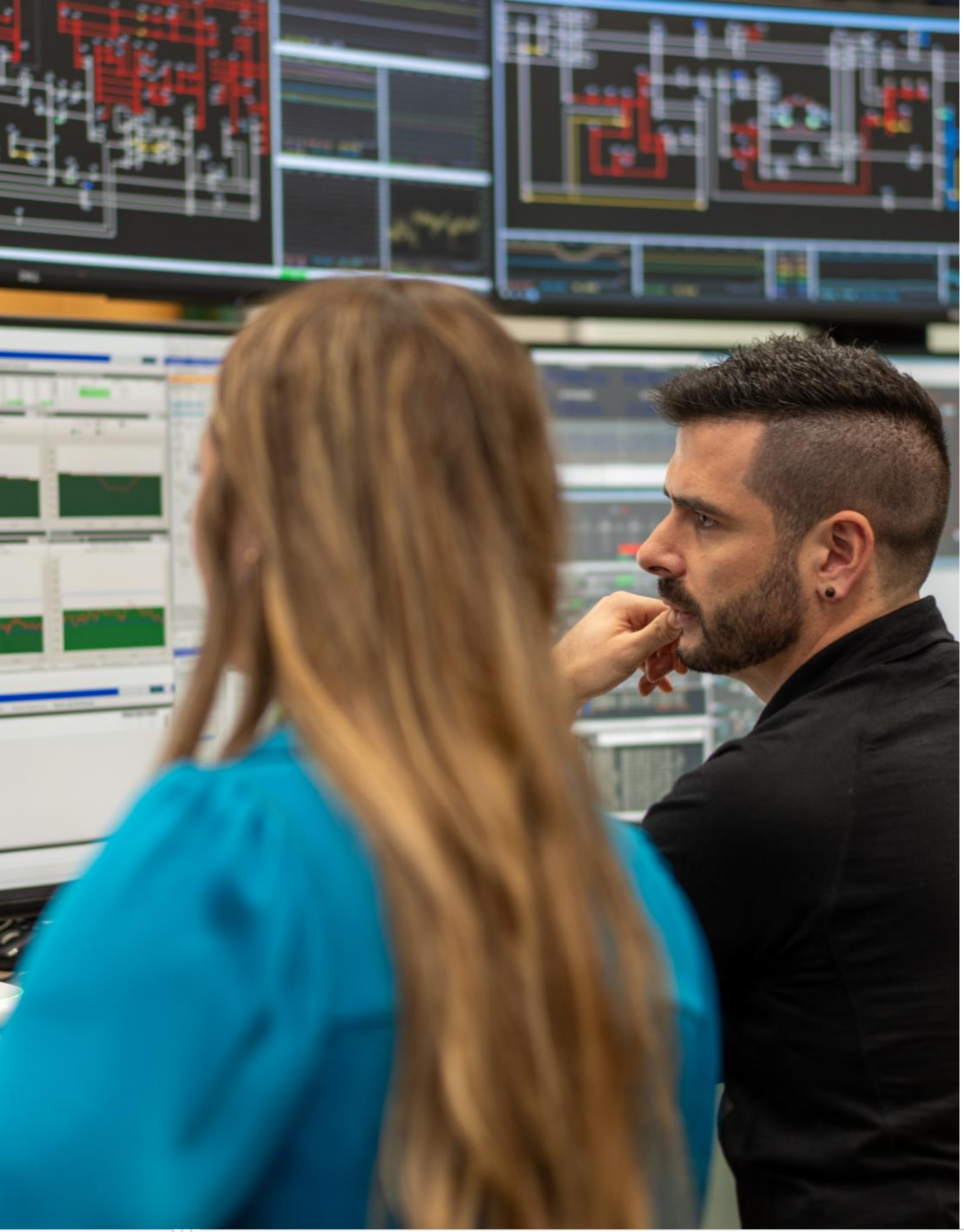
TRANSPOWER

System Operator Industry Forum

7 April 2026

Today’s agenda

- Key messages
- Market update
- NZGB update
- Outage update – next four weeks
- Operational update
- Consultations, publications and events
- Questions / Pātai



Key Messages

- National hydro storage is around average after some inflows, particularly in the North Island.
- Thermal fuel storage (coal and gas) remain high.
- Note NZGB potential capacity risks from July. Plant availability and flexibility remains a focus for industry during these times.
- We are watching the possible trajectories of Cyclone Vaianu for the coming days
- We will be holding a special forum in preparation for Winter 2026 on Tuesday 28 April. More details to come.

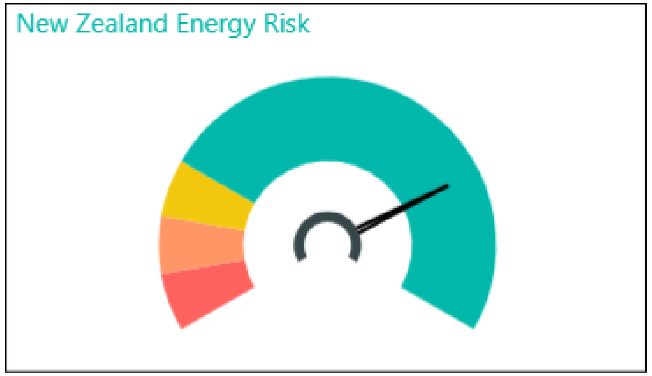
Market update

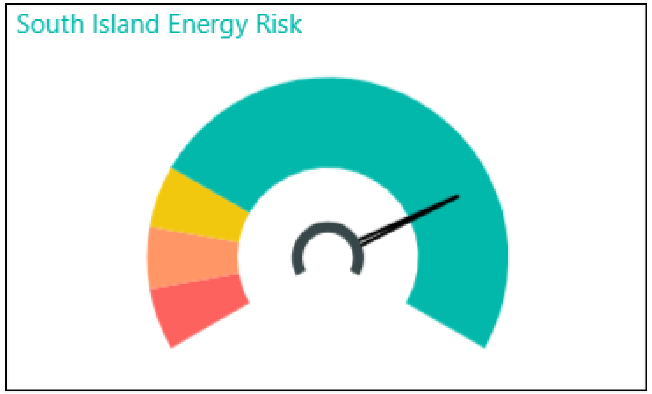
Energy: National hydro storage

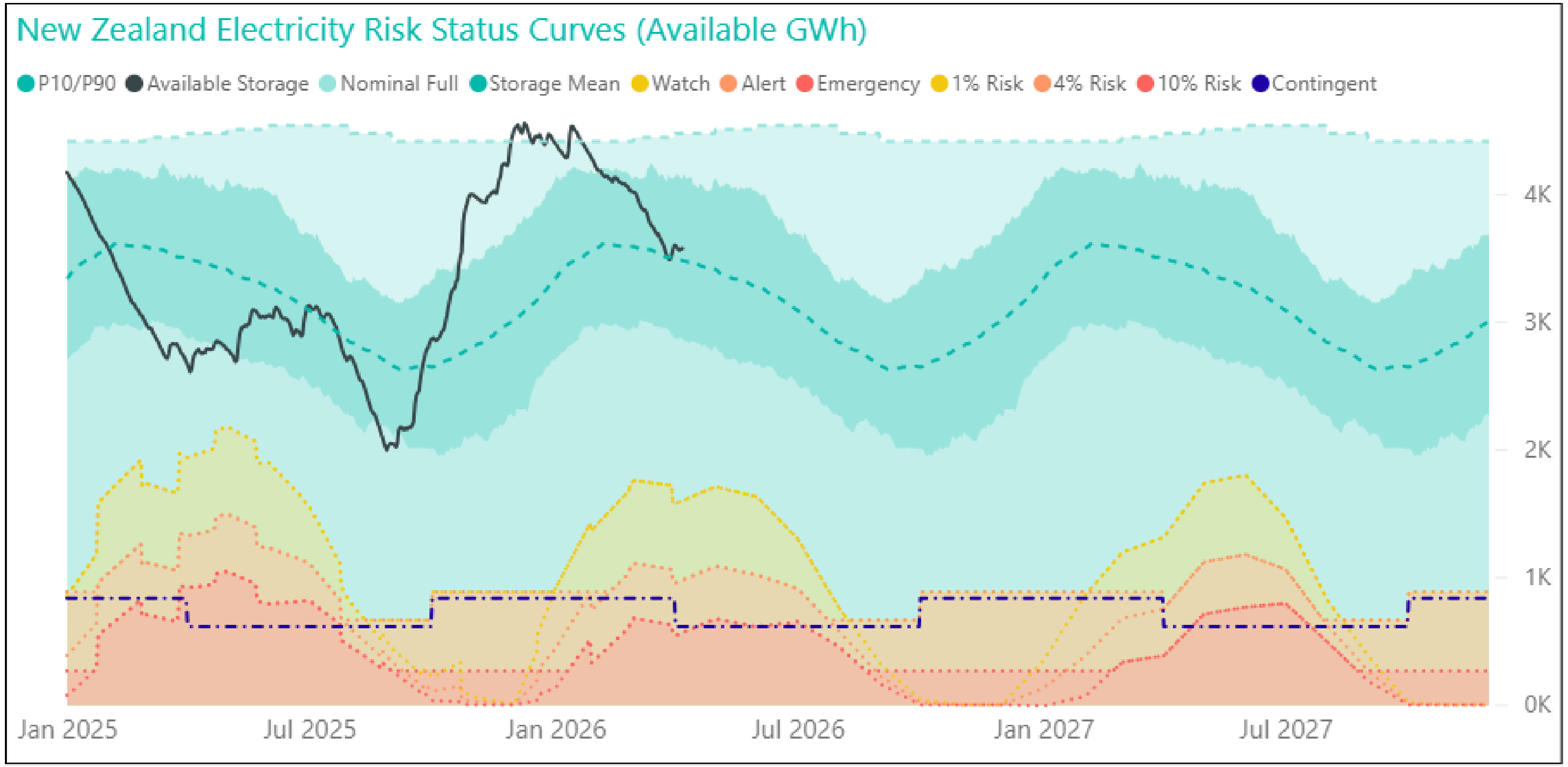
National storage has decreased slightly and is currently just above historic average for this time of year

	Hydro storage level (% of mean ▲/▼)		
	New Zealand	South Island	North Island
Last forum	102%	97%	173%
Now	102% ▲	96% ▼	185% ▲

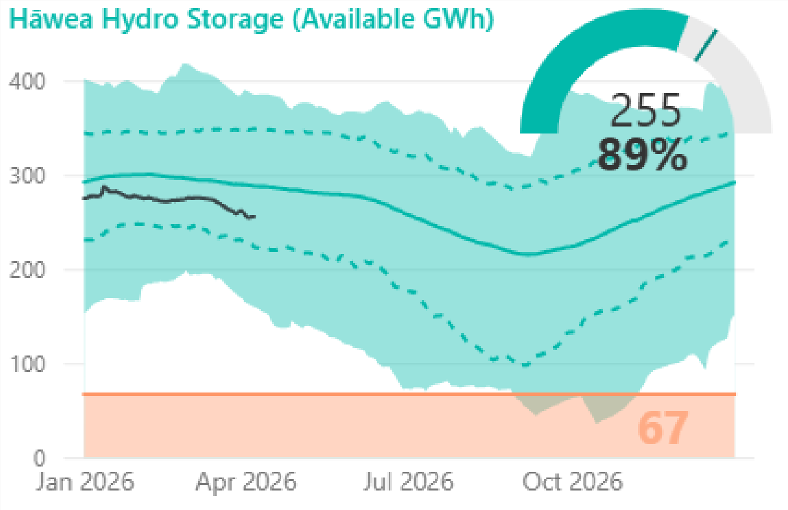
Note: these numbers include contingent storage, so they differ from those reported by NZX

