TRANSPOWER

System Operator Industry Forum

5 May 2026

Today's agenda

- Key messages
- Market update
- NZGB update
- Outage update – next four weeks
- Operational update
- Emergency Reserve industry co-design EOI
- Consultations, publications and events
- Questions / Pātai

Key Messages

- Hydro storage remains above average but has reduced slightly as we head into winter. We still recommend conservative South Island management.
- Thermal fuel storage (coal and gas) remain high.
- Note NZGB potential capacity risks from June. Plant availability and flexibility remains a focus for industry during these times.

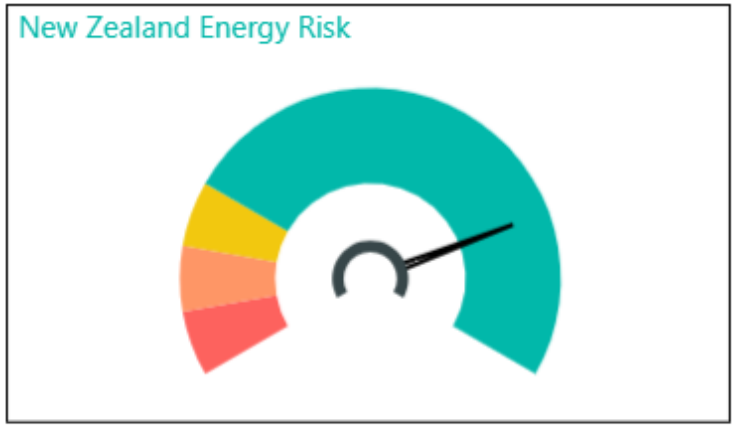
Market update

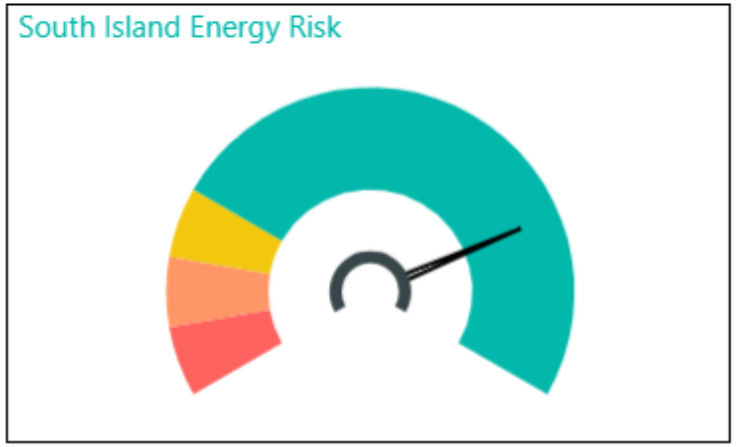
Energy: National hydro storage

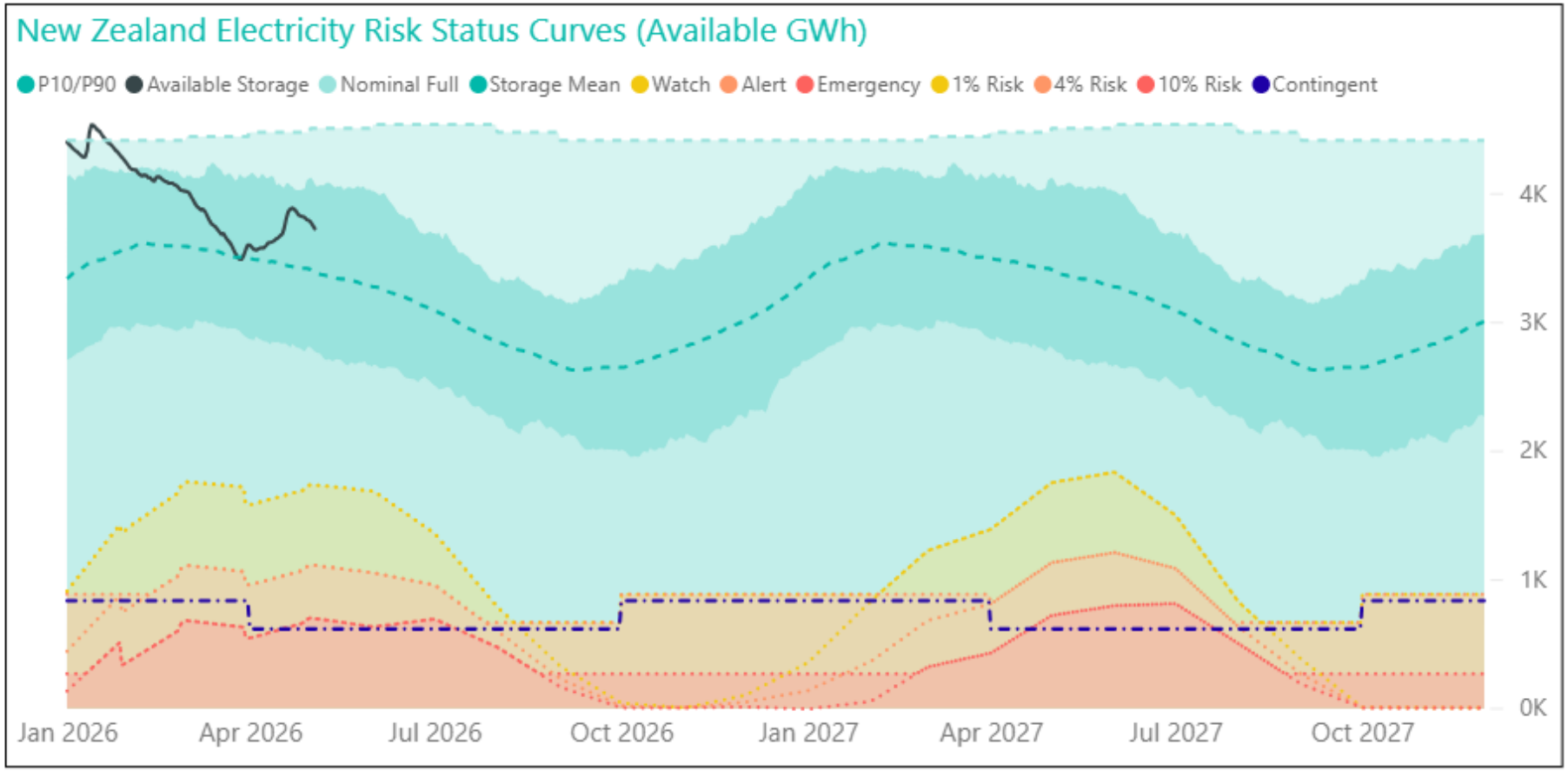
National hydro storage levels remain above average but have dipped slightly in the last week with less than average inflows

	Hydro storage level (% of mean ▲/▼)		
	New Zealand	South Island	North Island
Last forum	112%	104%	228%
Now	110% ▼	102% ▼	221% ▼

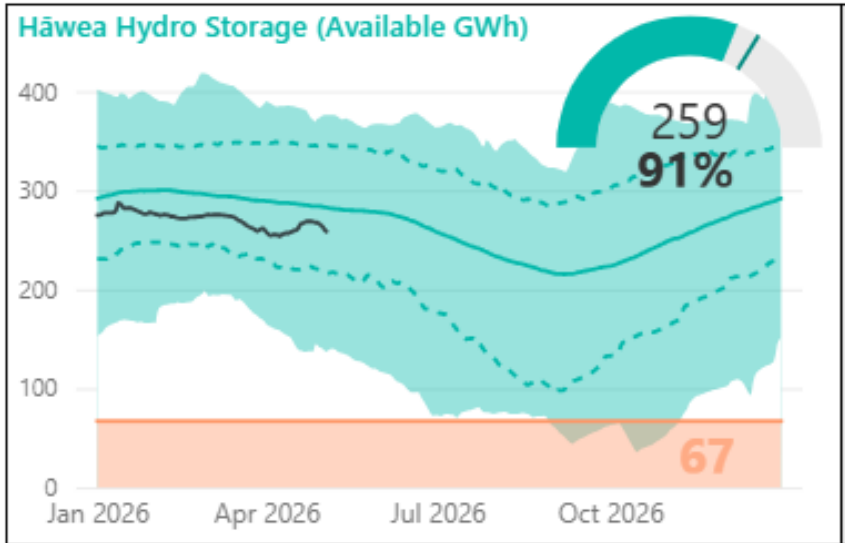
Note: these numbers include contingent storage, so they differ from those reported by NZX

