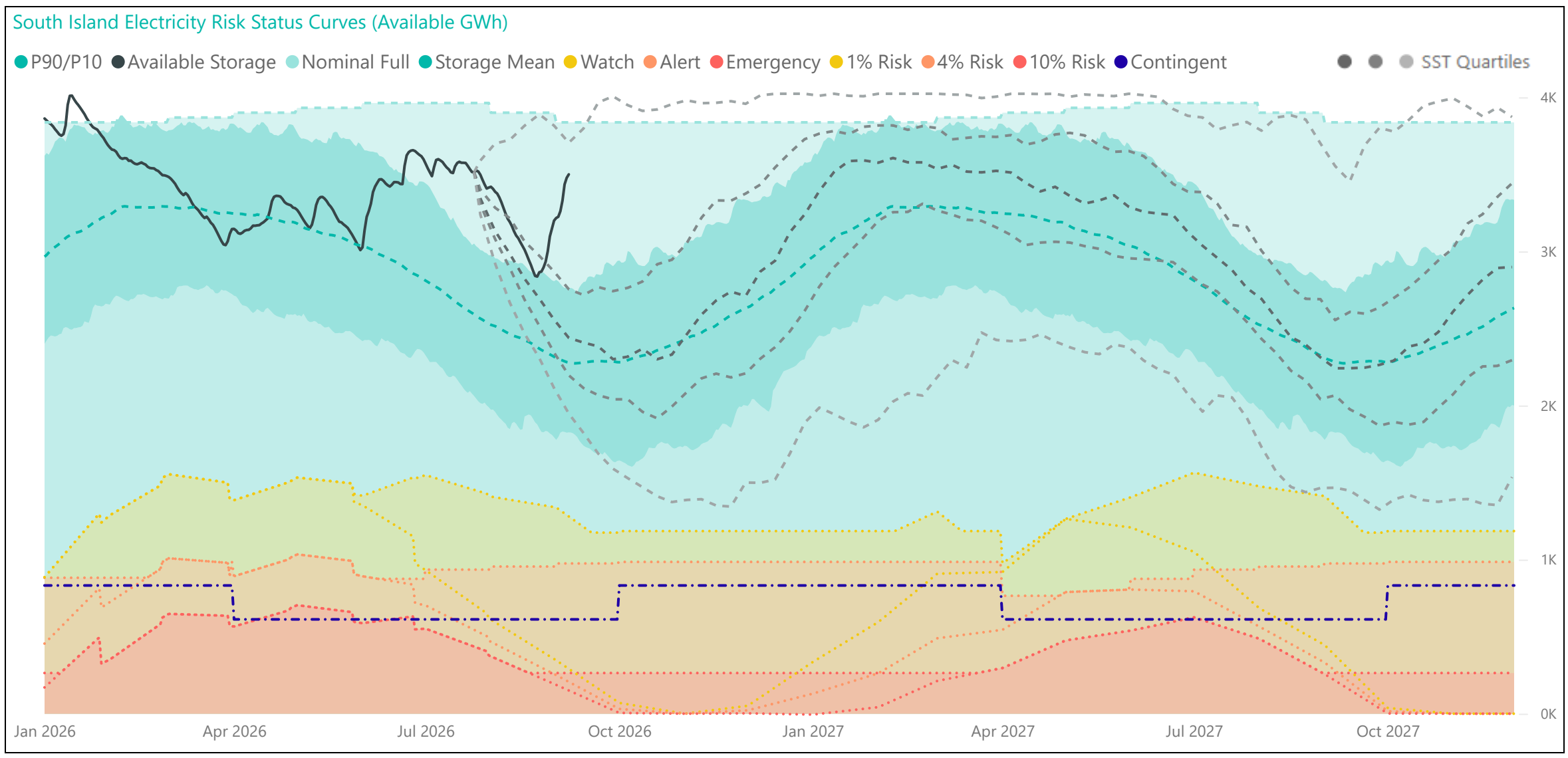
Hydro data used in this report is sourced from *NZX Hydro*.