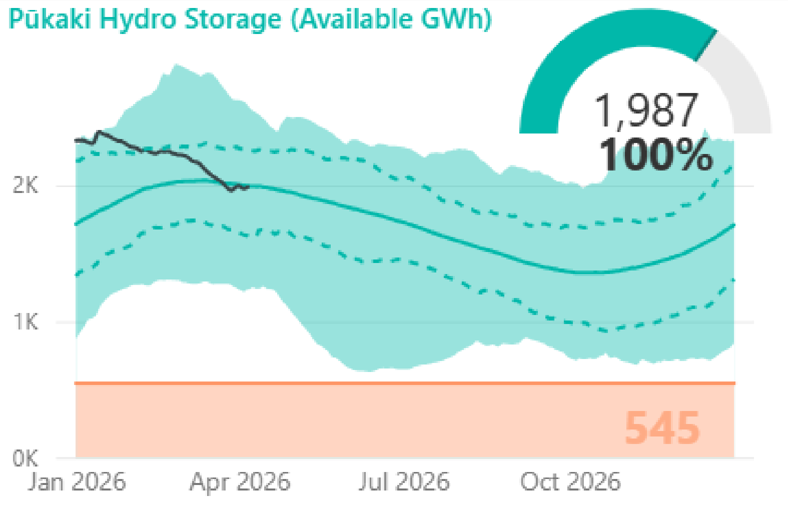


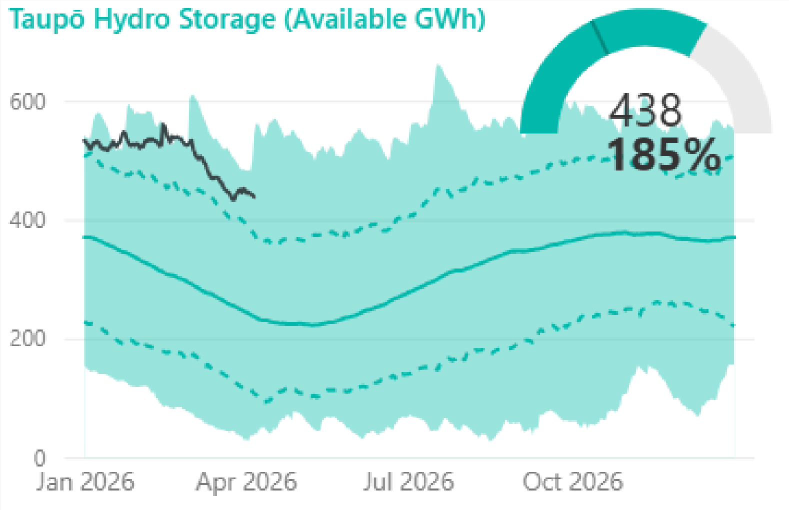


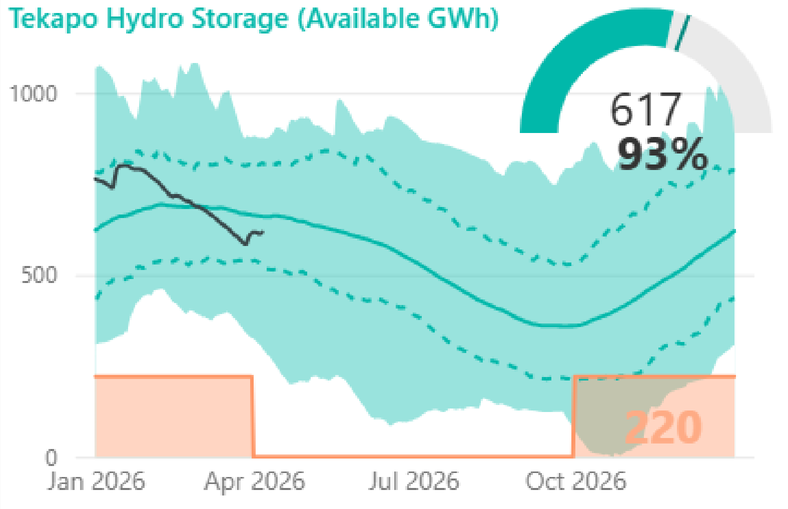


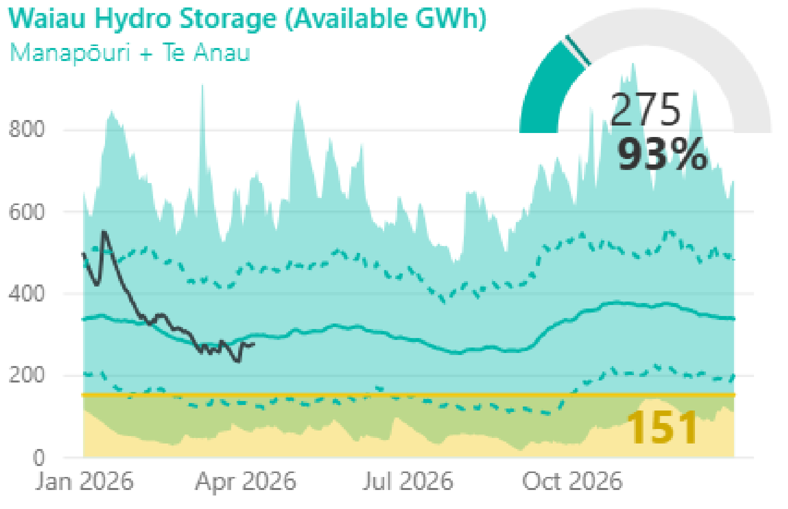
Hydro storage by catchment











Lake	Storage (%)	Storage (GWh)	Historic Mean
Hāwea	89%	255.45	287.92
Manapōuri	158%	160.88	101.56
NZ	103%	3,572.26	3,476.86
Pūkaki	100%	1,986.89	1,995.40
SI	97%	3,134.06	3,239.56
Taupō	185%	438.20	237.30
Te Anau	59%	114.22	194.45
Tekapo	93%	616.62	660.23

Energy Security Outlook
NZ base case

Changes this update:

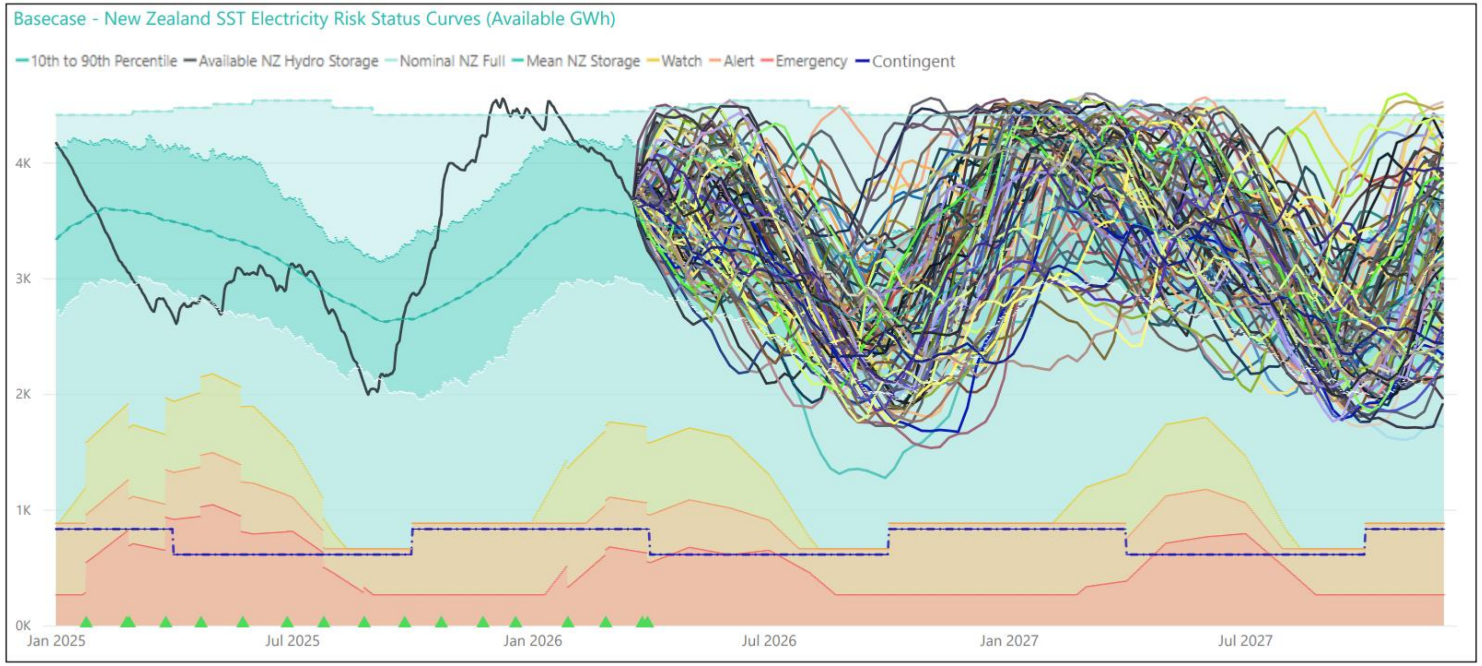
- Updated AGS gas storage – near full
- Gas reallocation from industrial to electricity generation
- Coal stockpile also near full
- Hydro back to average
- Updated outages and commissionings