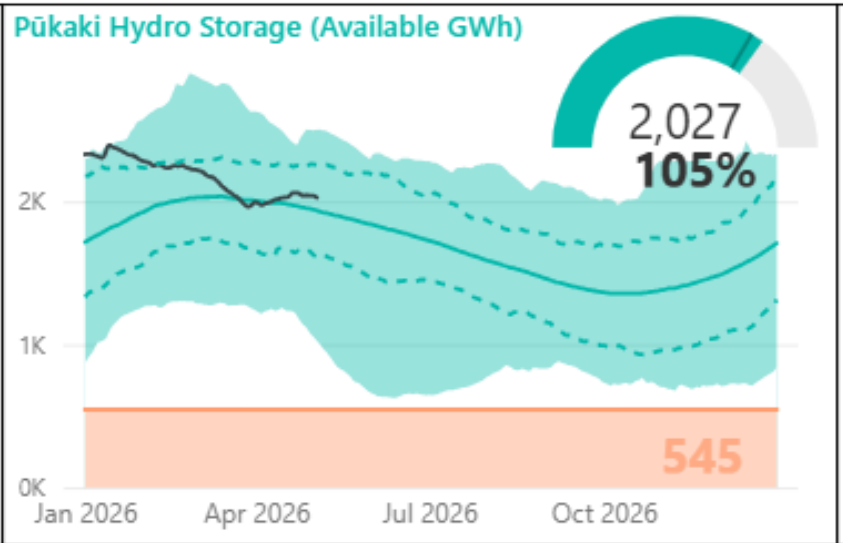


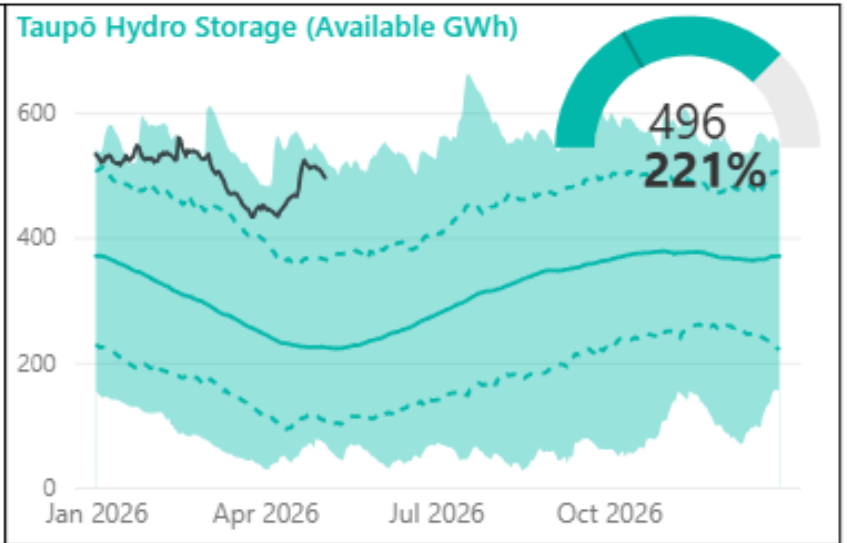


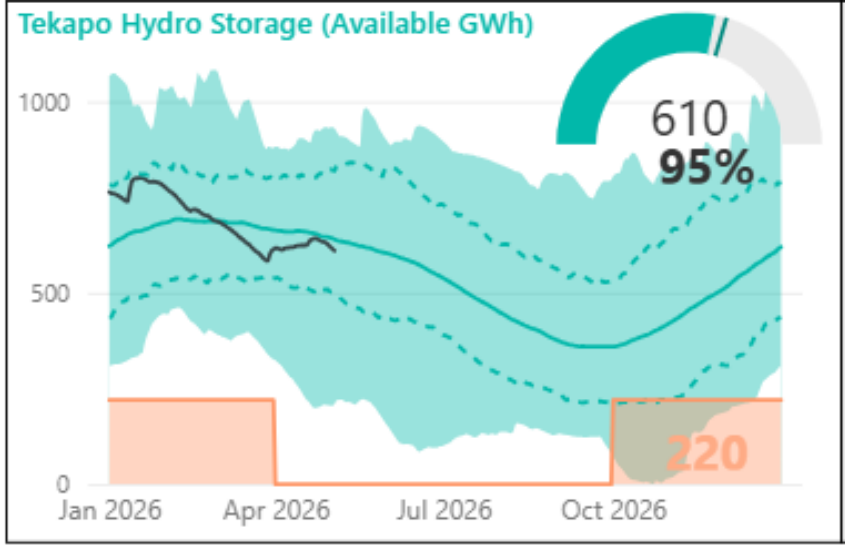


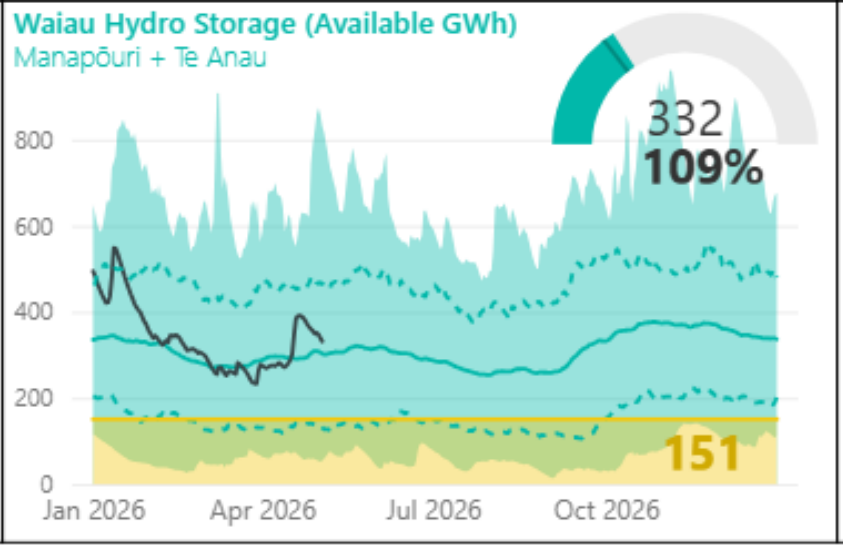
Hydro storage by catchment





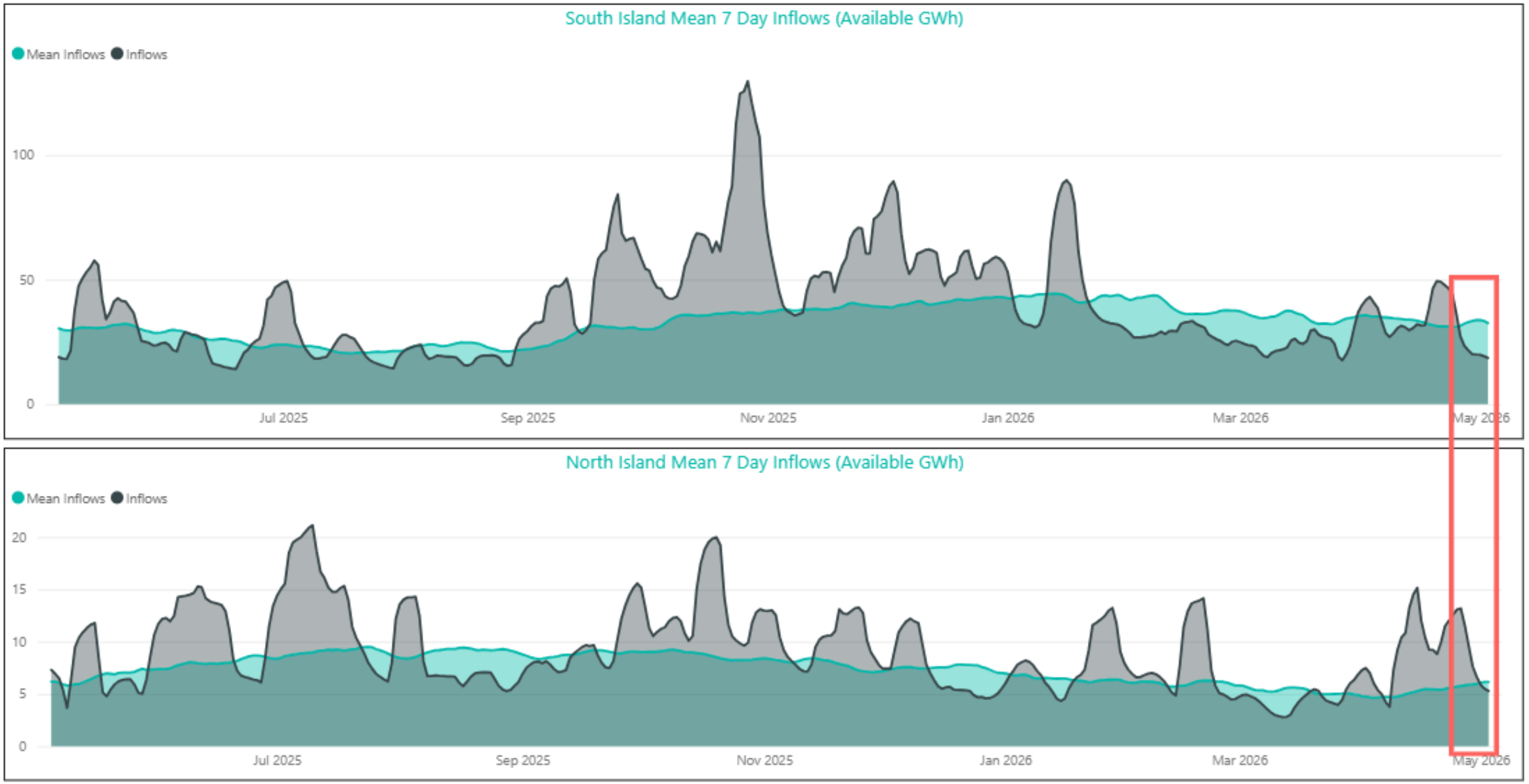






Lake	Storage (%)	Storage (GWh)	Historic Mean
Hāwea	91%	258.57	282.63
Manapōuri	153%	164.80	107.43
New Zealand	110%	3,723.20	3,387.21
Pūkaki	105%	2,026.57	1,937.44
South Island	102%	3,227.13	3,162.92
Taupō	221%	496.07	224.29
Te Anau	85%	166.97	195.62
Tekapo	95%	610.22	639.81

Hydro inflows



April 2026
Energy Security Outlook

Changes this update:

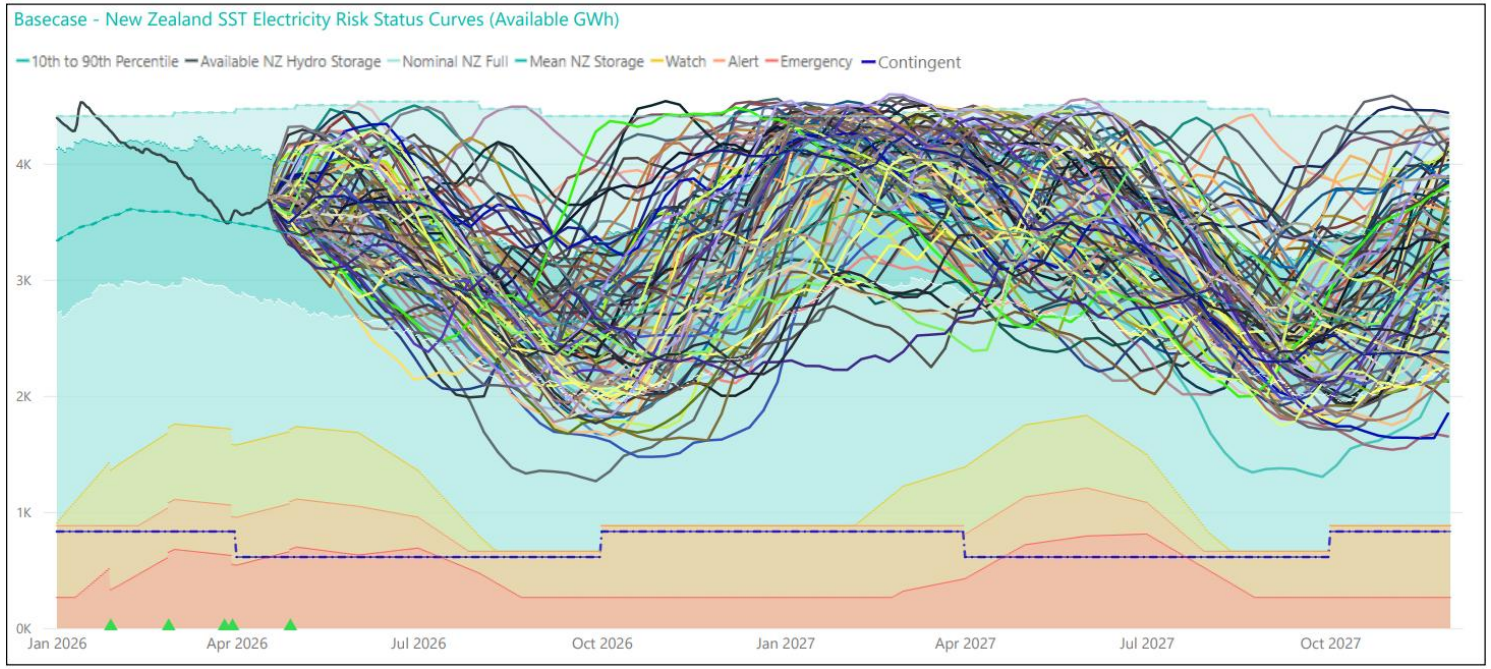
- Updated AGS gas storage – near full
- Gas reallocation from industrial to electricity generation
- Lower starting coal stockpile
- Updated outages and commissionings

