



TRANSPower

System Operator Industry Forum

11 November 2025



Today's agenda

- Key messages
- Market update
- 2026 SOSA
- NZGB update
- Outage update – next 4 weeks
- Outage planning notifications
- Operational update
- Consultations, publications and events
- Questions / Patai





Key Messages

- Nationally, hydro storage is above the historic mean for this time of year due to increased inflows.
- Spring has seen demand soften due to warmer weather, more planned outages and less firm thermal generation offered.
- Spring weather events are challenging the power system.
- Participants are asked to be responsive when needed and keep offers up-to-date especially during this busy outage period.



Market update

Energy: National hydro storage

	Hydro storage level (% of mean ▲ / ▼)		
	New Zealand	South Island	North Island
Last forum	143%	142%	134%
Now	137% ▼	138% ▼	131% ▼

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

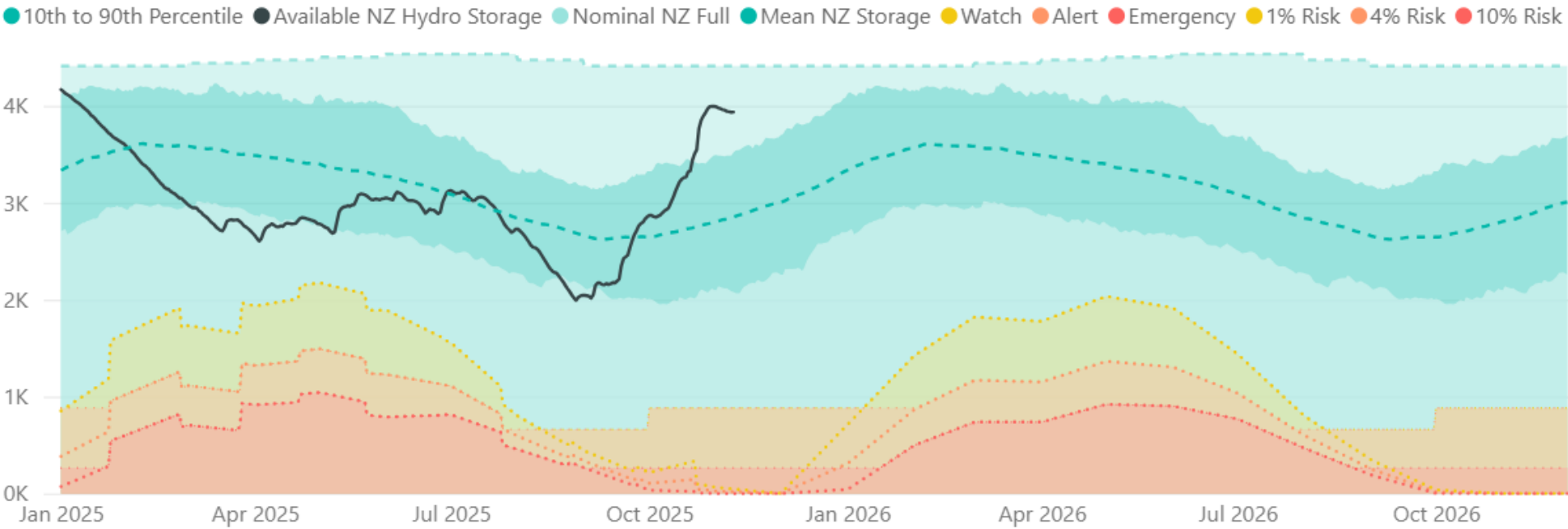
New Zealand Energy Risk



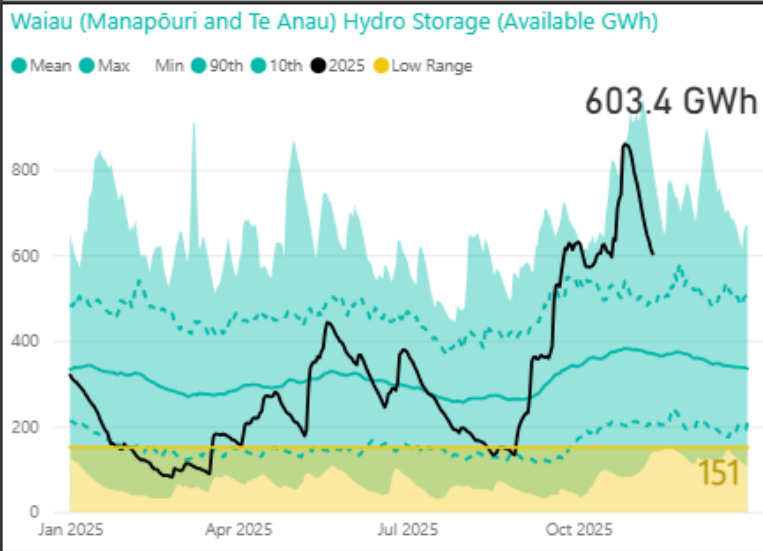
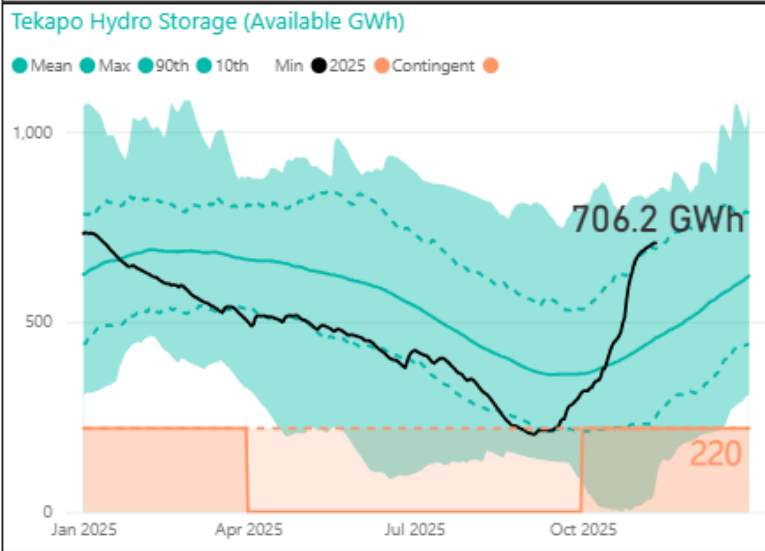
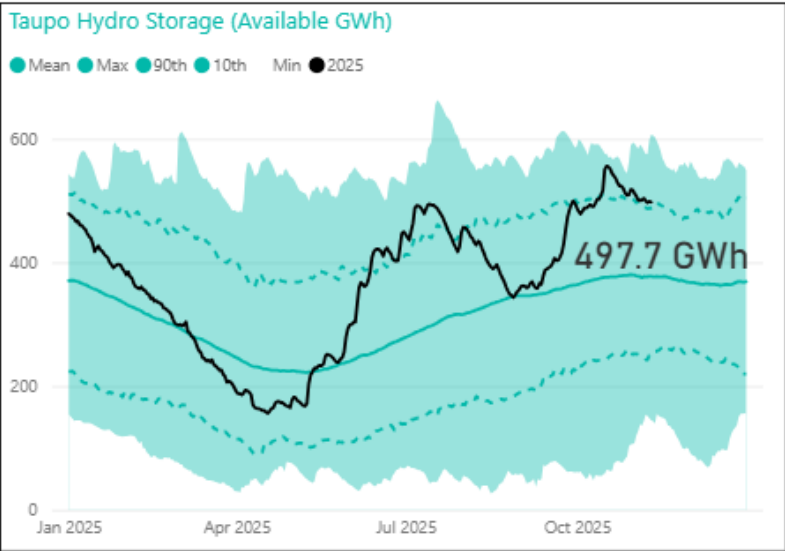
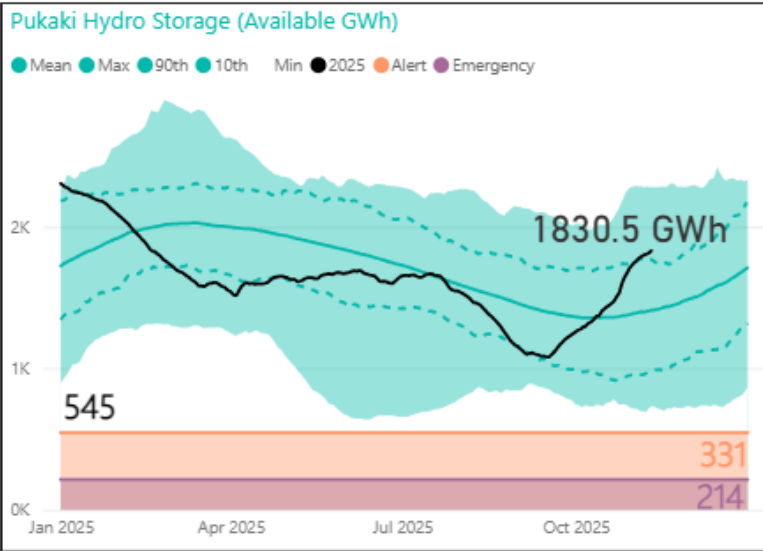
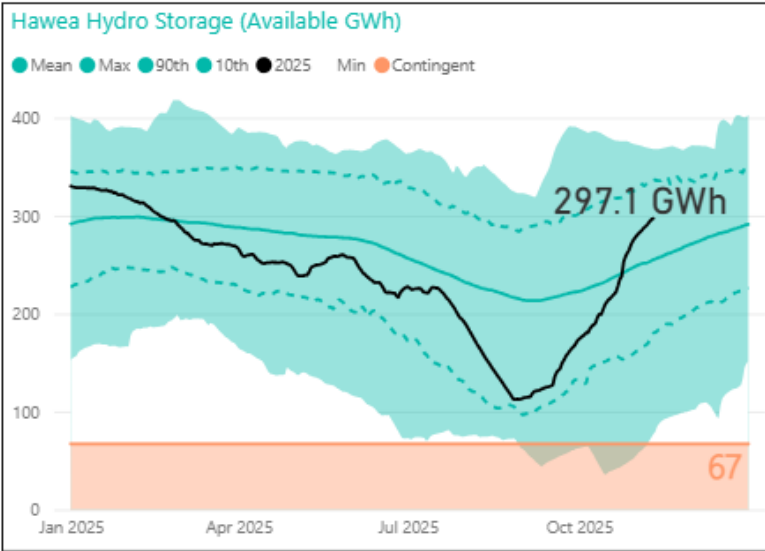
South Island Energy Risk