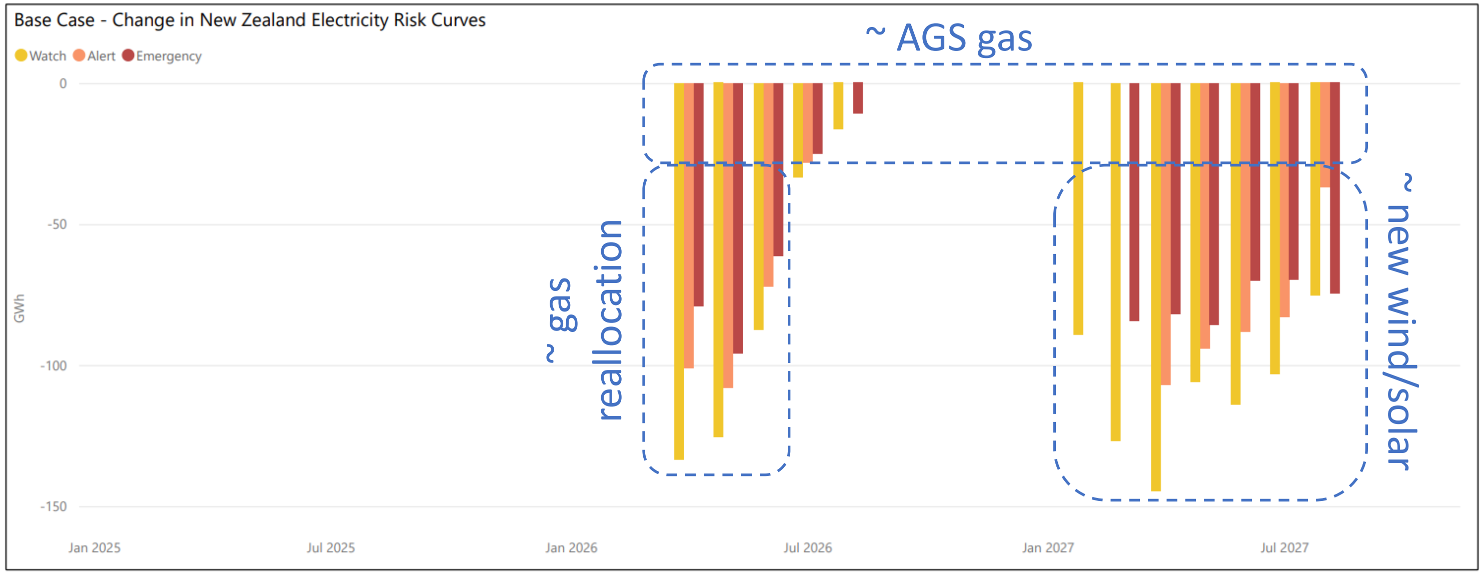
Decreases of up to:

- 140 GWh Watch (April 2027)
- 100 GWh Emergency (May 2026)

SSTs (94 total) crossing NZ:

	Watch	Alert	Emergency
2026	0	0	0
2027	0	0	0





Energy Security Outlook South Island base case

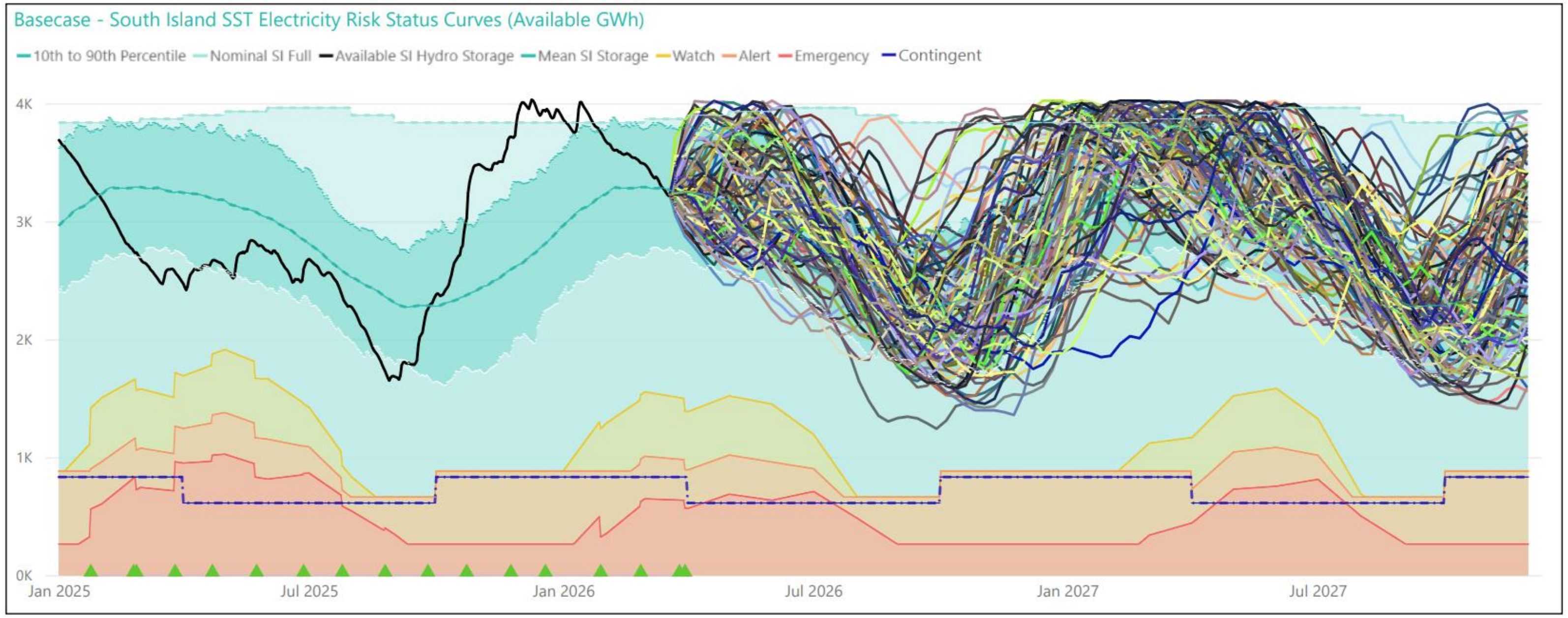
Assumes the market continues to supplement existing fuel storage to provide increased thermal generation as needed during low hydro sequences.

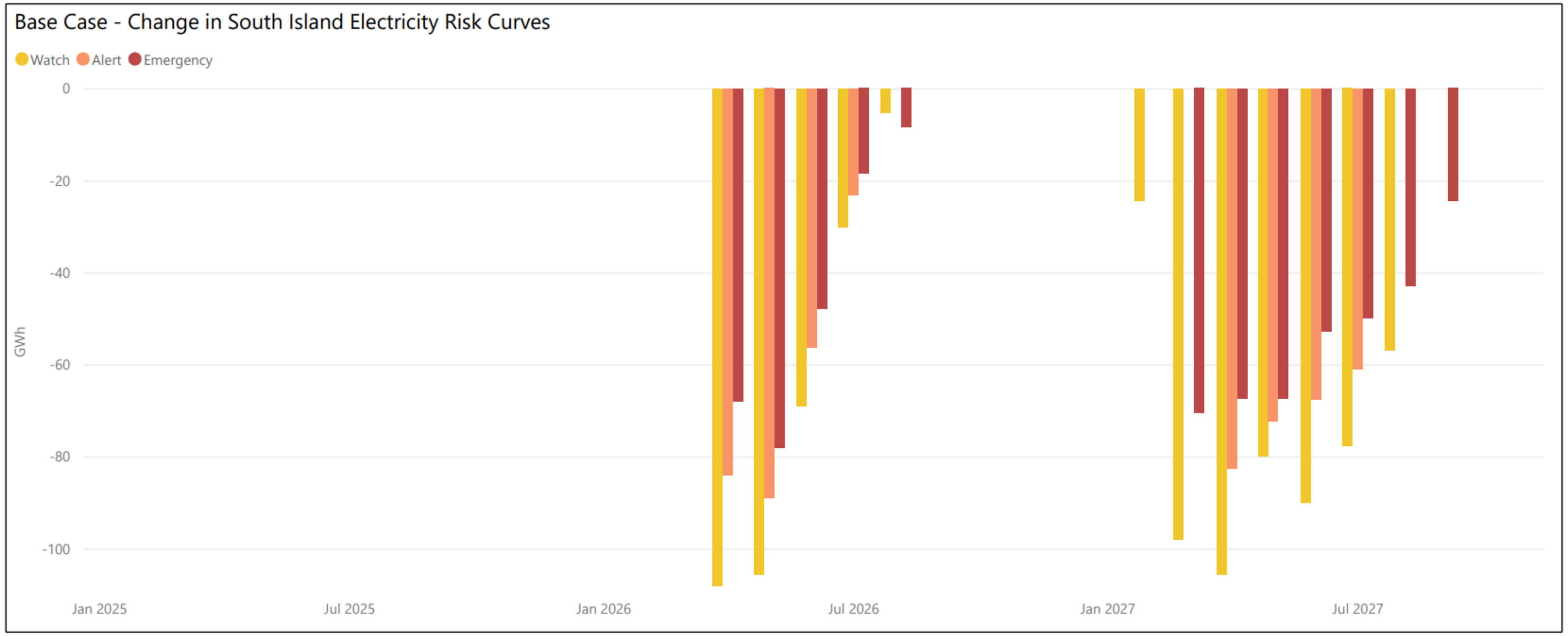
Decreases of up to:

- 110 GWh Watch (April 2026)
- 80 GWh Emergency (May 2026)

SSTs (94 total) crossing NZ:

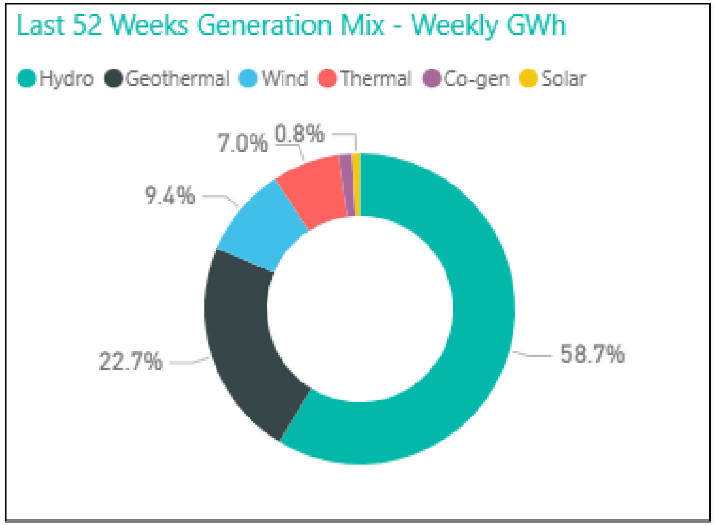
	Watch	Alert	Emergency
2026	0	0	0
2027	0	0	0