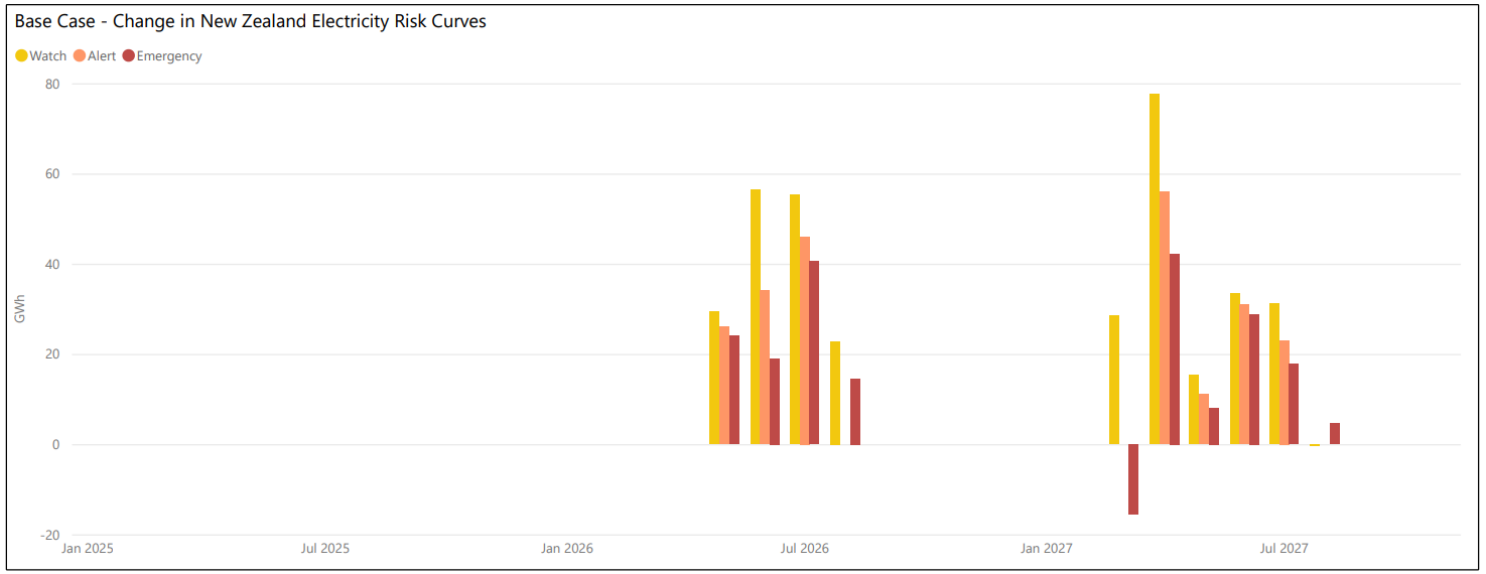
Increases of up to:

- 56 GWh Watch (June 2027)
  - Due to Huntly Rankine outages
  - Lower starting coal stockpile
- 78 GWh Watch (March 2027)
  - Lower gas production forecasts

SSTs (94 total) crossing NZ:

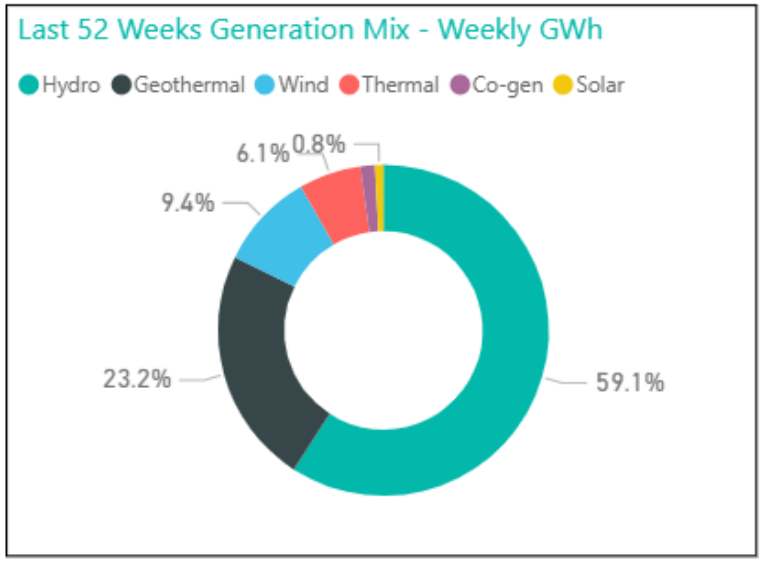
	Watch	Alert	Emergency
2026	0	0	0
2027	0	0	0

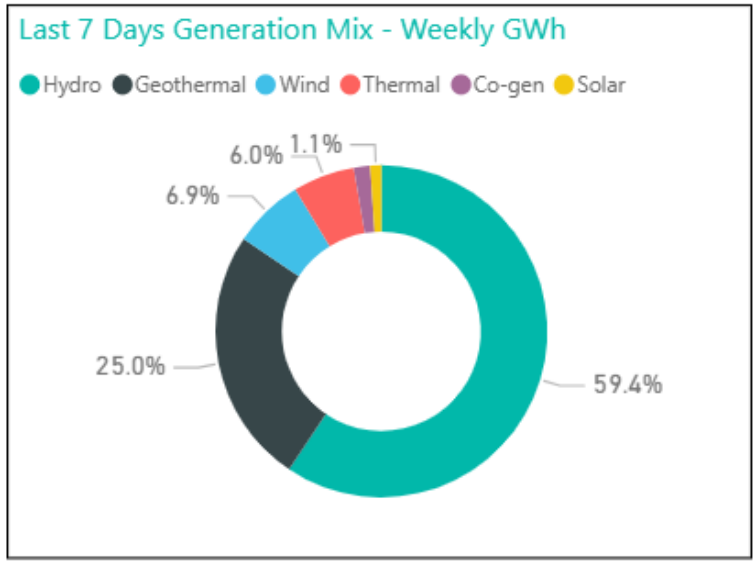


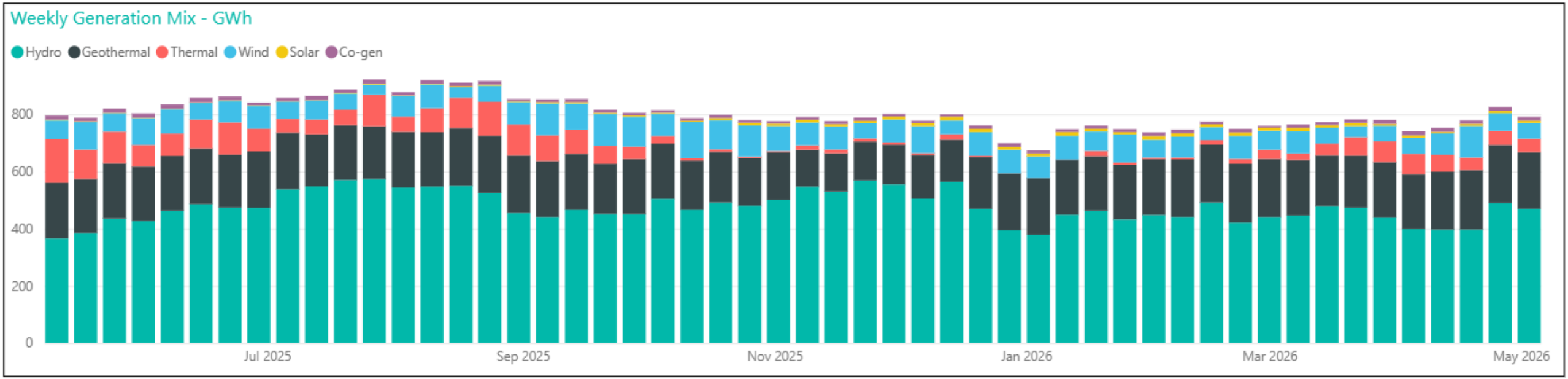


Generation mix

- Hydro generation at 59% of the mix – similar to yearly average
- Less than average wind generation at 7%
- Thermal generation at yearly average of 6%
- Geothermal remains above average at 25%