New Zealand Electricity Risk Status Curves (Available GWh)



Hydro storage by catchment



Lake	Current (%) avg
nz_controlled	137
si_controlled	138
hawea	116
pukaki	130
manapouri	164
te_anau	162
tekapo	154
taupo	132

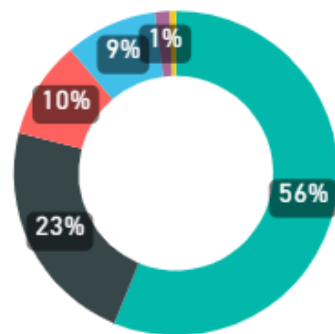


Generation mix

- Hydro generation share above average at 69%.
- Wind generation close to average at 10%
- Thermal increased from 0.5% to 2%
- Geothermal below average at 16% due to multiple planned outages

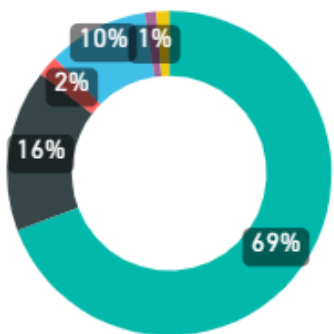
Last 52 Weeks Generation Mix - Weekly GWh

Hydro Geothermal Thermal Wind Co-Gen Solar



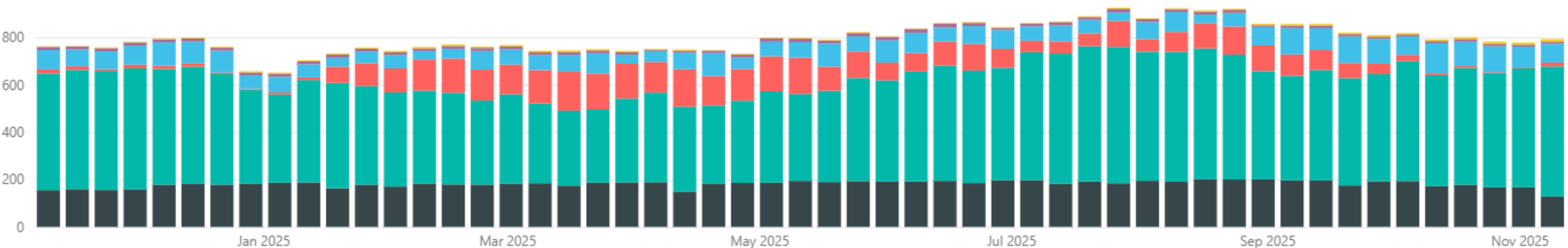
Last 7 Days Generation Mix - Weekly GWh

Hydro Geothermal Thermal Wind Co-Gen Solar



Weekly Generation Mix - GWh

Geothermal Hydro Thermal Wind Co-Generation Solar

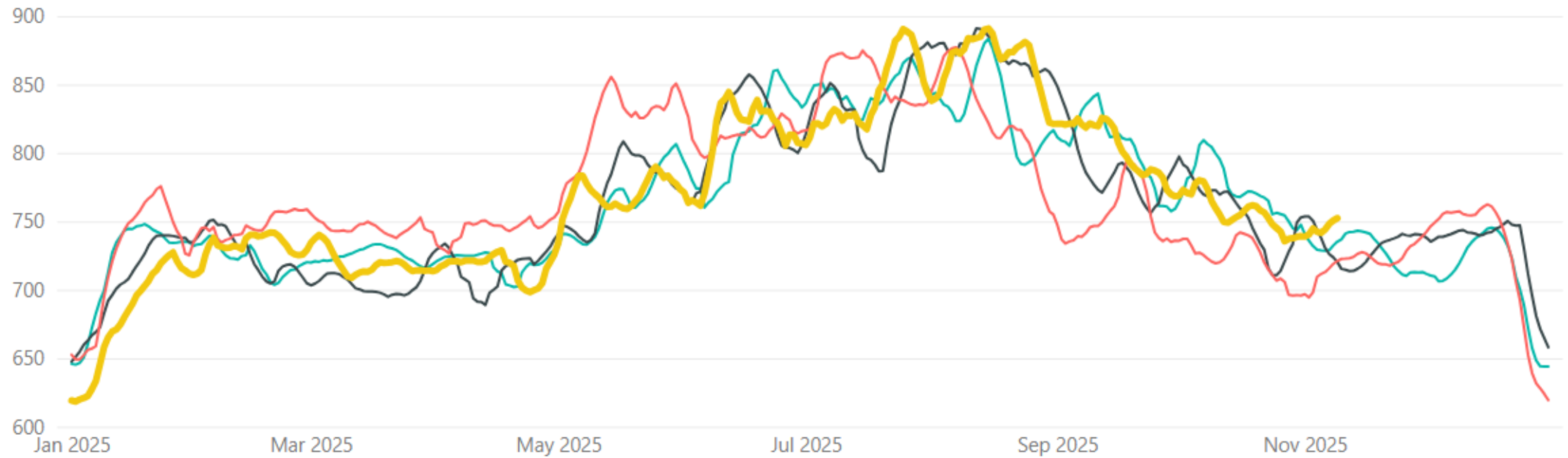


Demand

- Slight increase in demand over the last two weeks with colder temperatures
- 752 GWh last week, and 741 GWh the week before

National Weekly Demand - GWh - 7 Day Rolling

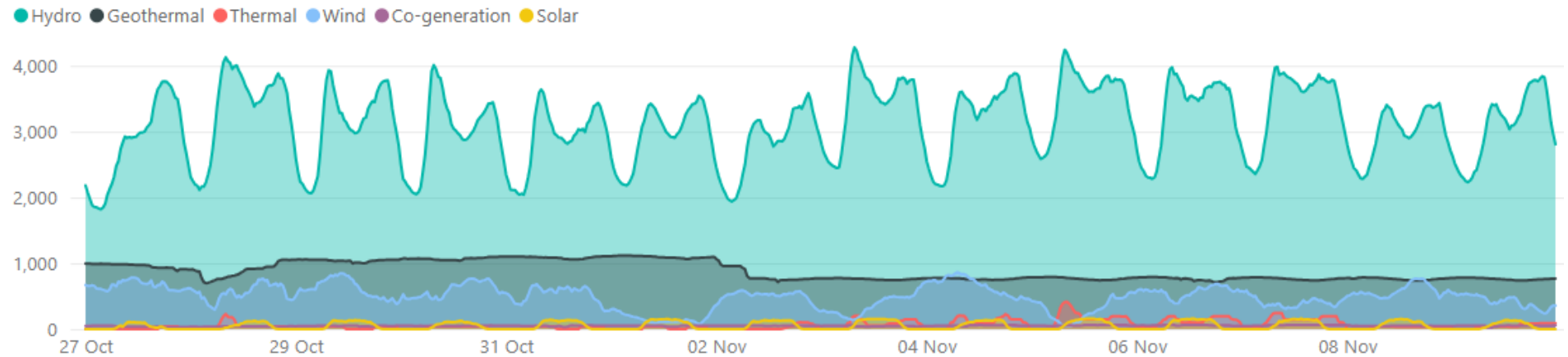
year ● 2022 ● 2023 ● 2024 ● 2025



Pricing

- Average Ōtāhuhu price was \$107/MWh last week, and \$12/MWh the week prior
- Higher prices in line with periods of lower wind and an increase in thermal generation
- Peak of \$303/MWh at Ōtāhuhu, 7:30am on Wednesday 5 November during a period of low wind