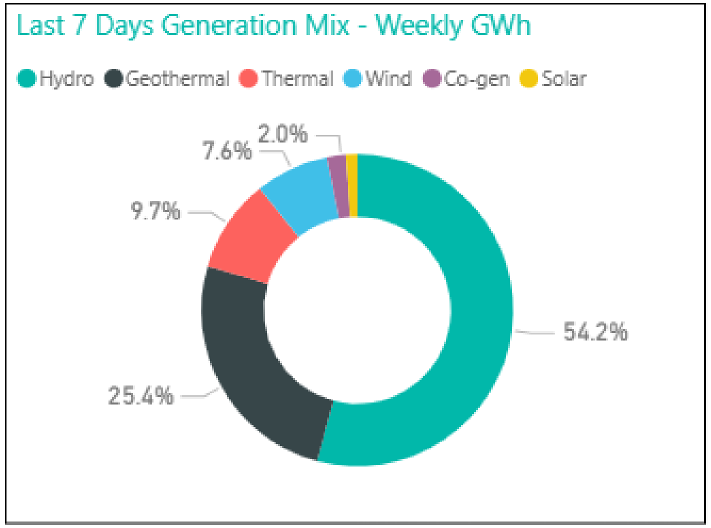


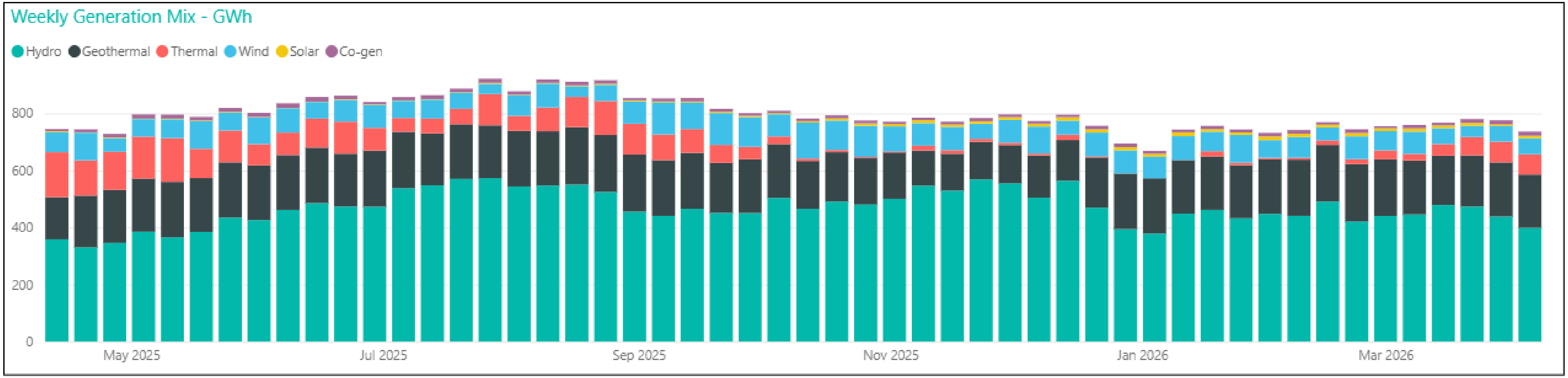


Generation mix

- Hydro generation below average at 54% over the last week
- Thermal generation was above average at 10% of the mix
- Renewable share dropped to 88% with increasing thermal generation
- Geothermal higher than average and wind generation below average

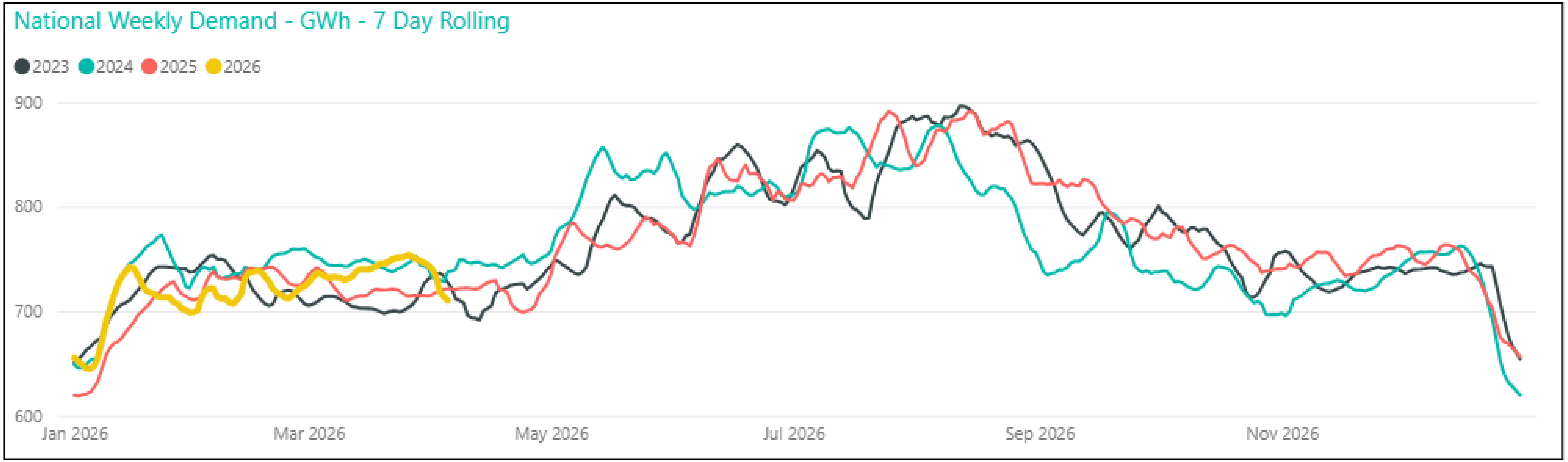






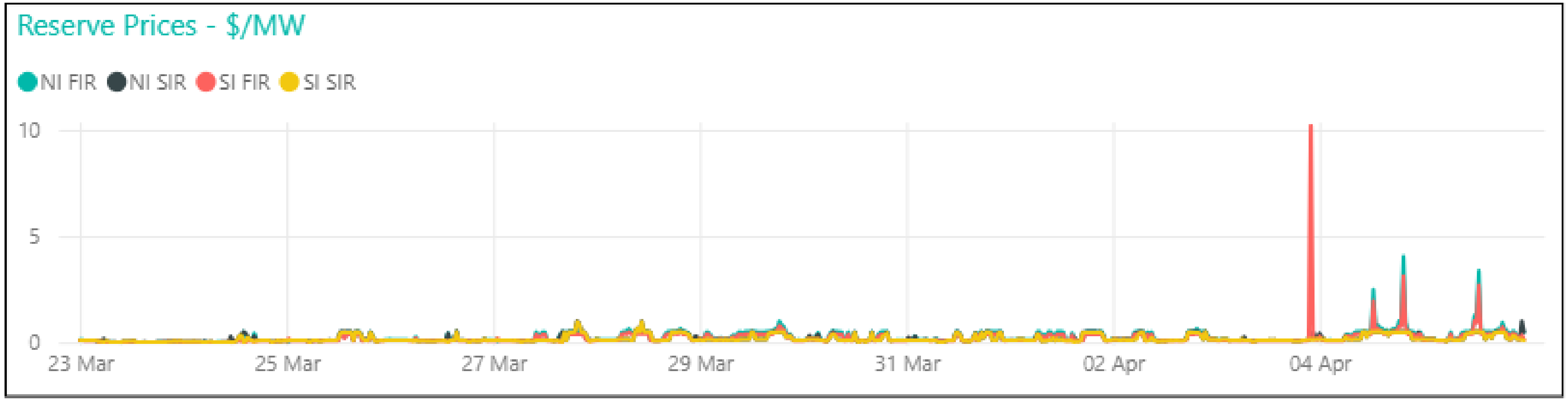
Demand

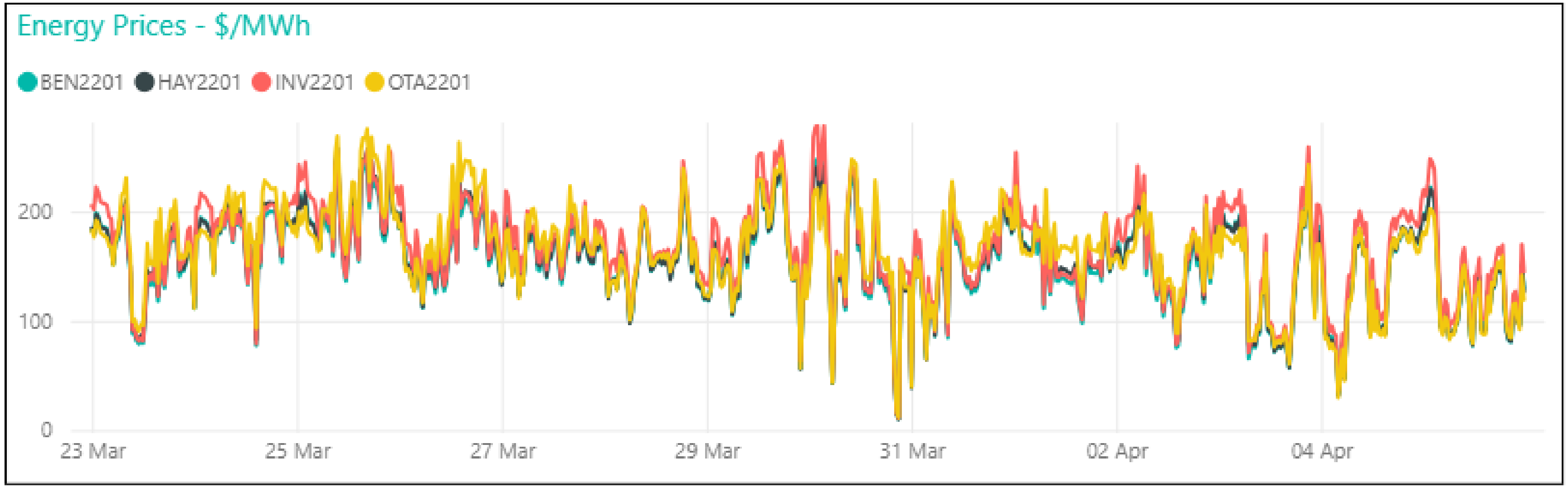
- Demand dipped to lower than recent levels in line with milder weather.
- Sitting below average demand for this time of year in the past three years.



Pricing

- Increased North Island generation – new geothermal, wind, solar, and increased thermal have pushed SI reference price nodes above typical NI maximums. This helps to reduce reliance on south island hydro and is arresting the storage decline earlier than previous years.
- Average price at Invercargill last week decreased to $155/MWh
- Decreased demand, declining hydro storage and increased thermal generation
- Peak of $278/MWh at Invercargill, 2:00 am on 30 March during a period of high southward transfer



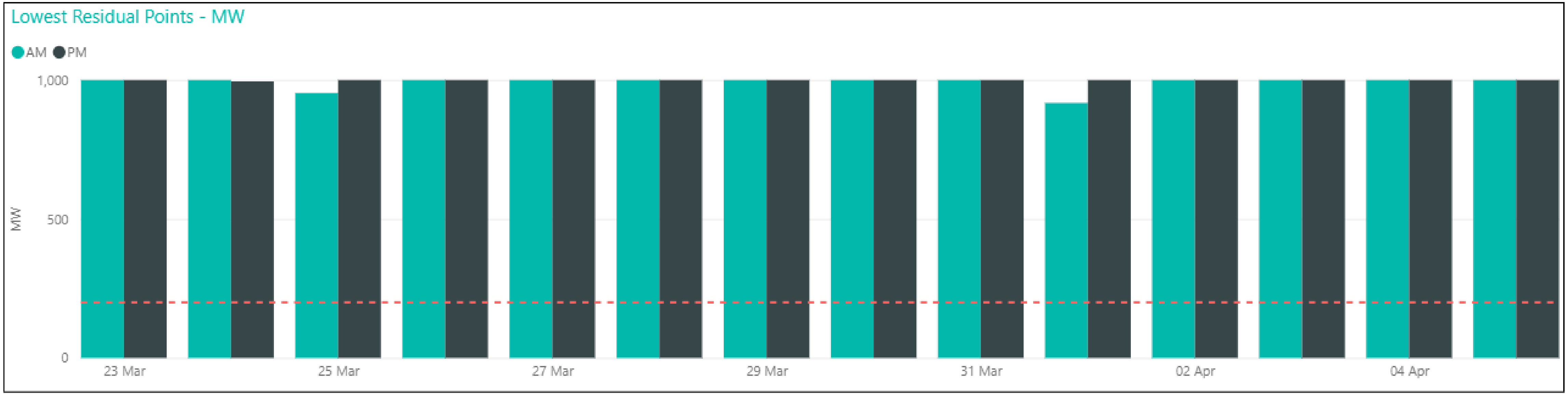


HVDC transfer

- Increasing periods of southward transfer during periods of low overnight demand and increased North Island thermal generation
- Past fortnight 109 GWh sent north, 25 GWh sent south