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





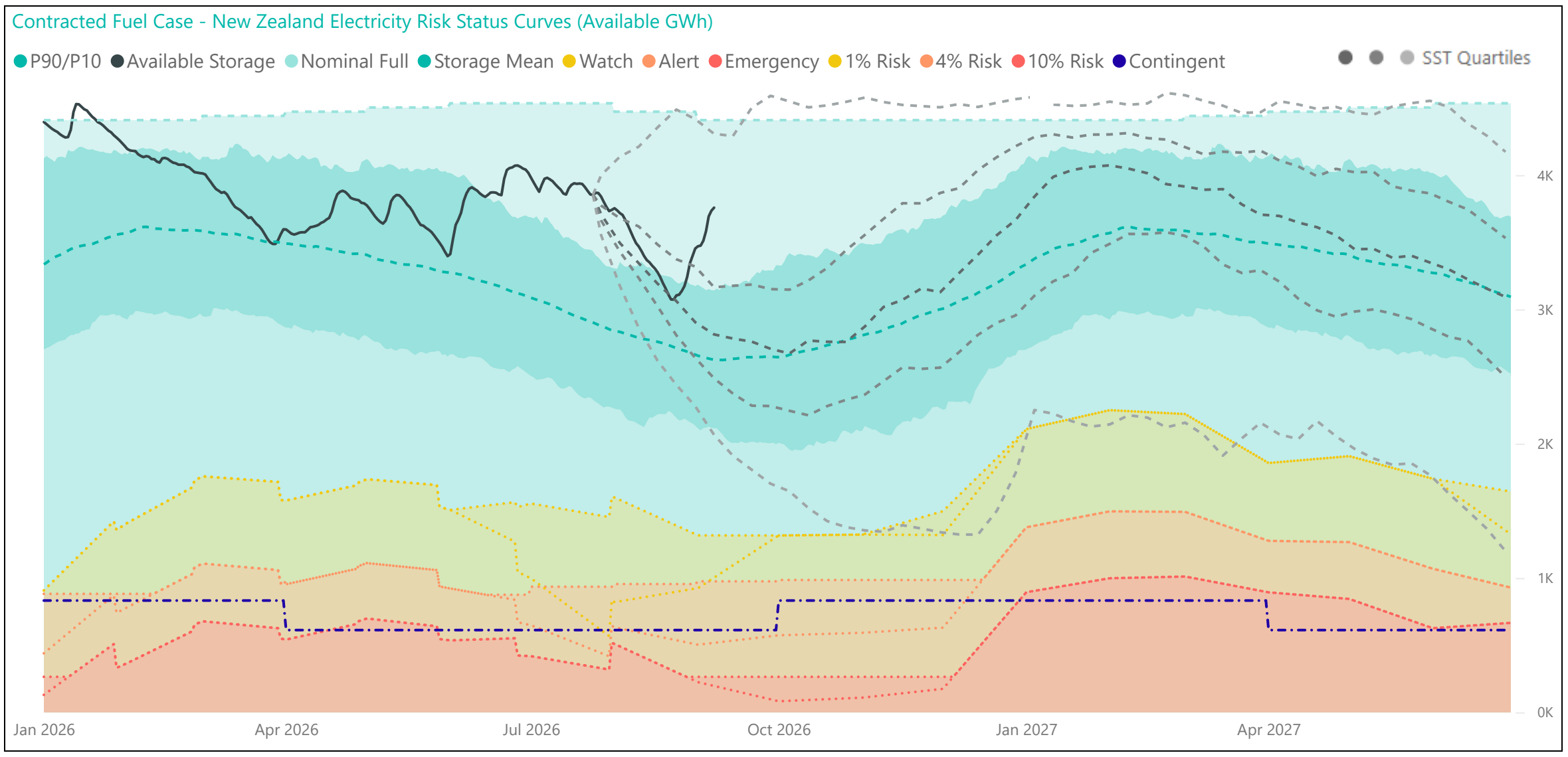
Electricity Risk Curve Explanation:

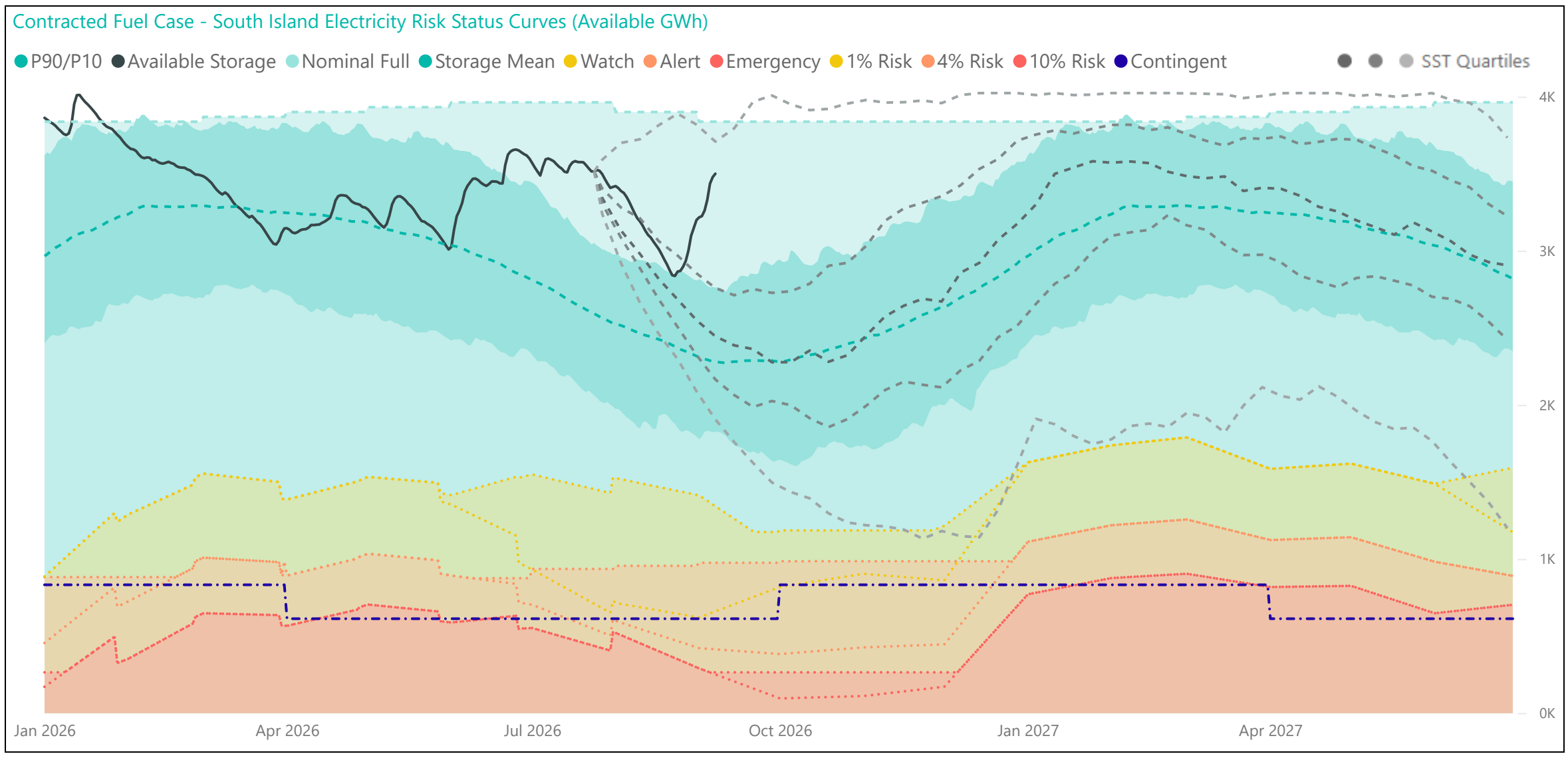
Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop
Alert Curve - The maximum of the four percent risk curve and the floor and buffer
Emergency Curve - The maximum of the 10 percent risk curve and the 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





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).