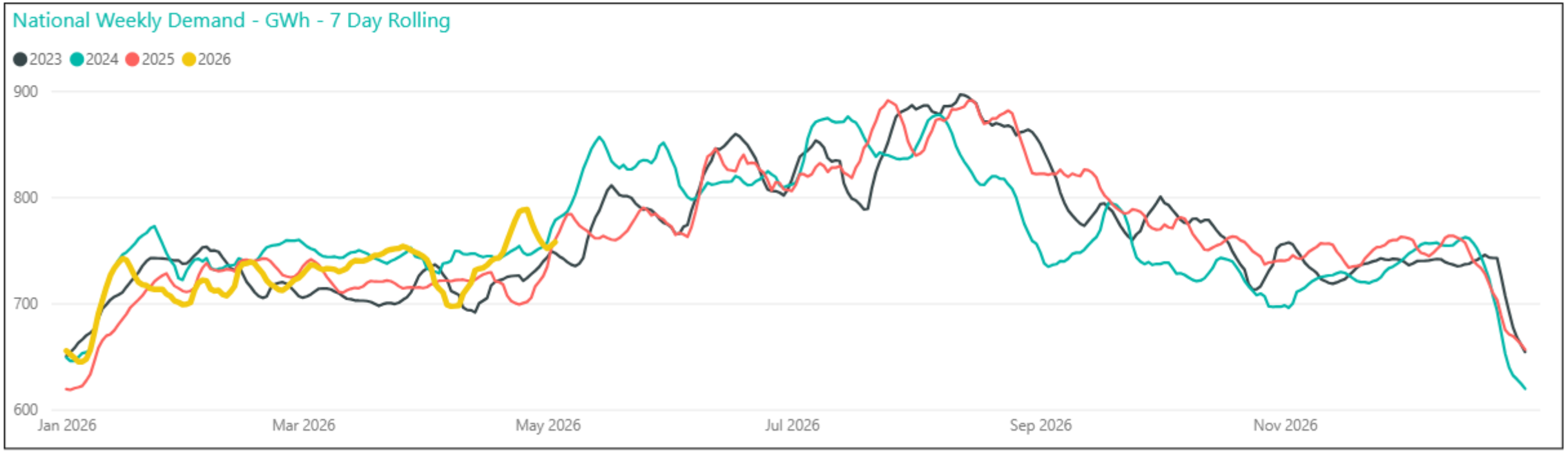






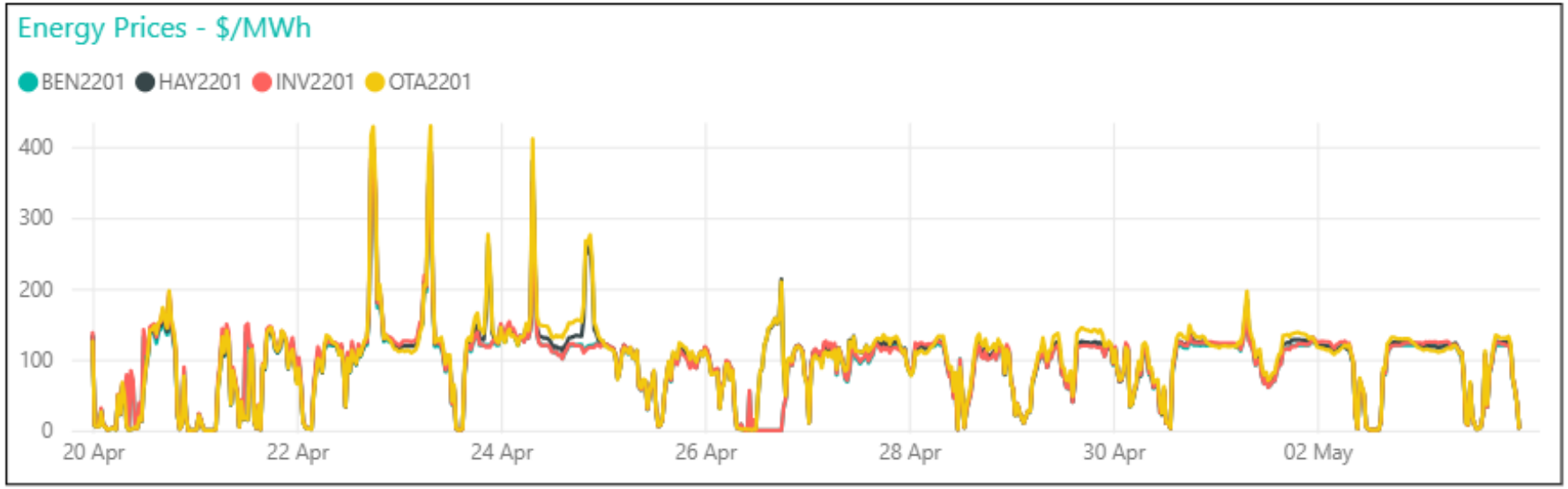
Demand

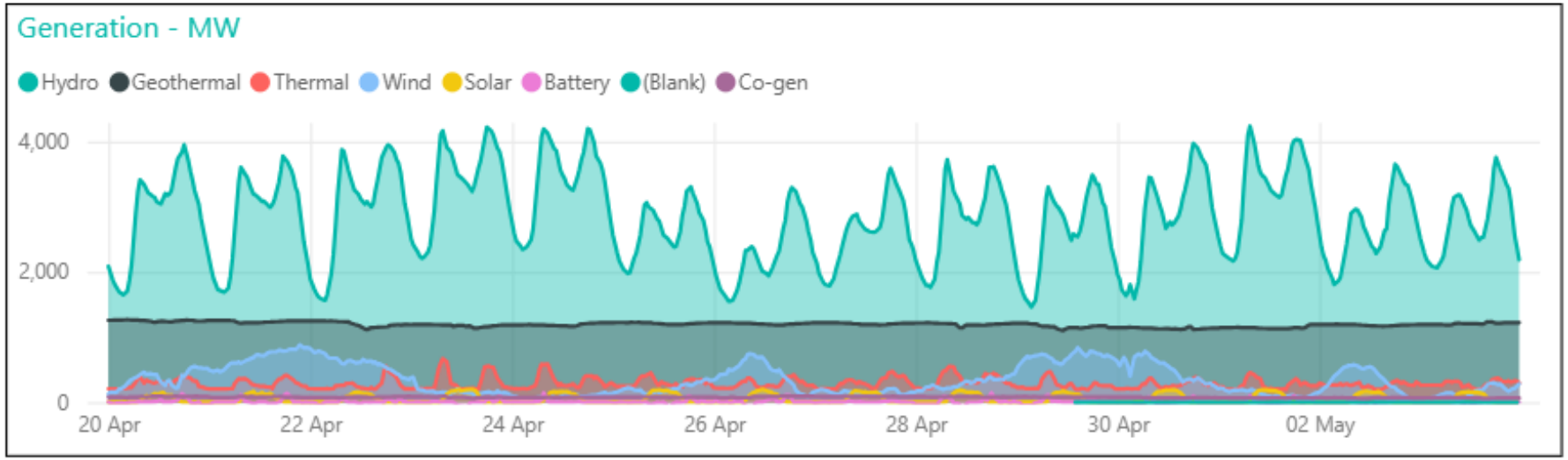
- Demand continues to increase with colder temperatures
- Last week saw some milder temperatures



Pricing

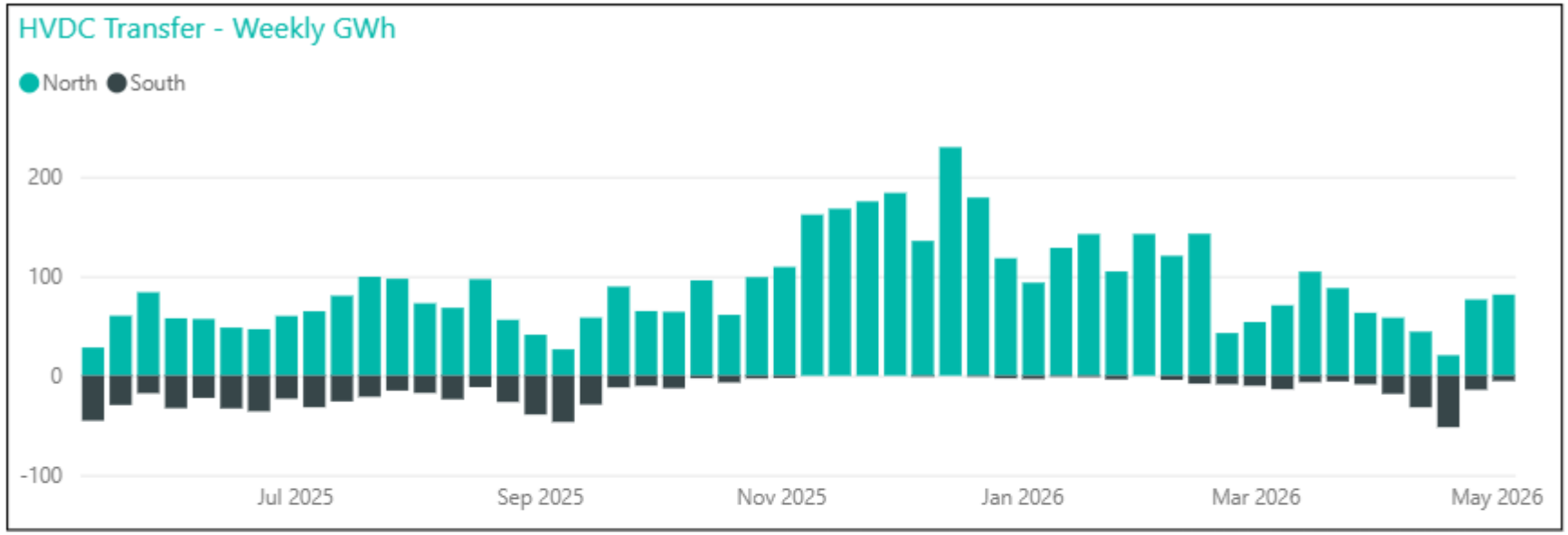
- Average price last week at Ōtāhuhu has remained at $101/MWh compared to the week prior
- Peak of $429/MWh at Ōtāhuhu at 7:30 am on 23 April during a high demand and low wind period
- There were several periods of high demand and high price periods causing thermal units to be switched on
- This is something we continue to monitor as we move into winter

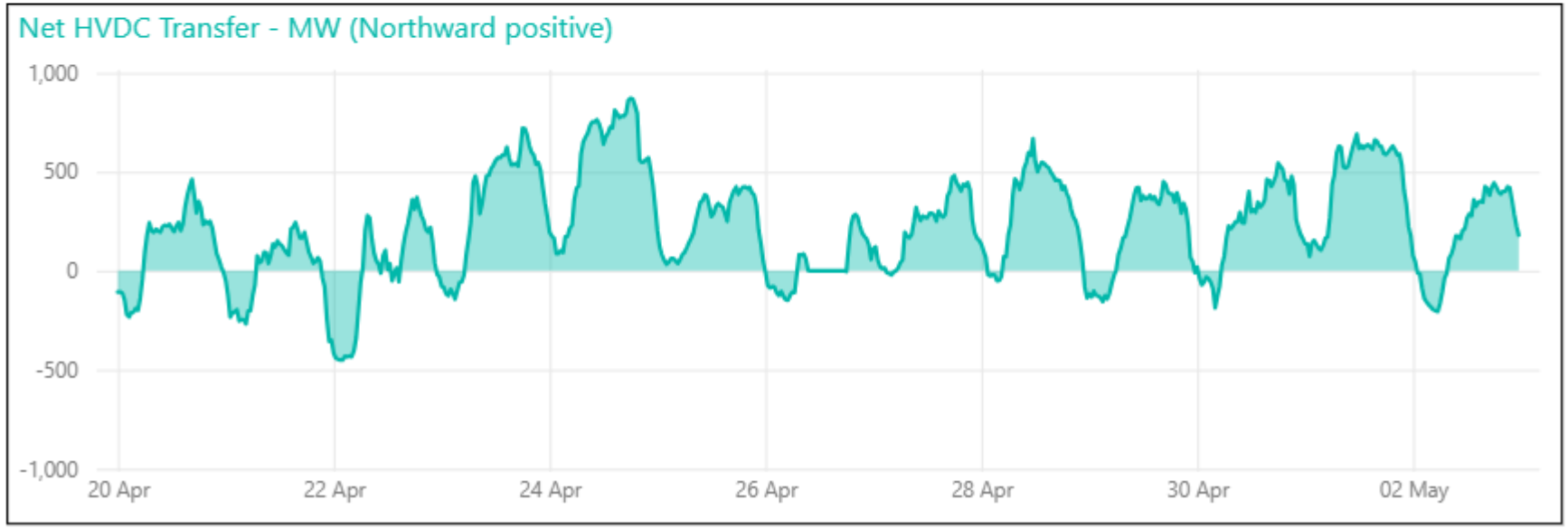




HVDC transfer

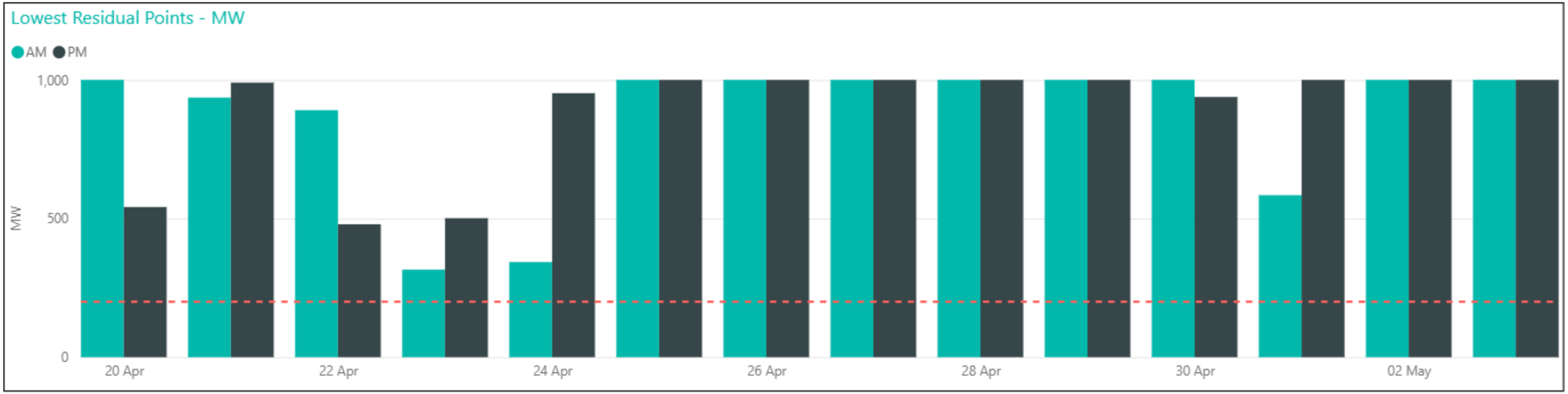
- HVDC transfer has been majority northward over the last couple weeks
- Improving hydro storage and tight demand periods switch on many hydro generators
- There was an HVDC bi-pole outage on the weekend of Sunday 26 April. This resulted in 0 HVDC flow for a brief period