Capacity residual margins

- Residuals continue to be healthy, above 900 MW
- In line with milder weather and increased thermal generation

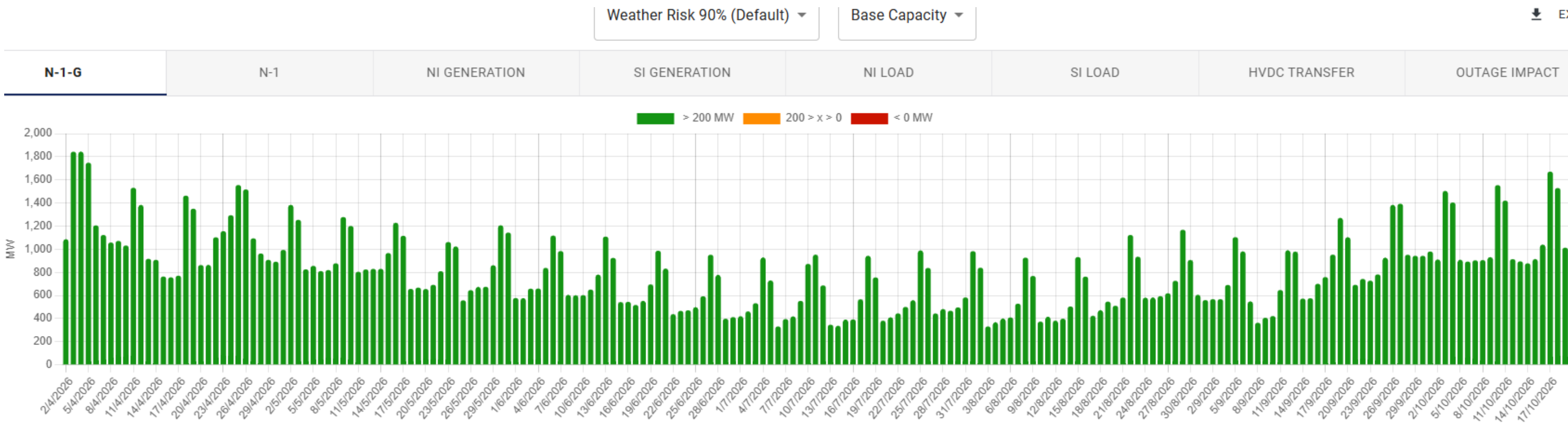


NZGB update

NZGB update: base capacity N-1-G

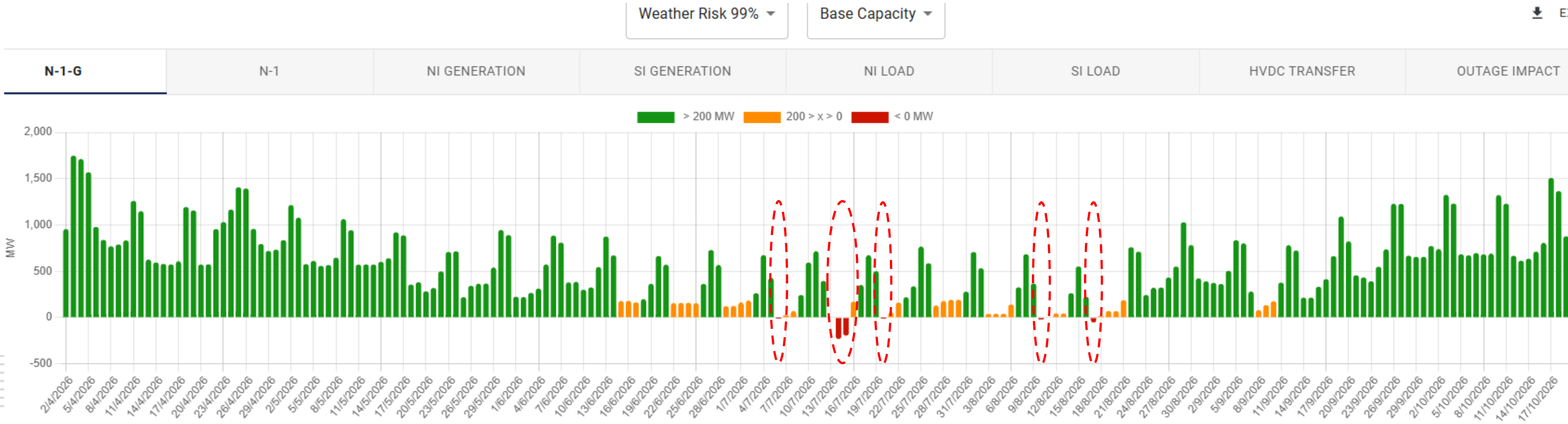
- N-1-G margins for 90th percentile load are currently showing healthy values
- Under the 99th percentile load, which we would expect under a cold snap, the margins drop substantially through the winter months and shows some shortfalls in mid July

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

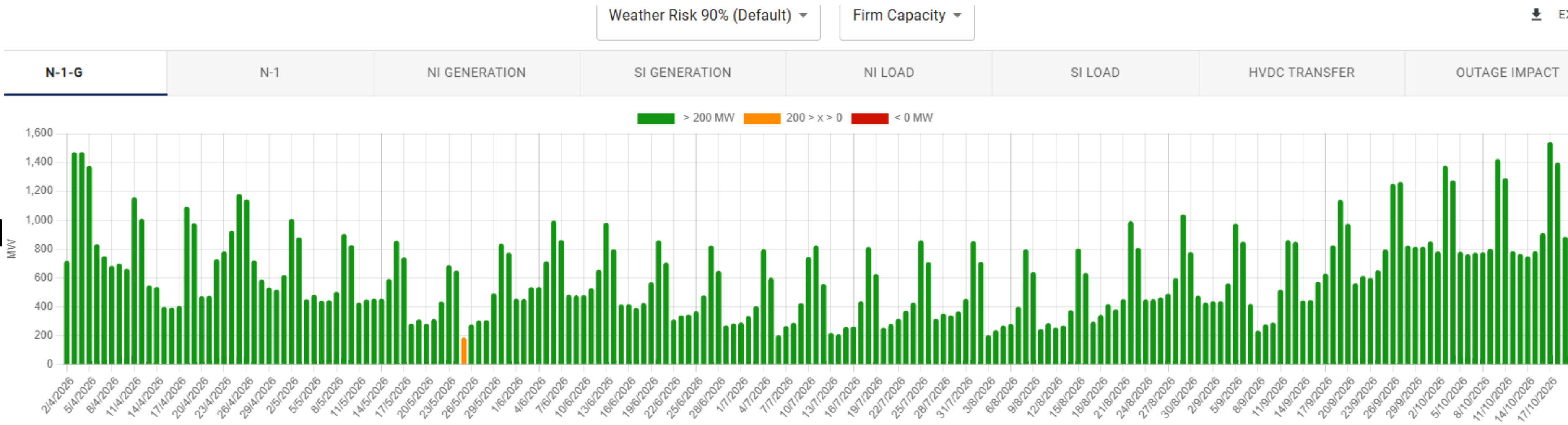
99th percentile load



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

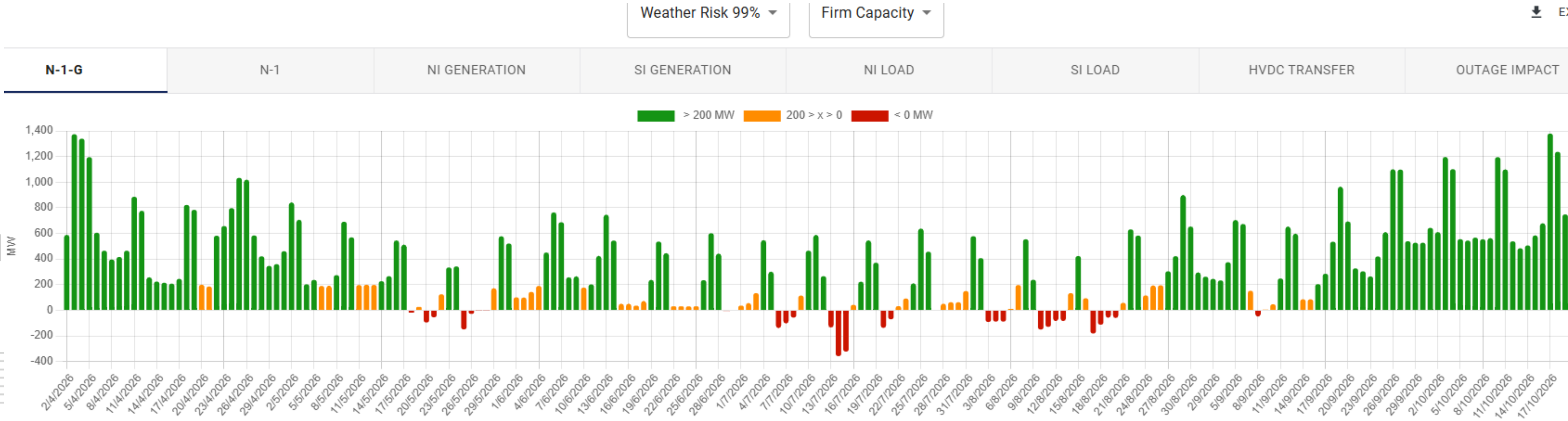
90th percentile load



Firm capacity <u>removes</u>

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

99th percentile load



NZGB update: Information

Recommendations from SO:

- Avoid further outages during periods with low margins
- Market coordination is required from industry to ensure available generation capacity remains high to cover potential cold snaps
- Consider the timing of outages and consider which outages may be able to be delayed in the event of low margins in real-time
- Keep POCP updated with scheduled or tentative outages
- Keep the WDS up to date with the latest offers
- Any other information on plant availability, please contact the SO