Generation - MW



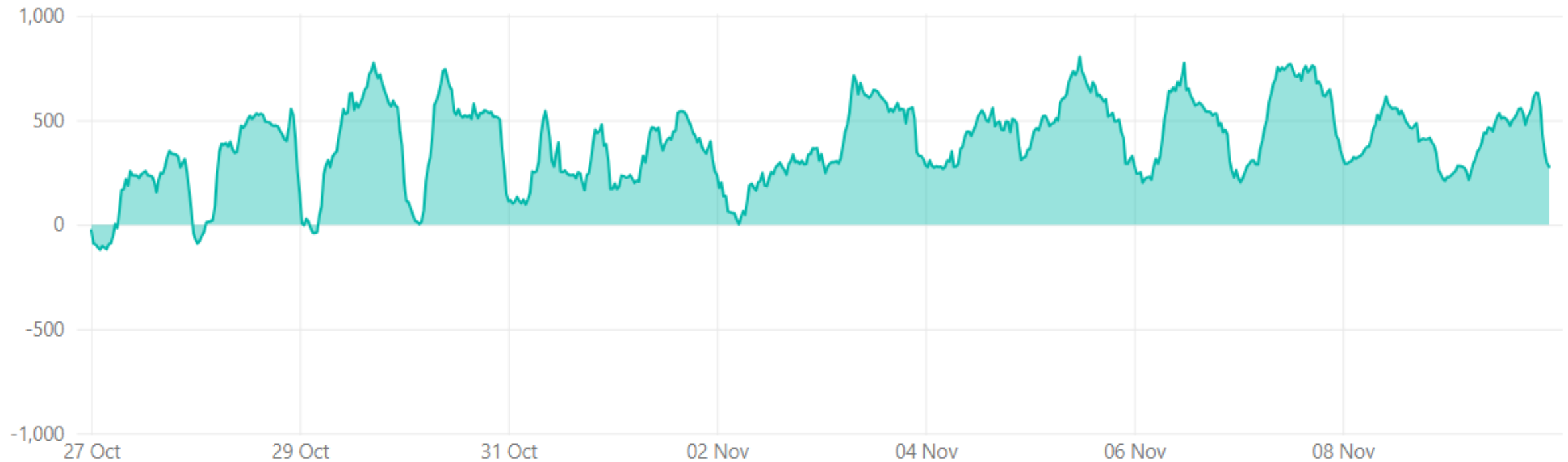
Prices - \$/MWh



HVDC transfer

- Last week 80 GWh sent north, 0 GWh sent south

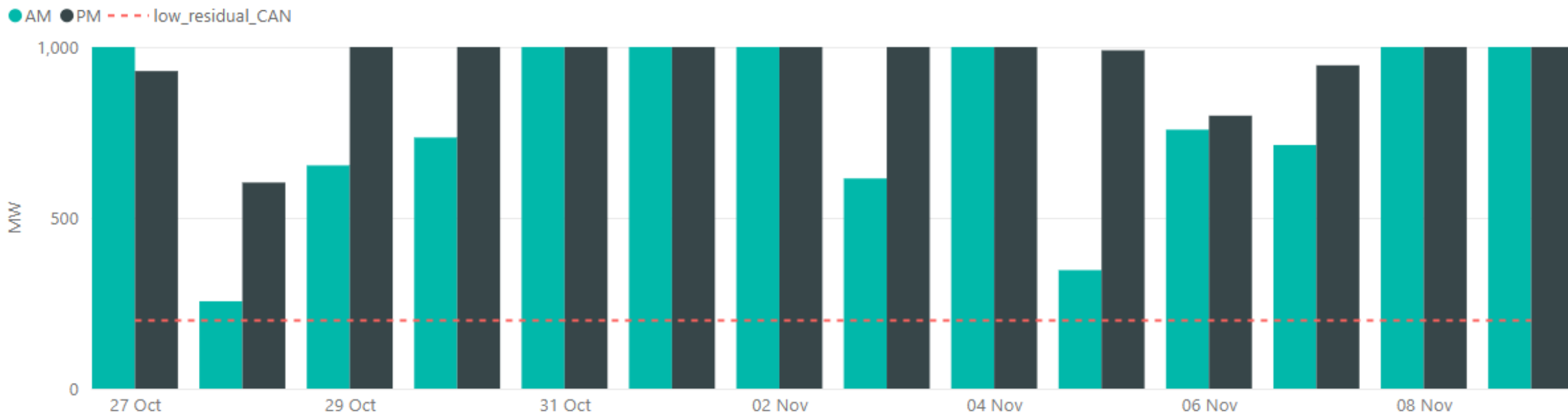
Net HVDC Transfer - MW (Northward positive)



Capacity residual margins

- Mostly healthy residual margins despite slight increase in demand
- Lowest residual 256 MW during 28 October morning peak

Lowest Residual Points - MW





2026 Security of Supply Assessment

2026 Security of Supply Assessment

Annual Security of Supply Assessment (SOSA)

Forecast winter energy and capacity margins relative to security standards over next 10 years

Energy Security Outlook

Electricity Risk Curves and Simulated Storage Trajectories assess hydro storage risks over the next 1-2 years

New Zealand Generation Balance (NZGB)

Generation margins for the next 200 days

Security of Supply Outlook

Summary of energy and capacity risks for the next 6 months

Forward market schedules (WDS, NRS, PRS)

Forecast market schedules, prices (1-week, 36 hour and 4 hour horizons)

Published by SO

Published on WITS

Real-time dispatch

1 week

36 hours

4 hours

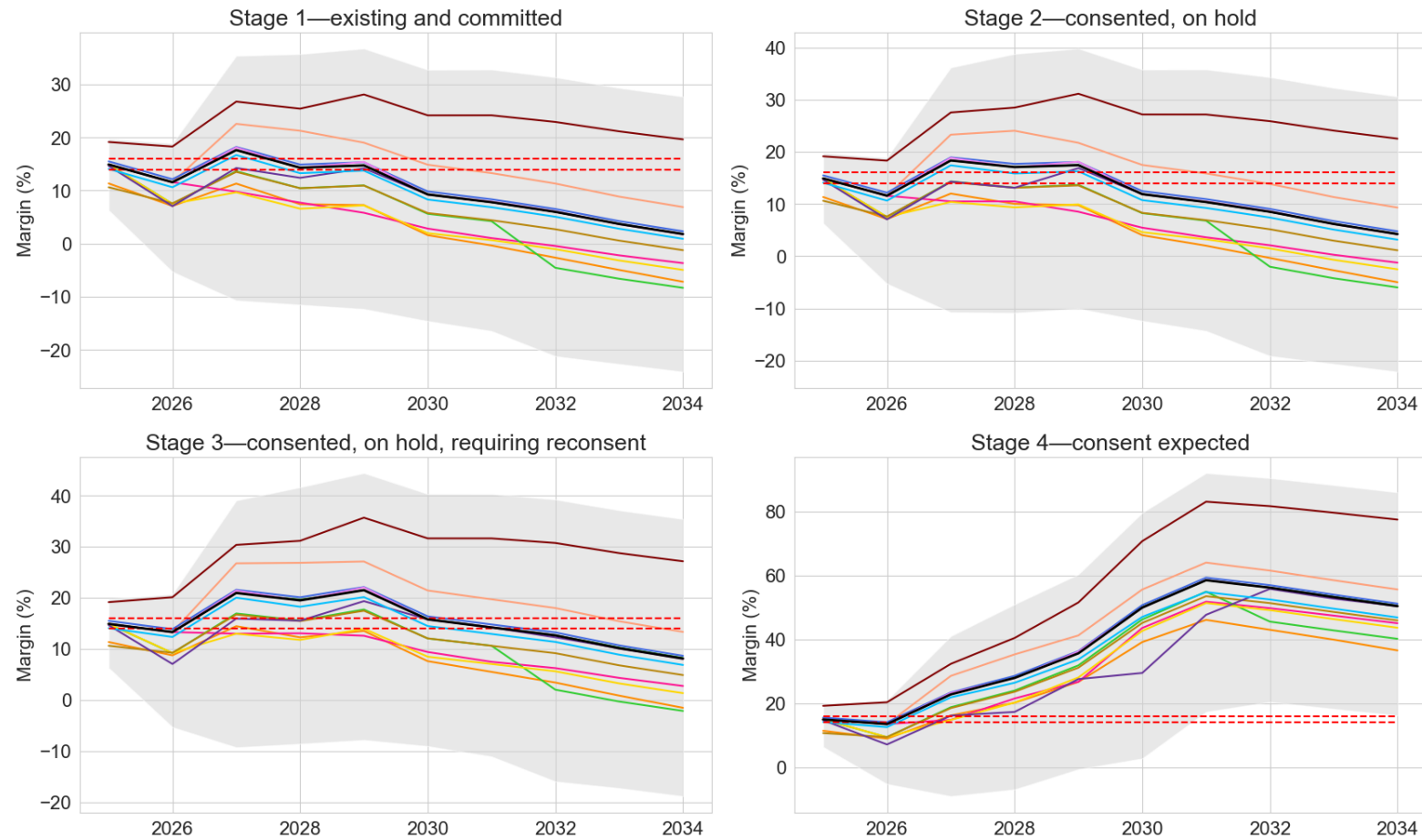
5 mins

Real time



2026 Security of Supply Assessment

New Zealand Winter Energy Margin – SOSA 2025



2026 Security of Supply Assessment

Reference case

The purpose of the reference case is to provide a consistent baseline against which changes in the power system can be compared. It reflects, where reasonable, a continuation of current conditions.

Proposed changes from this year's SOSA are:

1. **Modify pipeline stages:** Exclude projects that have consent, but are unlikely to proceed

Stage 1: Committed (with Final Investment decision)

Stage 2: Consented and likely to proceed

Stage 3: Consent likely to be sought within 2 years

2. **Gas supply and demand:** Assume exit of Maui, Methanex, and Ballance Kapuni in 2027



2026 Security of Supply Assessment

Sensitivities

Proposed changes from this year's SOSA are:

1. **TCC**: Remove the “TCC stays” sensitivity
2. **Additional step demand**: Remove this sensitivity
3. **Change in thermal mix**: This will replace “thermal decommissioning”
4. **Delayed build times**: We have asked for pessimistic commissioning dates in our survey to inform this sensitivity, instead of a blanket 1-year delay
5. **Low wind and solar supply**: This will replace “low wind supply”

Expected Future case

This will be the combination of sensitivities that we consider reflects the most likely outcome. This may differ from the Reference case.