Capacity residual margins

- Less than usual residual periods over the last couple of weeks
- Low wind and chilly peak periods

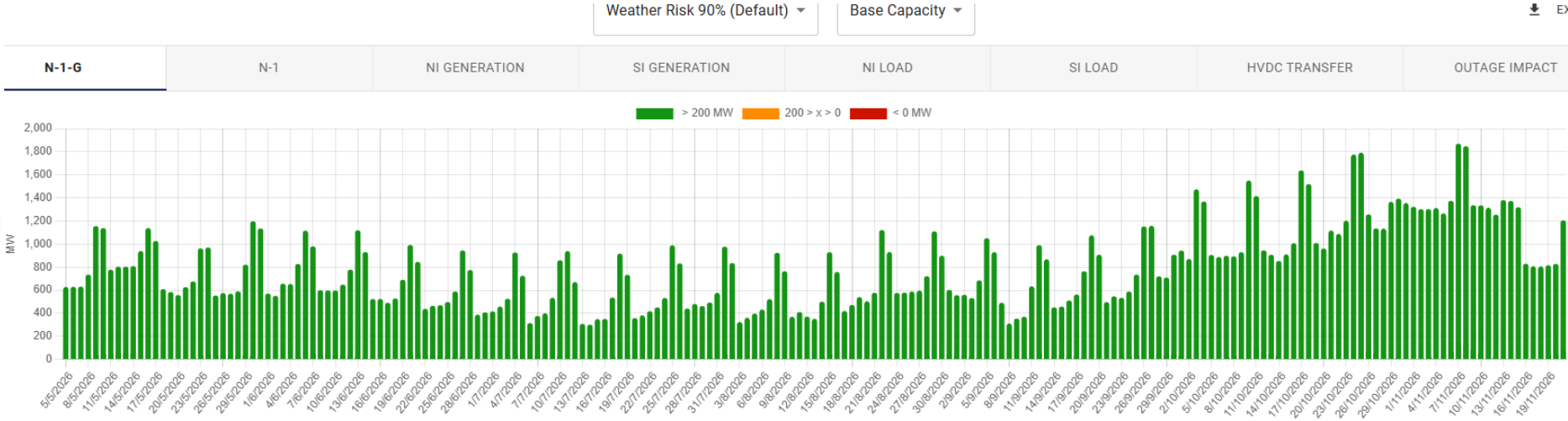


NZGB update

NZGB update: base capacity N-1-G

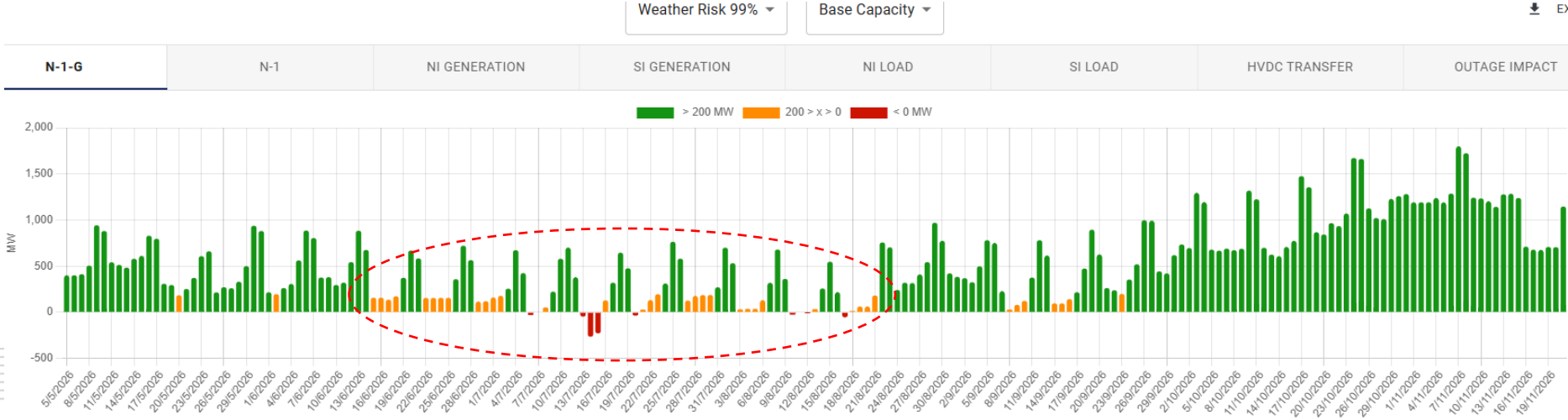
- N-1-G margins for 90th percentile load are currently showing healthy values
- Under the 99th percentile load, which we would expect under a cold snap, the margins drop substantially through the winter months and shows some shortfalls in mid July

90th percentile load



Base case capacity at 90%
- ***This triggers the CAN process***
- Assumes all generation available in POCP is offered
- It uses 20% of total wind capacity

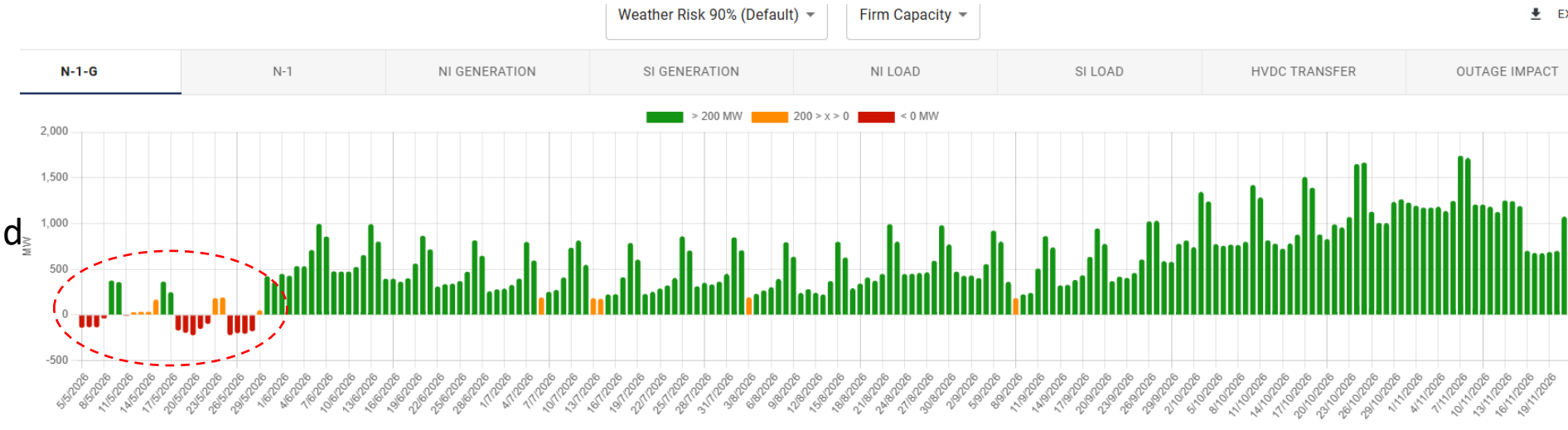
99th percentile load



NZGB update: firm capacity only N-1-G

- Firm capacity scenario reflects units that historically operate for at least 90% of AM & PM peaks.
- Any shortfall or low margin periods highlight the potential reliance on these units to be available to cover N-1-G
- This means we are relying on the market to coordinate especially slow starting thermal units, to get through high peak load periods