Outages next 4 weeks

Outages

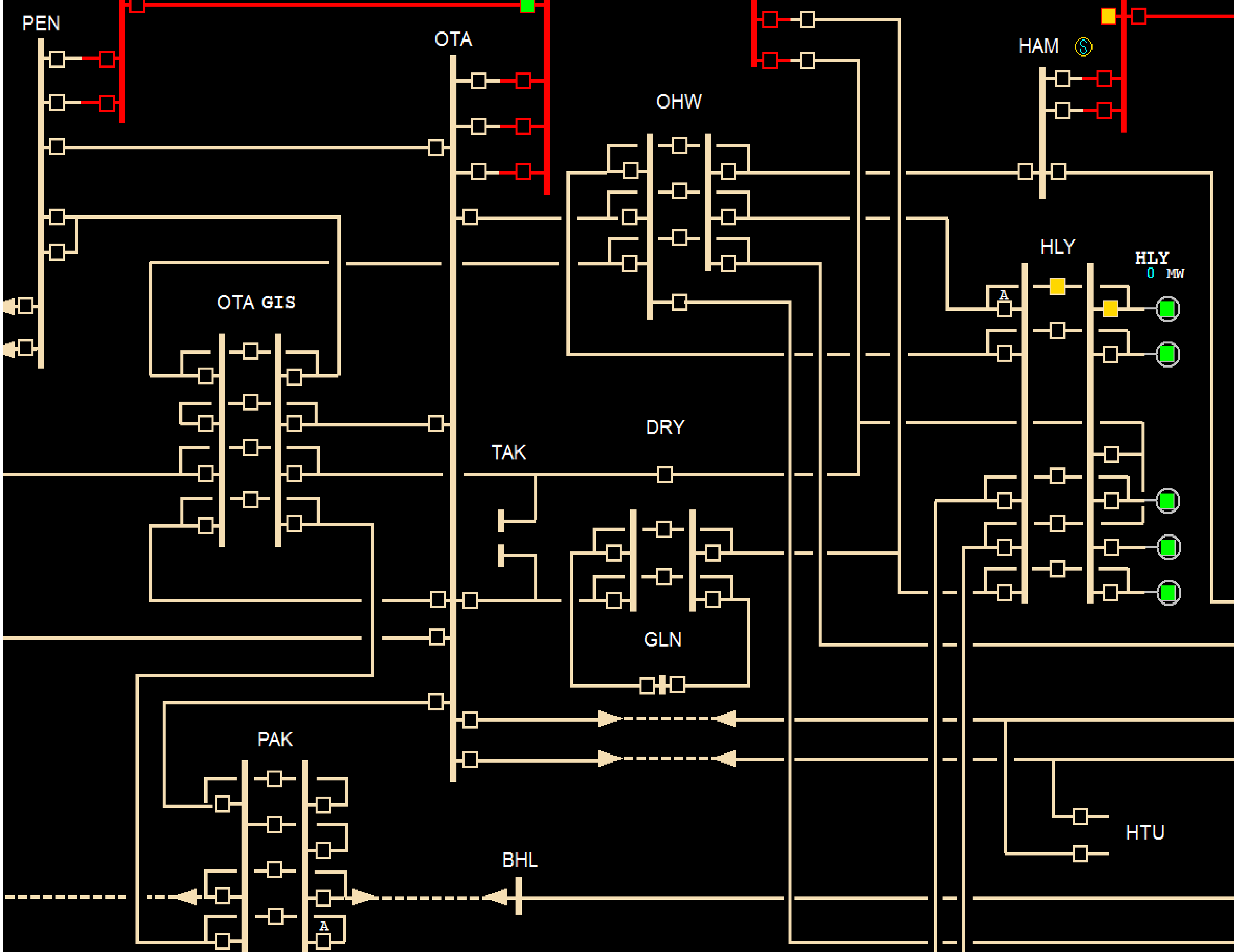
- NNI outages
- SNI outages
- SI outages

Asset owners

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

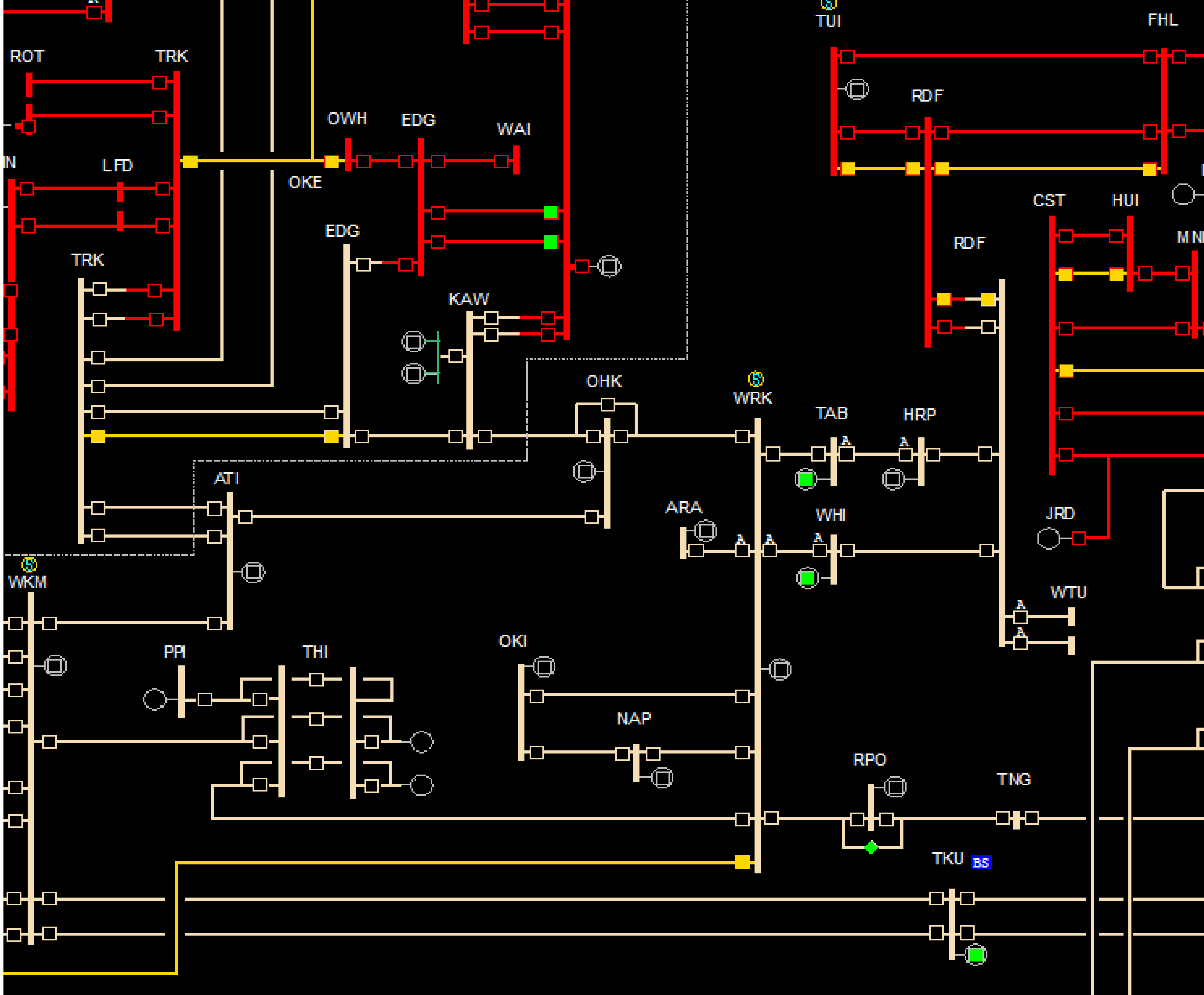
NNI Outages

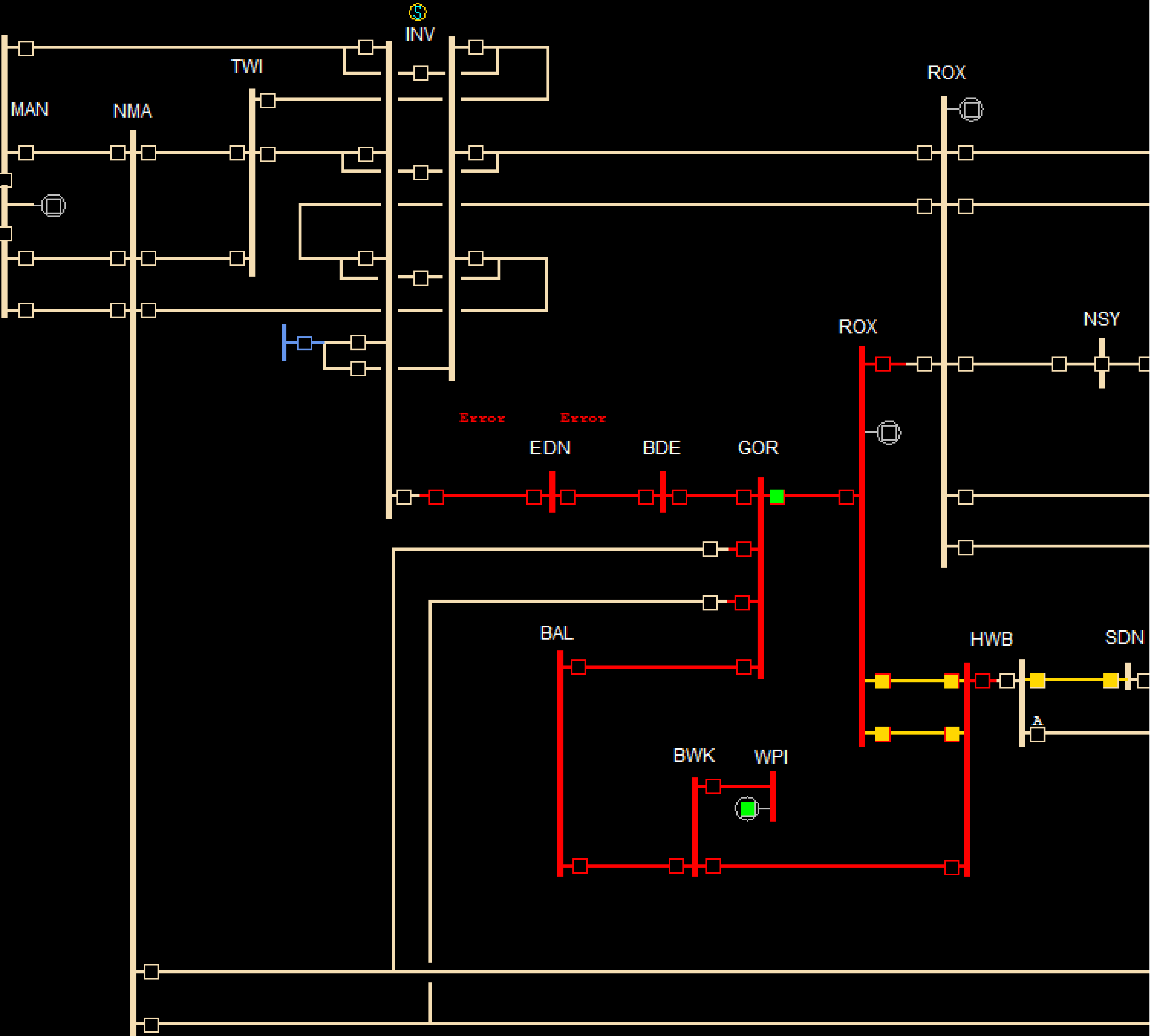
- Week of 13 Apr
    - DRY_TAK_OTA_1
    - HAM_WKM_1
    - OTA_PAK_3
    - OTA_T5
    - EDG_TRK1 & 2, EDG_T5
- Week of 20 Apr
    - DRY_TAK_OTA_1
    - HAM_WKM_1
    - EDG_TRK_2, TRK_T2
- Week of 27 Apr
    - DRY_TAK_OTA_1
    - EDG_TRK_2
    - DRY_BOB_HLY_2
    - OTA_PEN_6
- Week of 4 May
    - DRY_TAK_OTA_1
    - KAW_OHK_1