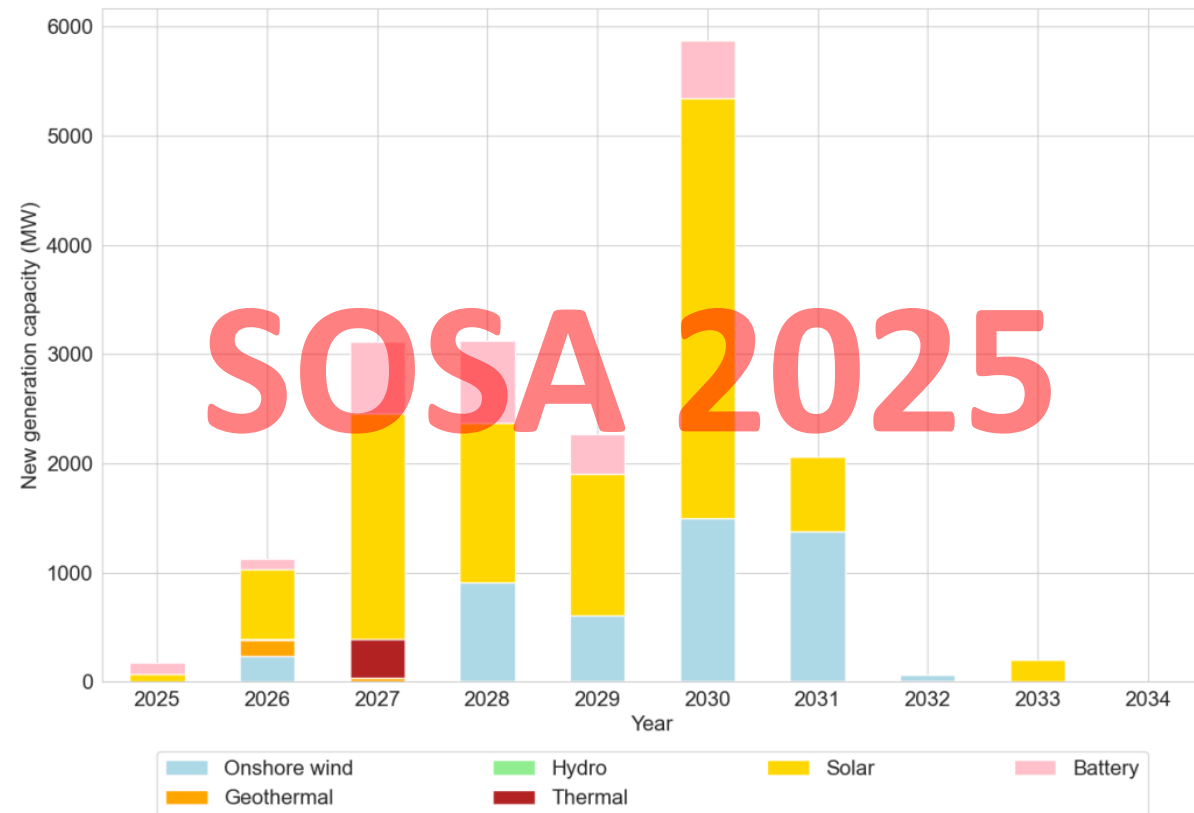


2026 Security of Supply Assessment

SOSA pipeline

Thank you to all 2025 survey respondents

Figure 7: Proposed new supply project timeline for the reference case



2026 Security of Supply Assessment

Survey

- We survey participants as an input to our SOSA supply pipeline.
- EDBs, and generators who have an account with the Grid Owner's customer team, have been surveyed.
- Industry participants, as defined in section 7 of the Electricity Industry Act 2010 (Act), who have been surveyed are required to respond by section 9.18(1)(f) of the Code. This is a new requirement.
- Information will be treated confidentially. The Electricity Authority (EA) now requires the System Operator to provide this survey information to the EA under section 46(2) of the Act, for the purpose of carrying out the EA's monitoring functions. Information will not otherwise be shared unless explicitly allowed by the respondent.
- If your organisation is planning to build any significant new generation or energy storage and you aren't sure if you received the survey, please contact market.operations@transpower.co.nz



2026 Security of Supply Assessment – Questions?

Invitation To Comment: 2026 Security of Supply Assessment: Reference Case Assumptions and Sensitivities

Closing date for submissions, is 5pm on Monday 24 November 2025.

Transpower, in its role as System Operator, is seeking feedback on the proposed assumptions and sensitivities for the 2026 Security of Supply Assessment (SOSA). The SOSA is an annual publication that provides a 10-year outlook on the balance between electricity supply and demand in New Zealand. It supports risk management and investment decisions by market participants, policy makers, and other stakeholders.