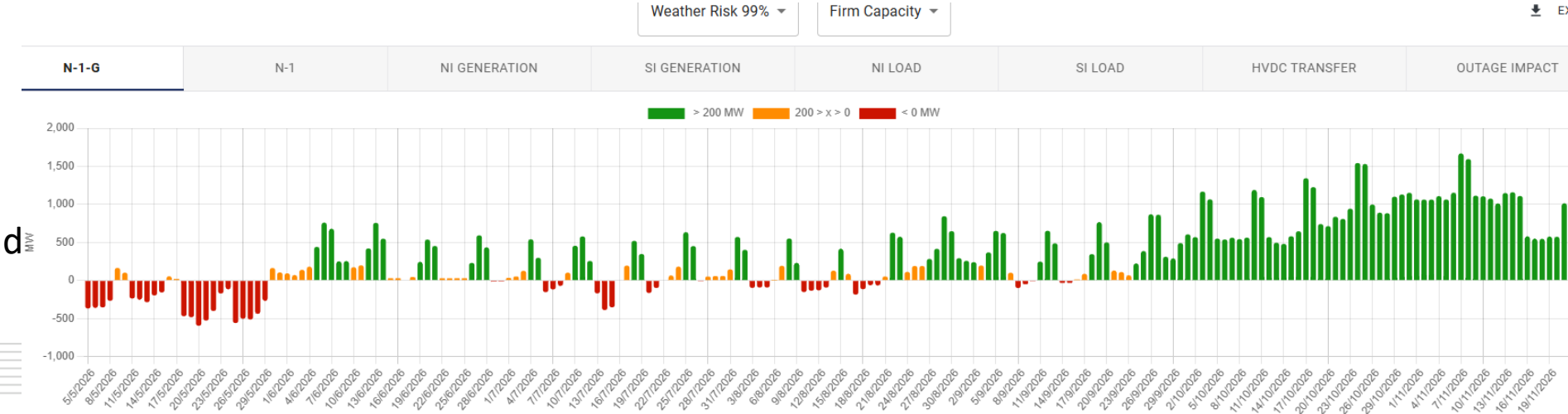
90th percentile load



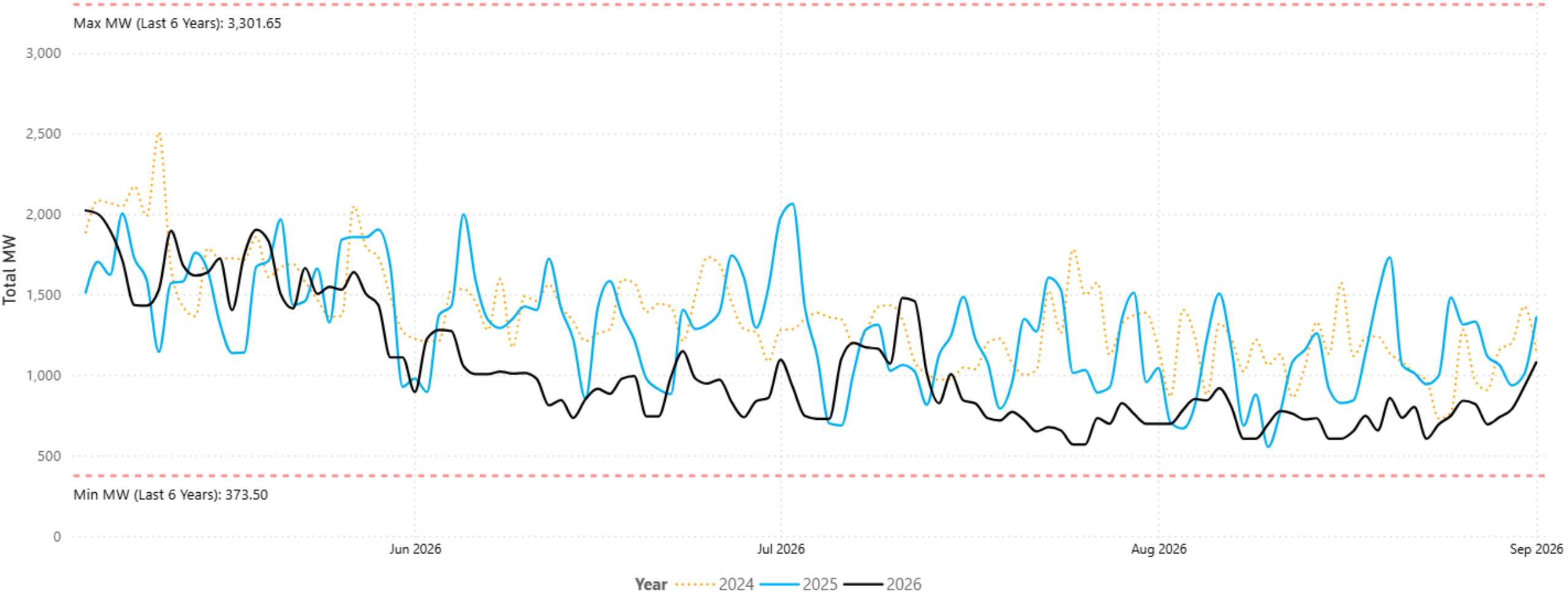
Firm capacity removes

- 1 HLY Rankine over winter months June to November, and 2 Rankines + HLY 5 over the remaining months
- It uses the lowest 10th percentile generation for wind (8% of total capacity)

99th percentile load



POCP Generation Outages



Mean Difference (2025/2026)

-255.67 MW

Mean % Difference (2025/2026)

-17.77%

Date

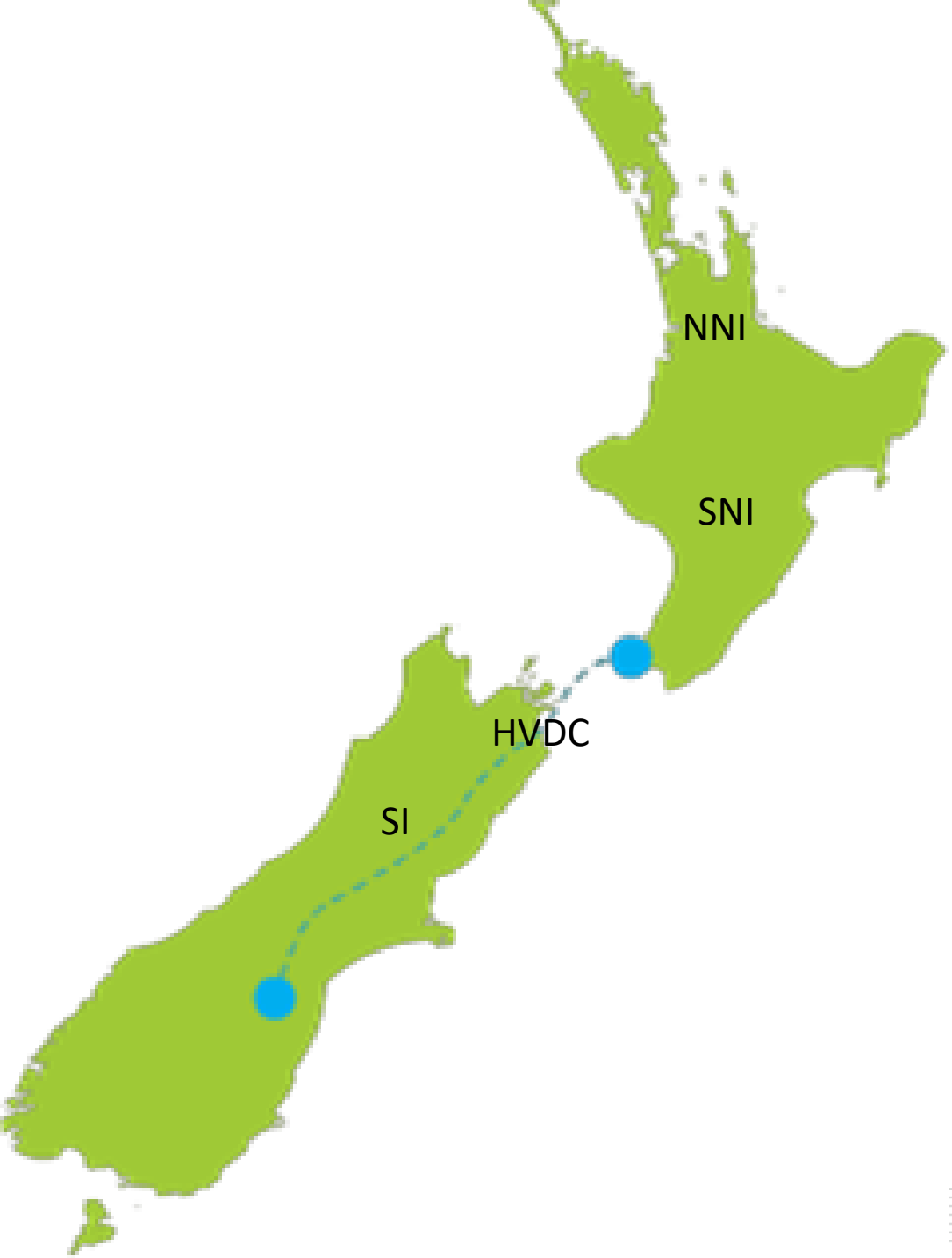
5/05/2026

1/09/2026

Year

- 2024
- 2025
- 2026

Outages next 4 weeks



Outages

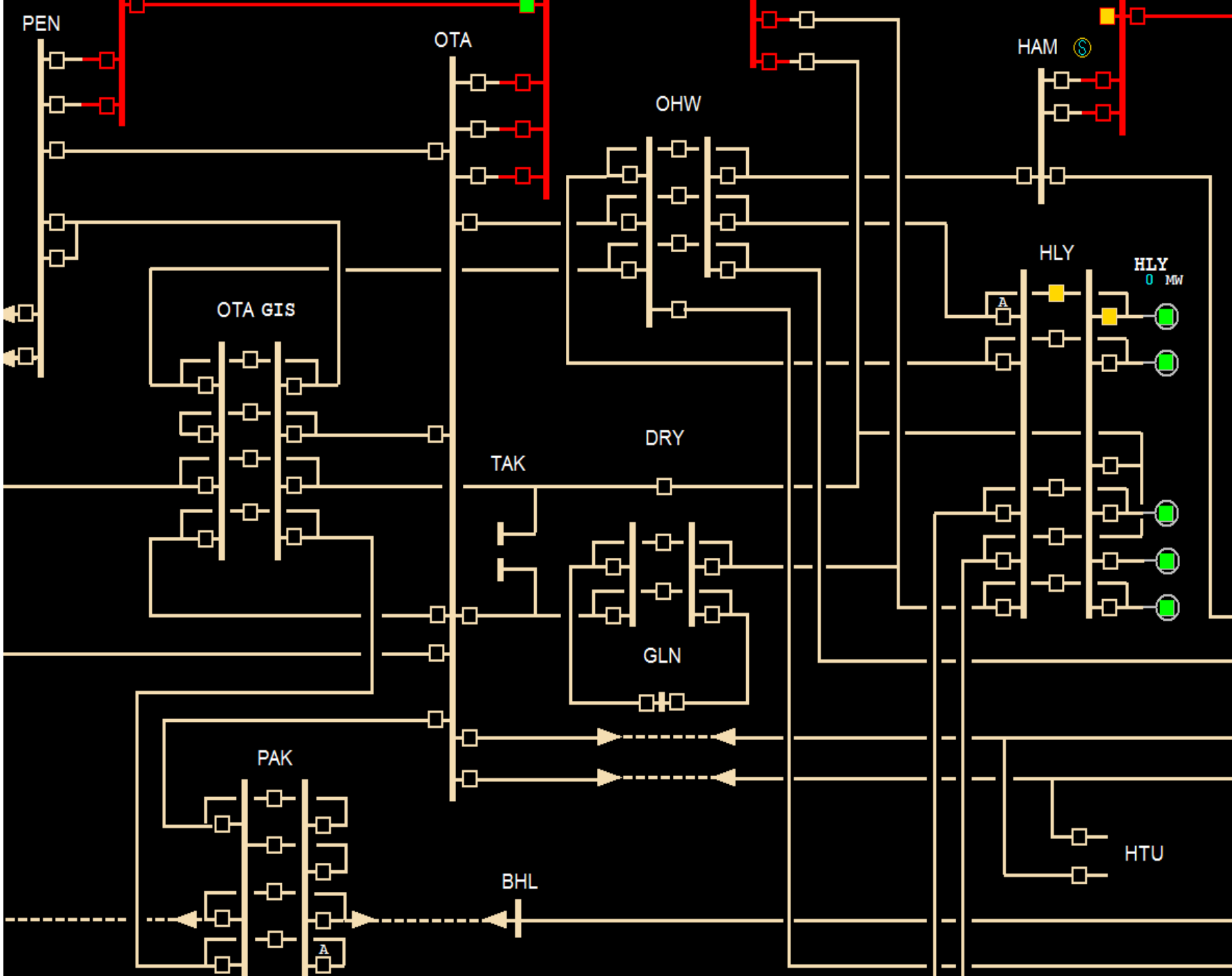
- NNI outages
- SNI outages
- SI outages