SNI Outages

- Week of 13 Apr
  - TKU_WKM_2
  - BPE_TKU_2
  - BPE_PRM_HAY_2 (Monday)
- Week of 20 Apr
  - TKU_WKM_2
  - BPE_TKU_2
  - HRP_RDF_1
- Week of 27 Apr
  - TKU_WKM_2
  - BPE_TKU_2
  - ARI_HTI_ONG_1
- Week of 4 May
  - TKU_WKM_2
  - BPE_TKU_2
  - HRP_TAB_1

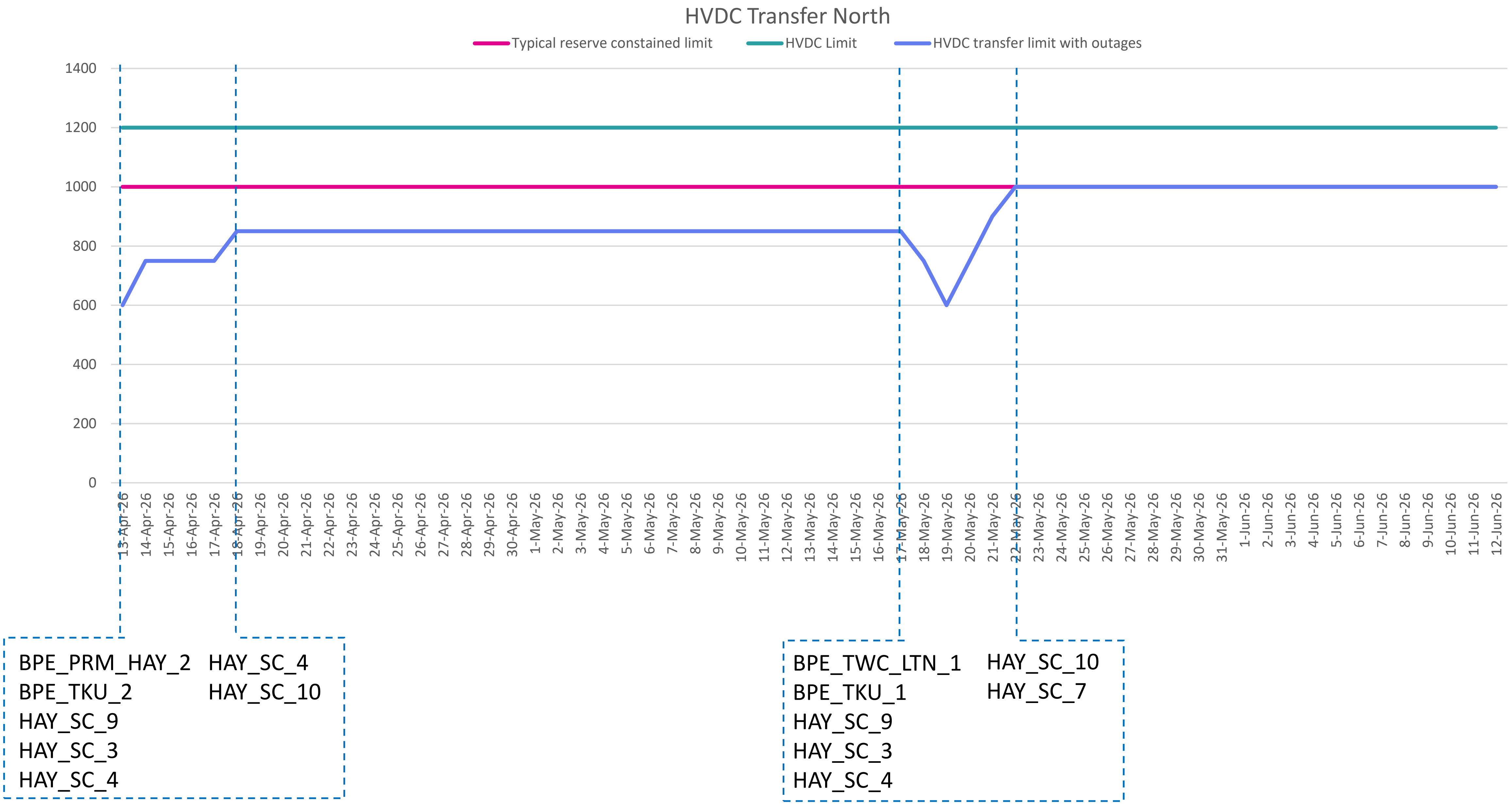




SI Outages

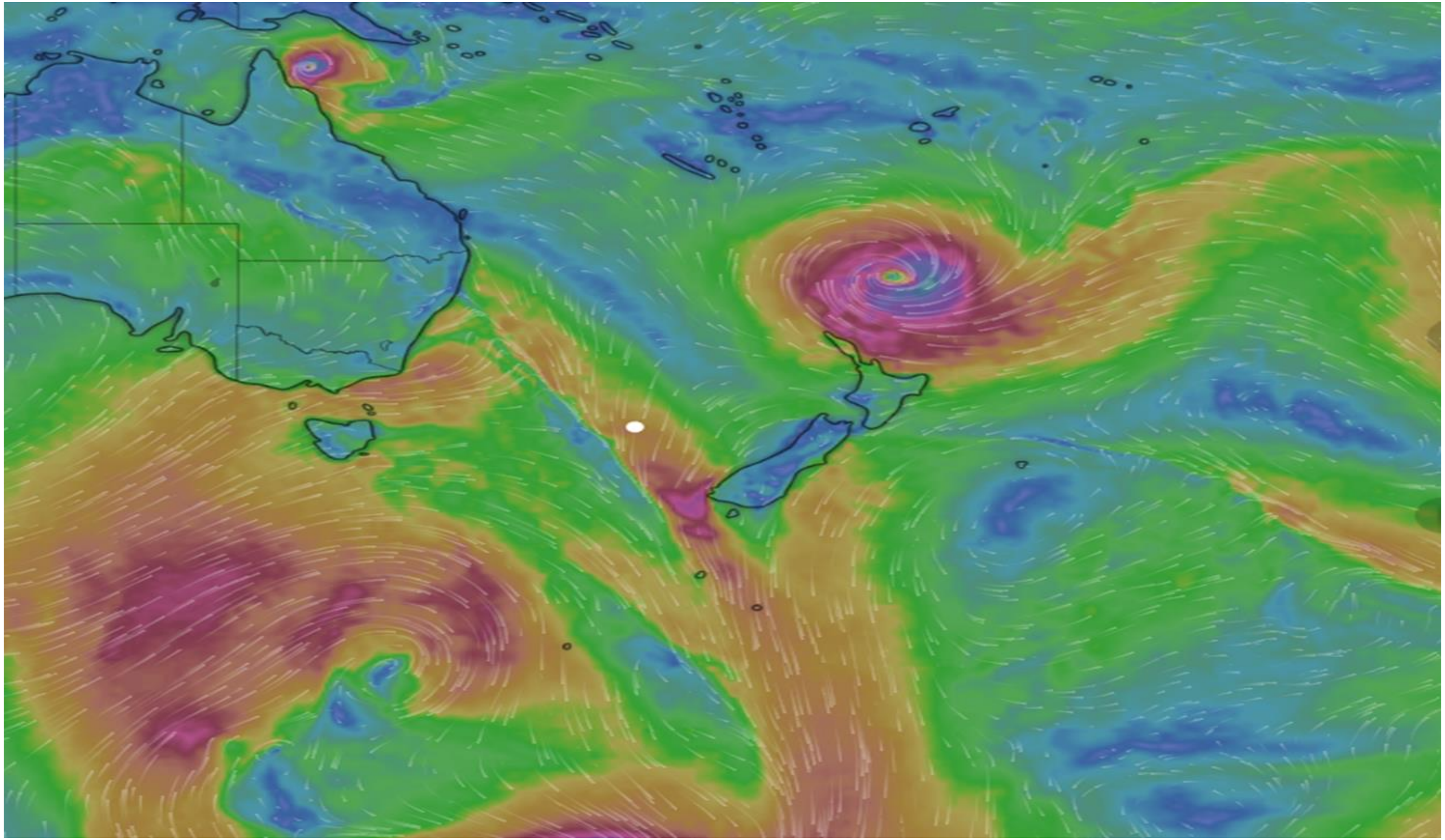
- Week of 13 Apr
  - ASB_TIM_TWZ_1 until Tuesday
  - ASB_TIM_TWZ_2 from Friday
  - ASB_ISL_1
  - AVI_BEN_1
  - NMA_GOR_TMH_1
- Week of 20 Apr
  - ISL_WPR_CUL_KIK_3
  - ASB_TIM_TWZ_1
  - AVI_BEN_1
  - MAN220BUS A & B
  - MAN_NMA_3
  - INV_MAN_2
- Week of 27 Apr
  - ISL_NWD_1
  - KAI_SBK_1
  - SBK_WPR_1
  - ISL_SBK_2
- Week of 4 May
  - CYD_CML_TWZ_2
  - AVI_BEN_2
  - CML_FKN_2
  - INV_TWI_1