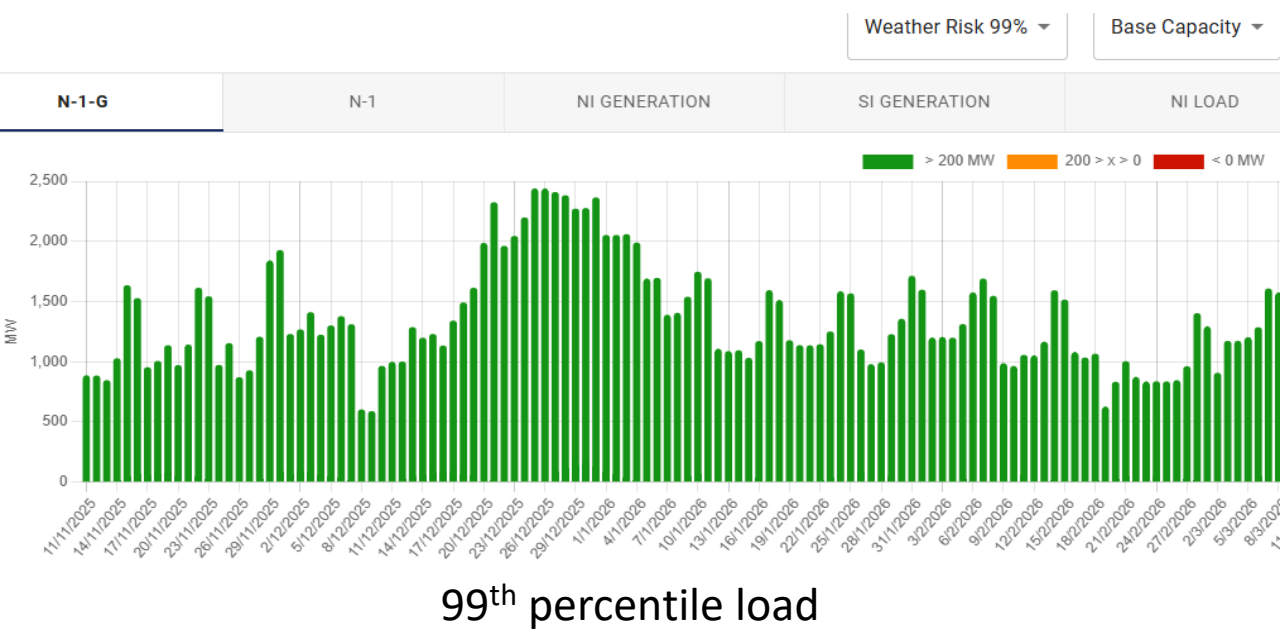
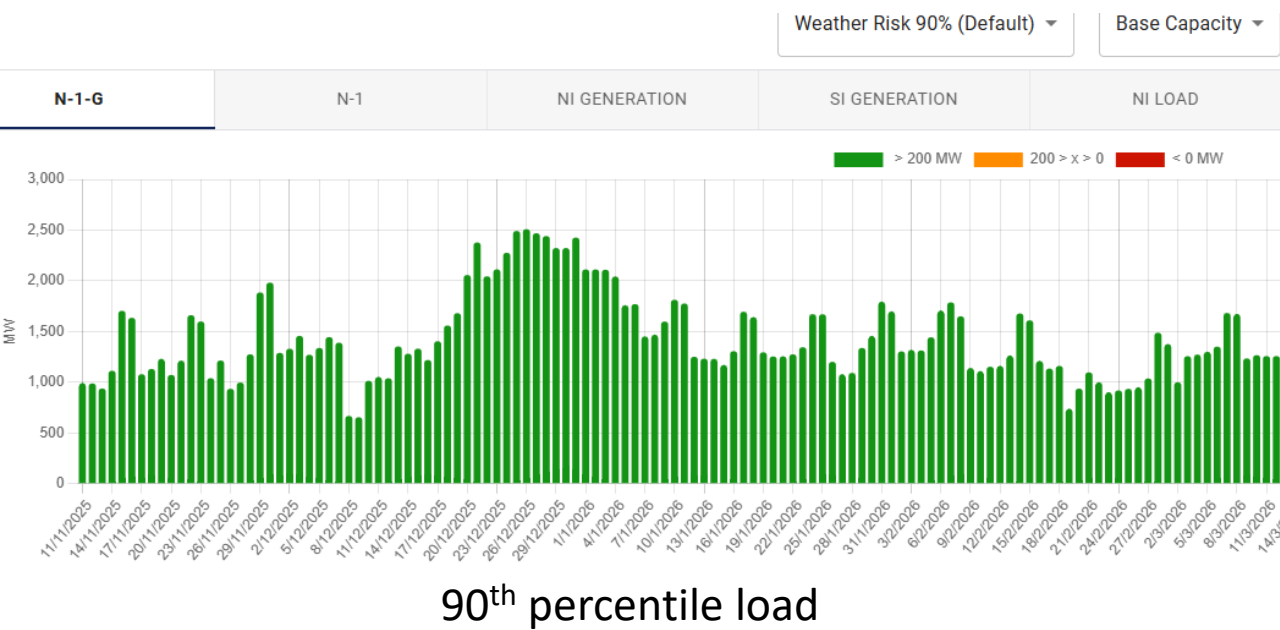
NZGB update

NZGB update: base capacity N-1-G

- N-1-G margins are currently showing healthy values
- Under the 99th percentile load, which