Asset owners

- Check in POCP for detailed dates
- Consider the impact on your own outages

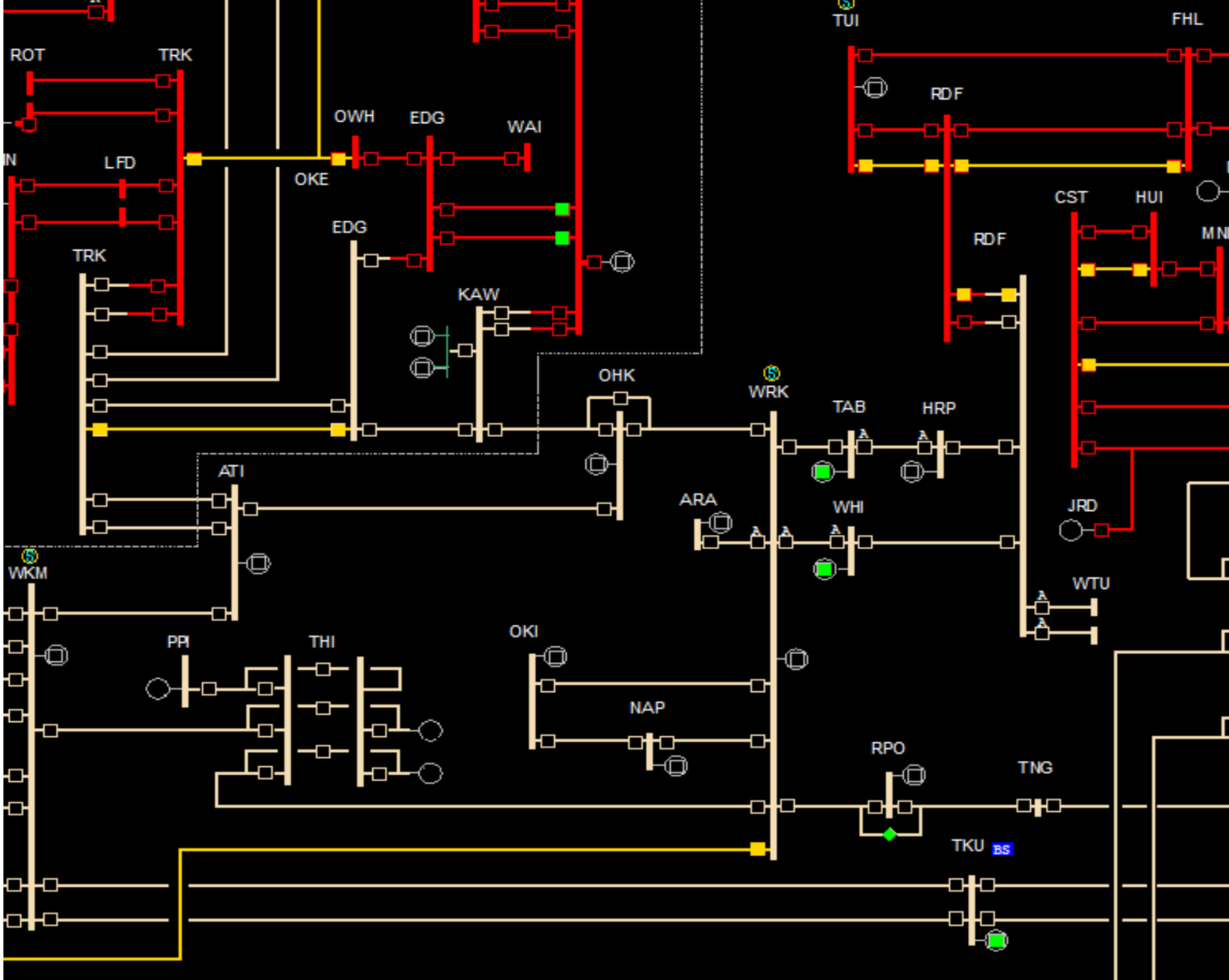
NNI Outages

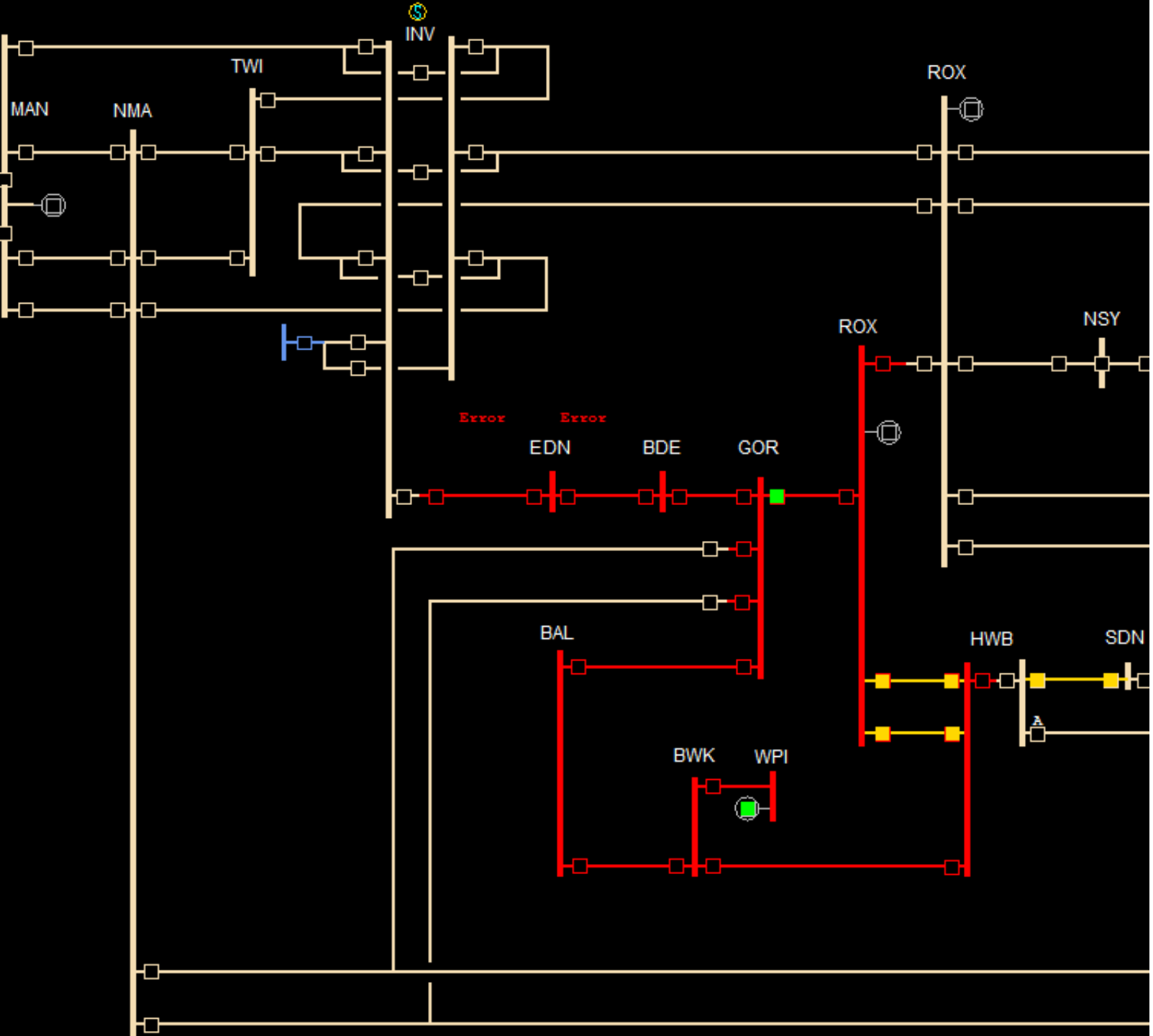
- Week of 11 May
  - EDG_T5
  - EDG_TRK_1
  - EDG_TRK_2
  - MNG_ROS_1
  - HAM Bus outages (weekend)
- Week of 18 May
  - EDG_T5
  - MNG_ROS_2
  - DRY_TAK_OTA_2
  - HAM Bus outages (weekend)
- Week of 25 May
  - EDG_T5
  - DRY_TAK_OTA_2
  - OHW_WKM_1
  - OTA_PEN_5
  - OTA_SWN_1
- Week of 1 June
  - EDG_T5
  - MNG_ROS_1
  - HOB_PEN_1



SNI Outages

- Week of 11 May
  - TKU_WKM_2
  - BPE_TKU_2
  - HAY_WIL_LTN_2
  - MGM_WDV_1
- Week of 18 May
  - TKU_WKM_1
  - BPE_TKU_1
  - RDF_TUI_1 & 2
- Week of 25 May
  - TKU_WKM_1
  - BPE_TKU_1
  - BRK_SFD_2
  - HAY_UHT_1
- Week of 1 June
  - HLY_SFD_1
  - FHL_TUI_1

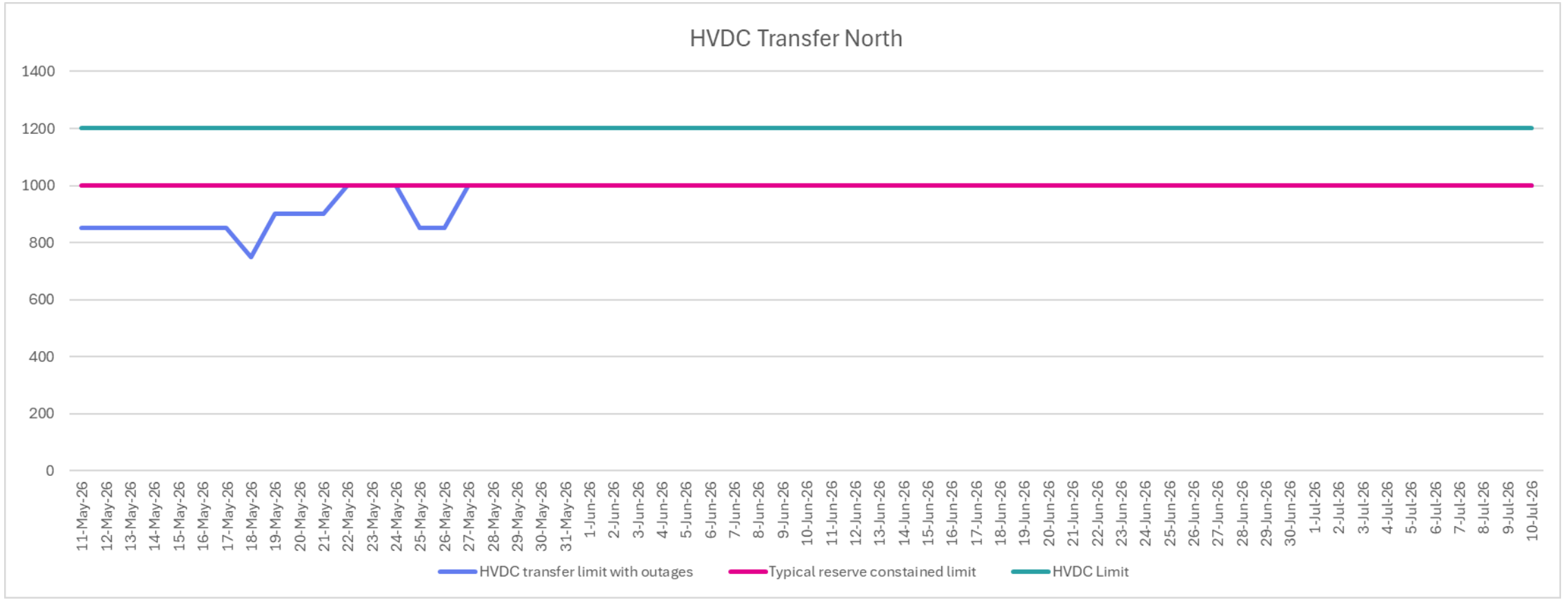




SI Outages

- Week of 11 May
  - INV_TWI_2
  - ISL_SBK_1, ASY_SBK_1, KAI_SBK_2
  - ISL_WPR_CUL_KIK_3
  - CML_FKN_1
- Week of 18 May
  - AVI_BEN_2
  - ISL_SBK_1, ASY_SBK_1, KAI_SBK_2
  - OAM_STU_BPD_WTK_2
- Week of 25 May
  - AVI_BEN_2
  - INV_ROX_1
  - ISL_TKB_1
  - HKK_KUM_1 then HKK_OTI_2
- Week of 1 June
  - HOR_KBY_ISL_2
  - ISL_WPR_CUL_KIK_2