HVDC North transfer limit

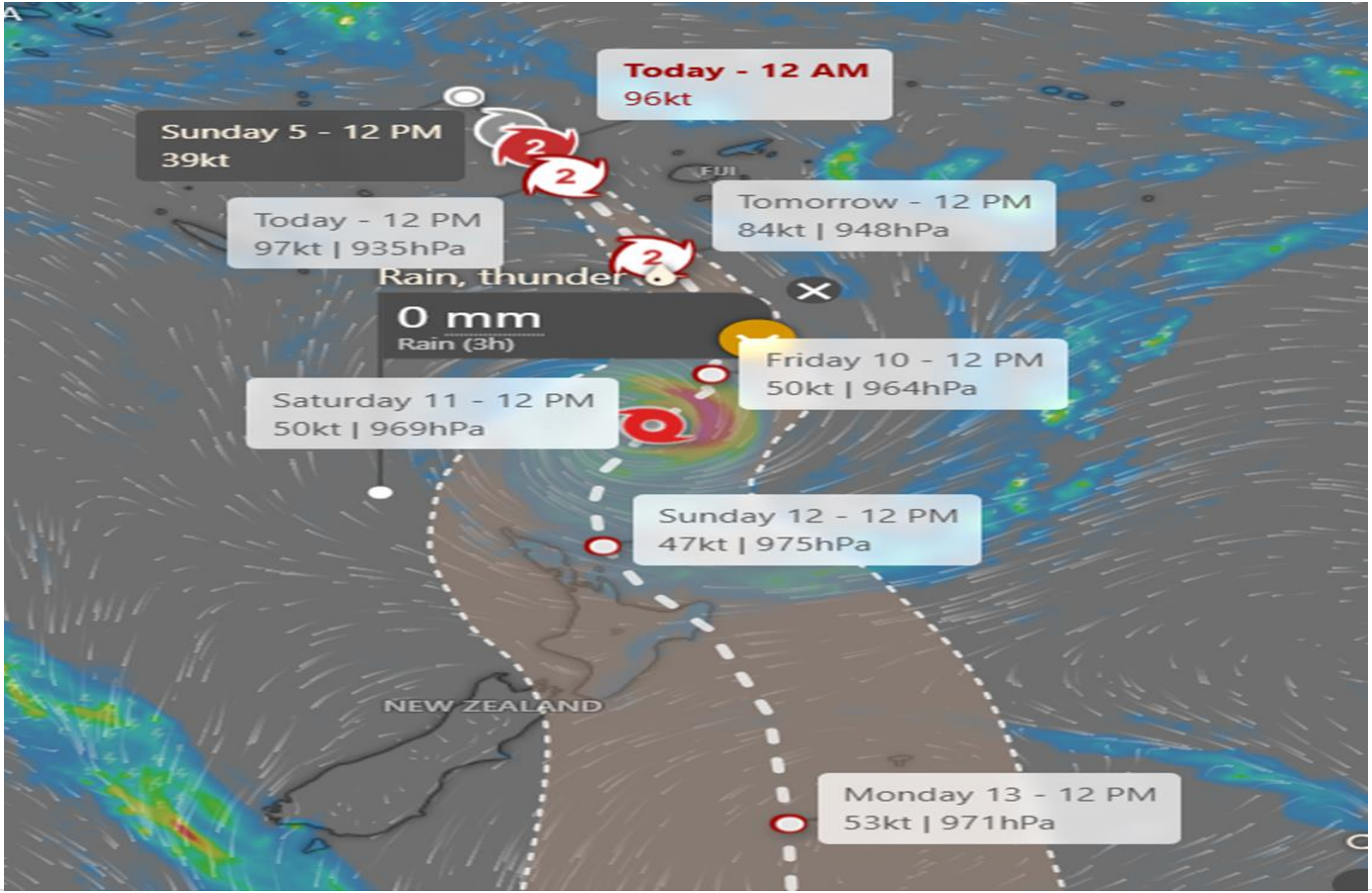


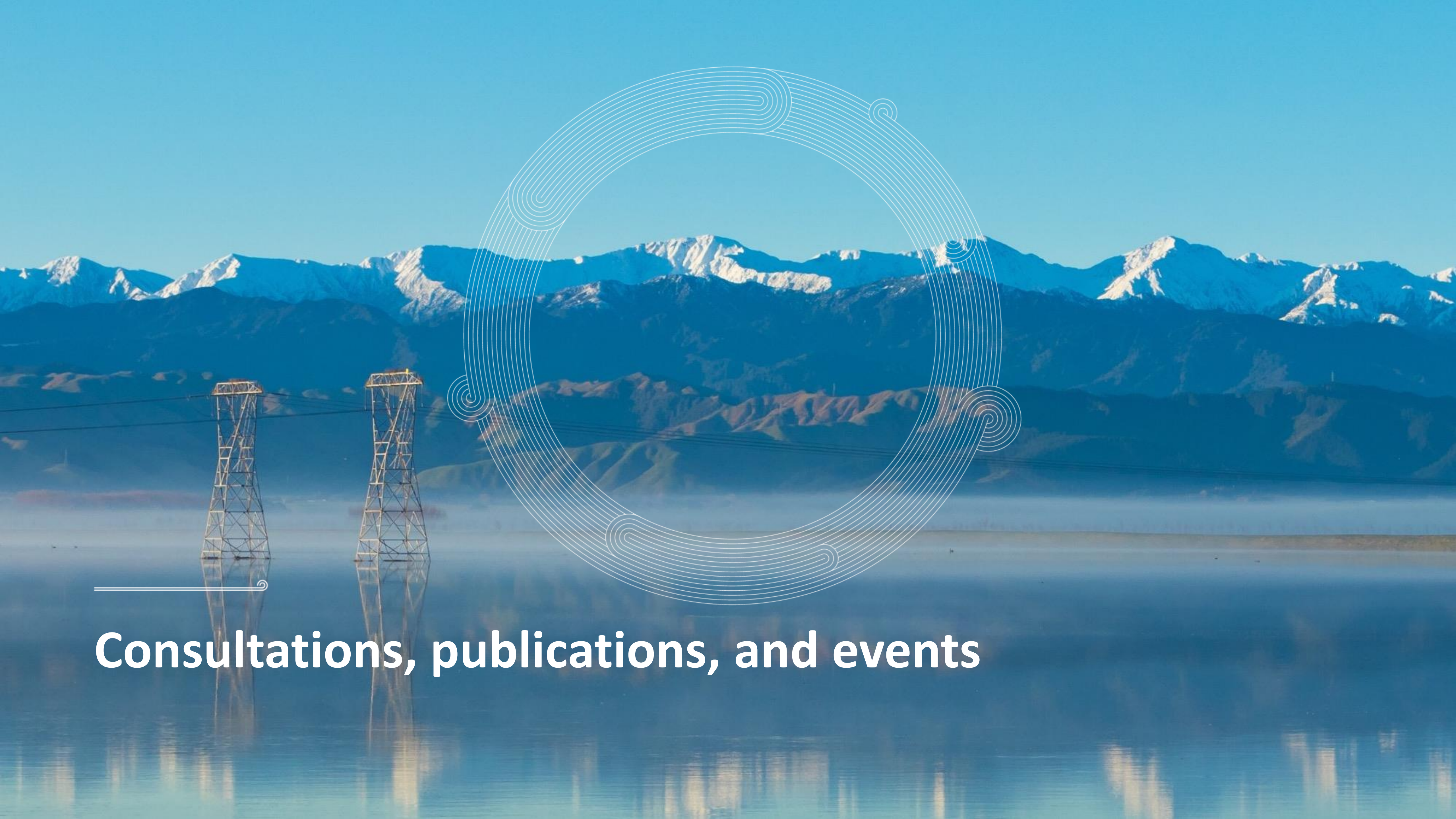
Operational update

Cyclone Vaianu



Possible Trajectory





Consultations, publications, and events

Upcoming System Operator Webinars

Operational Notices changes

For Generators, EDBs and Direct Connect customers

14 April 2026 – 11 – 11.30am

- We'll demonstrate what you can expect from Operational Notices sent from the new system.

Demand Allocation Tool changes

For EDBs and Direct Connect customers

23 April – 2-3pm

- DAT determines equitable load limits using load forecast and load bids, rather than historical data.
- Load limits will be published to each individual EDB's WITS page.
- The new tool and process is scheduled for go-live on 14 May.

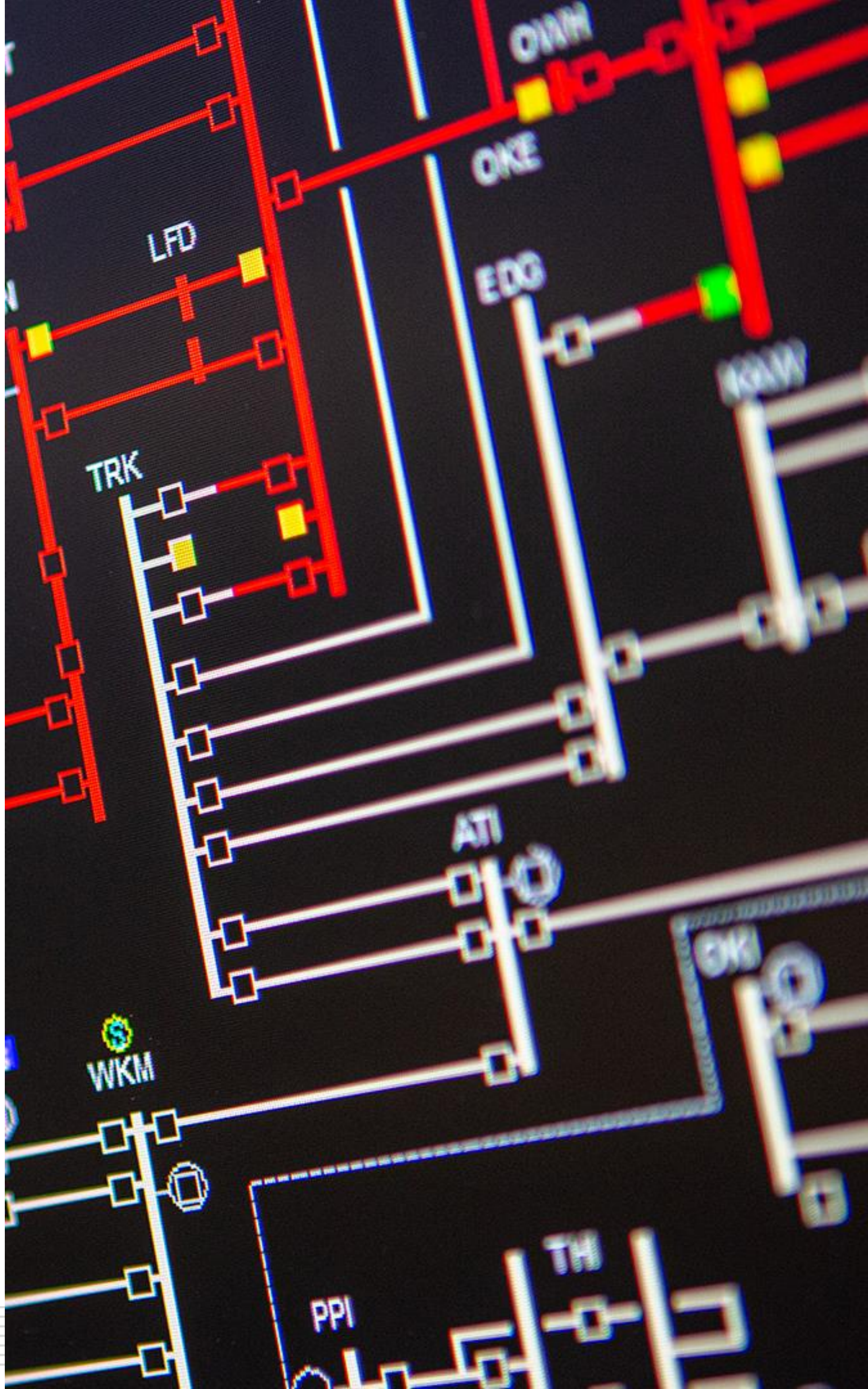
Consultations, publications, and events

On 10 March the Authority updated the **Frequency and voltage common quality requirements**, details of which can be found on their website

The March **Energy Security Outlook** has been published on our website at the end of the month.

We will be holding a special forum in **preparation for Winter 2026** on Tuesday 28 April. More details to come.

The Authority issued Notification to incorporate the Connected Asset Commissioning and Testing Information Standard (CACTIS) into the Code.



2026 Annual System Operator Participant Survey

We need your feedback!

Our 2026 Annual System Operator Participant Survey is your opportunity to give us feedback on how we are performing in our role as System Operator for Aotearoa New Zealand. Your responses help us improve the quality of our services and better meet the market’s needs in the future.

The survey is open until Friday 17 April.

Scan here to have your say

Questions / Pātai

Please raise your hand

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