we would expect under a cold snap, the margins drop but are still healthy

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

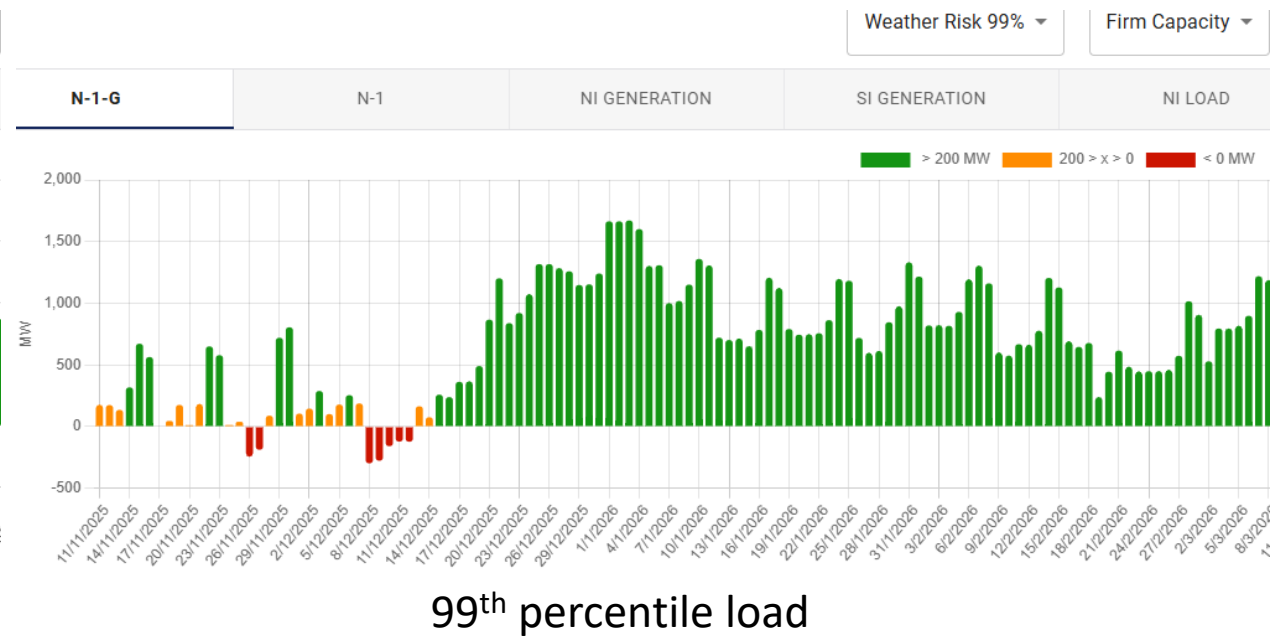
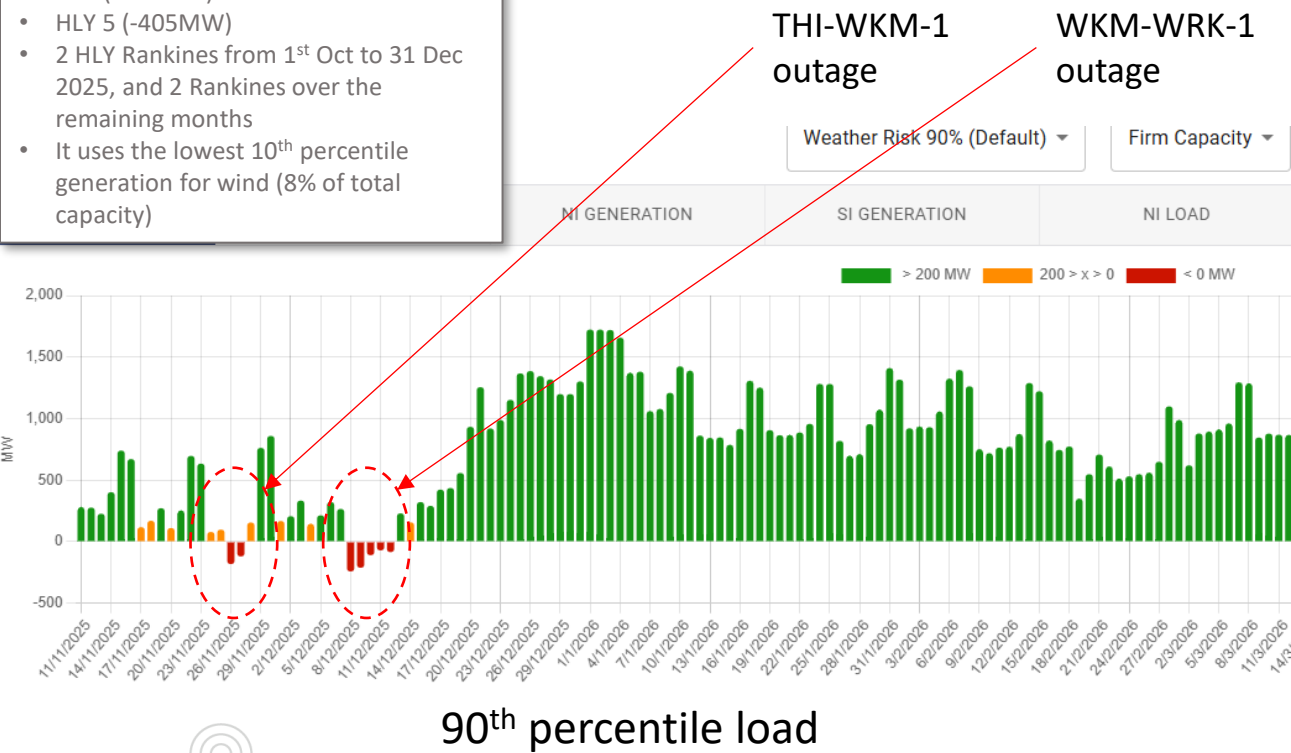