HVDC North transfer limit



Operational update

HVDC Outages 26-27 April

- The first Pole 2 line restart happened at 18:27 on the 23rd April
- Pole 2 was changed to reduced voltage at 20:47, and remained in that mode for the remainder of that night
- An inspection of Pole 2 was organised for the next day
- A further 3 restarts occurred the next day with Pole 2 again being operated in reduced voltage overnight from 19:53 on the 24th
- The inspection identified faulty insulators on both Poles on one tower in the upper South Island and spares were organised to be sent from Bunnythorpe

HVDC Outages 26-27 April

- A 6 hour outage of each pole was required to replace the insulators. This was organised for Sunday/Monday when conditions looked most suitable for the outages to occur.

- Pole 2 was to be repaired first due to the re-occurring re-starts.

- When the service providers went to start work on Pole 2 Sunday they observed excessive corona and raised concerns about possible flashovers from the faulty Pole 3 insulators, due to be replaced Monday

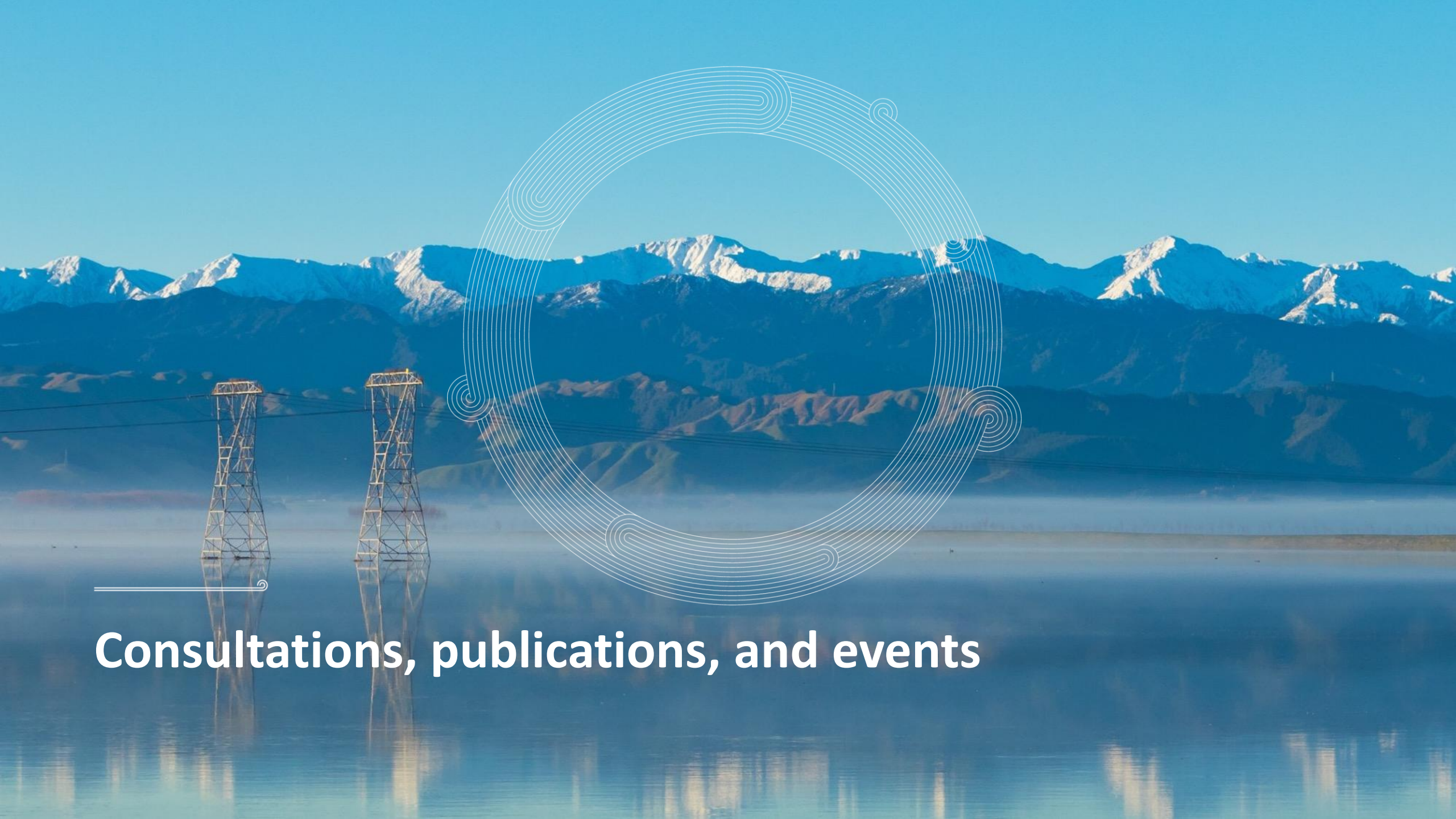
- A Bipole outage was then initiated to allow the faulty Pole 2 insulators to be replaced

- The Pole 3 outage went ahead Monday to complete all the required insulator strain replacements

Emergency Reserve – industry co-design panel EOI

Emergency Reserve – industry co-design panel

- Emergency Reserve as a new Ancillary Service.
- Paid demand response during acute system stress events.
- Enabled by EA Code amendment effective 1 March 2026.
- System Operator to establish by the end 2026.
- We seek experts for an industry co-design panel:
  - workshops May-July 2026,
  - some occasional support/review as required.
- EOI published, Expressions of Interest from potential panel members by Wednesday 20 May.
- Information is on our website or if you have questions contact system.operator@transpower.co.nz.



Consultations, publications, and events

Consultations, publications, and events

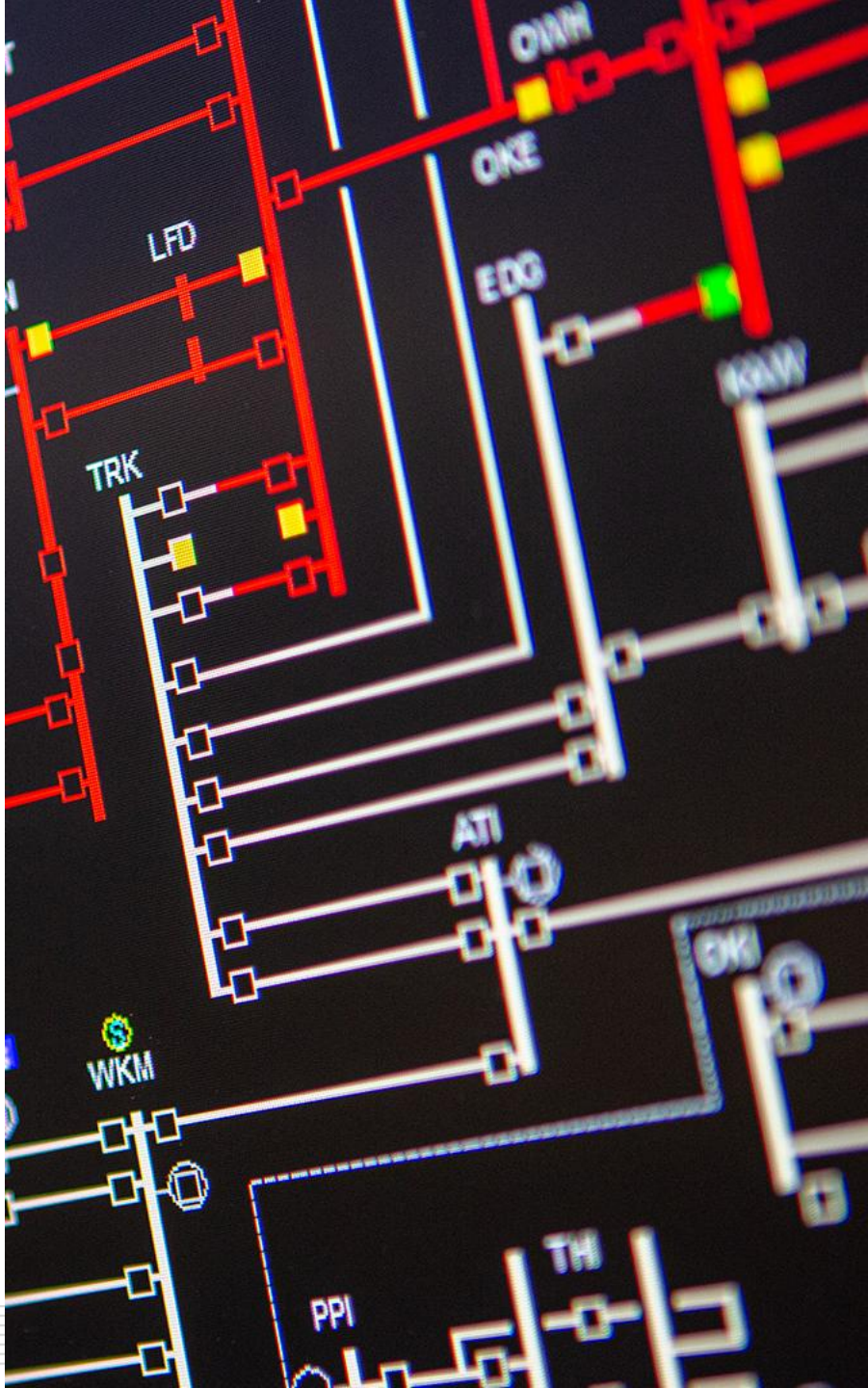
Our draft **SOSA 2026 consultation** is open for submissions until Thursday 14 May followed by a week for cross submissions.

Emergency Reserve industry co-design panel EOI documents are available on our website, and open for expressions of interest until Wednesday 20 May.

Last week we published the April **Energy Security Outlook** which is available on our website

Industry Exercise 2026 pre-briefing webinar is on 12 May, with the exercise to take place 20-21 May. More information is available on our website.

System Operator Engineering Forum will be held on 1 July 2026, invites will be sent out this week. Contact us on system.operator@transpower.co.nz if you have any questions.



Questions / Pātai

Please raise your hand

If you have feedback let us know via our **Feedback Form**

TRANSPOWER.CO.NZ