NZGB update: firm capacity only N-1-G

- 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

Firm capacity removes

- TCC (-360MW) all months
- HLY 5 (-405MW)
- 2 HLY Rankines from 1st Oct to 31 Dec 2025, and 2 Rankines over the remaining months
- It uses the lowest 10th percentile generation for wind (8% of total capacity)



NZGB update: Information

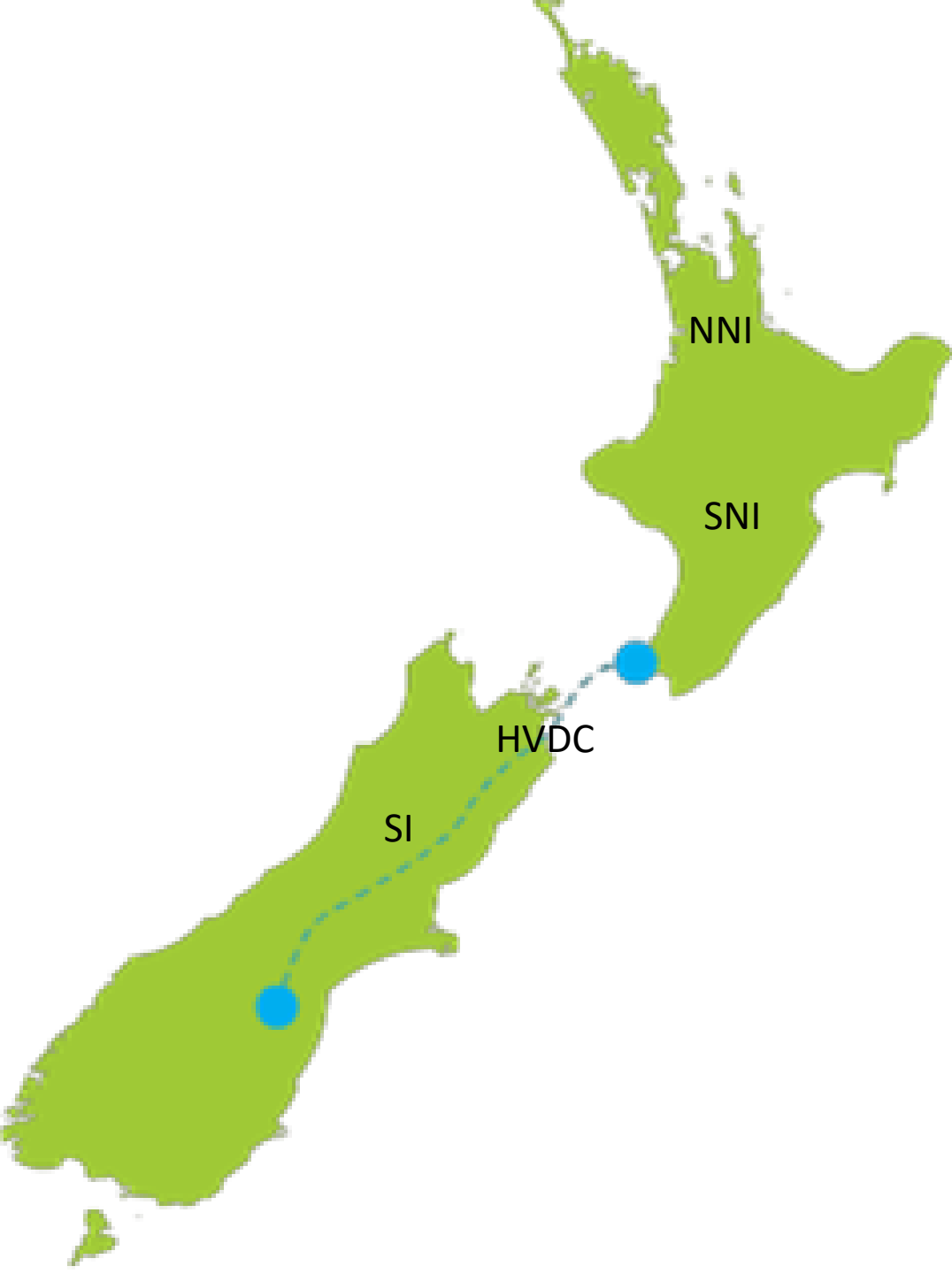
Recommendations from SO:

- 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
- 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

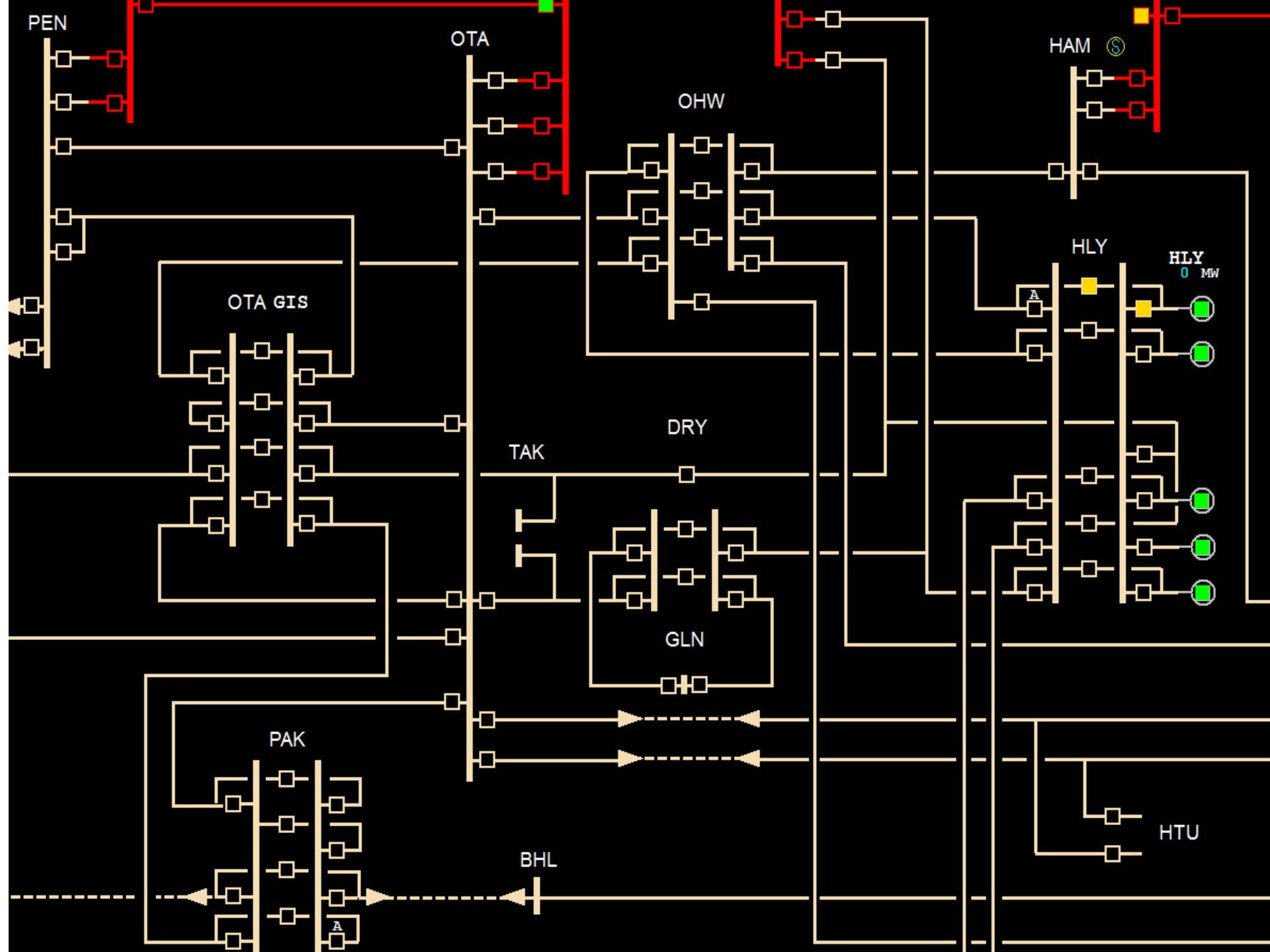
Asset owners

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



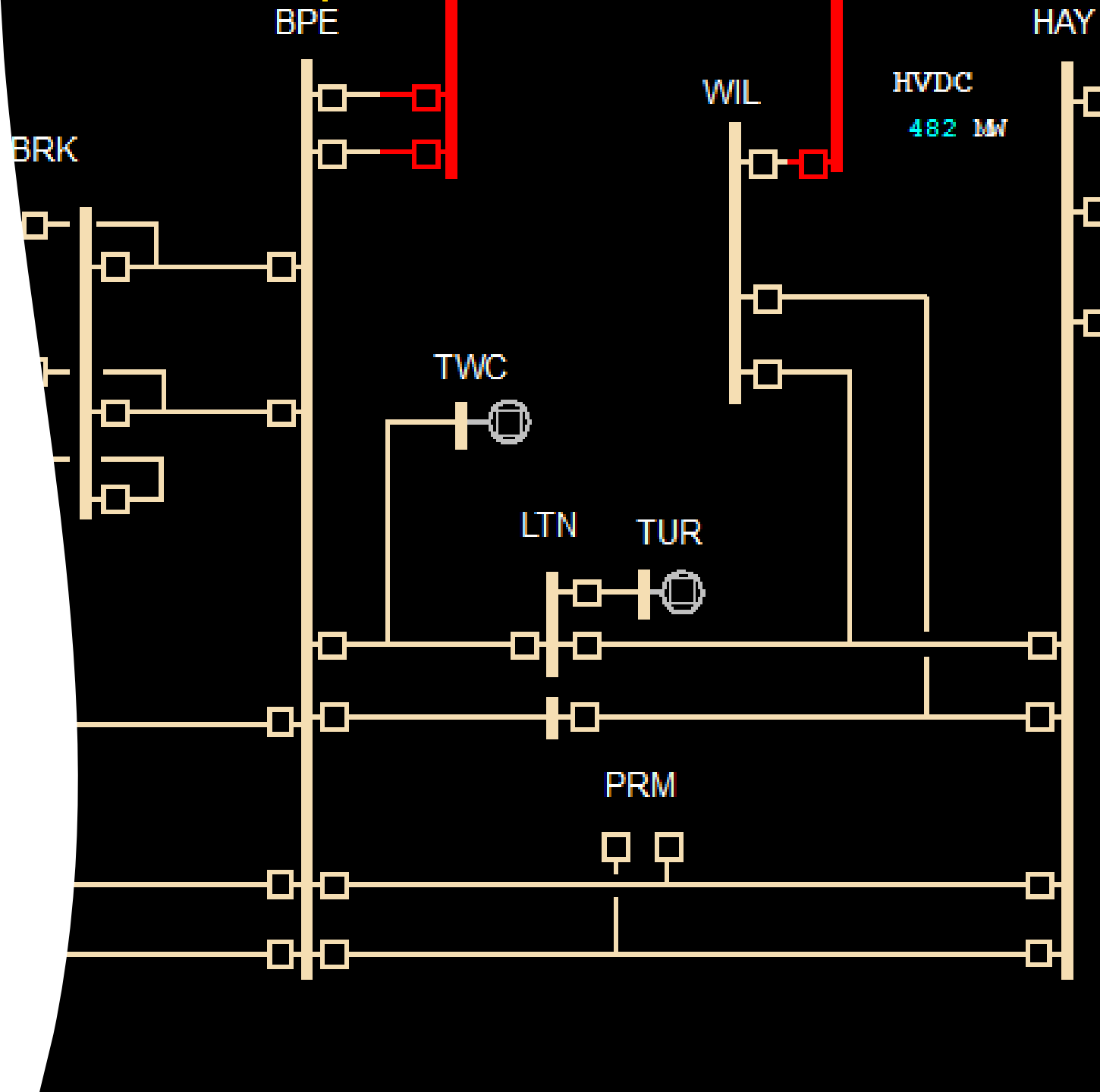
NNI Outages

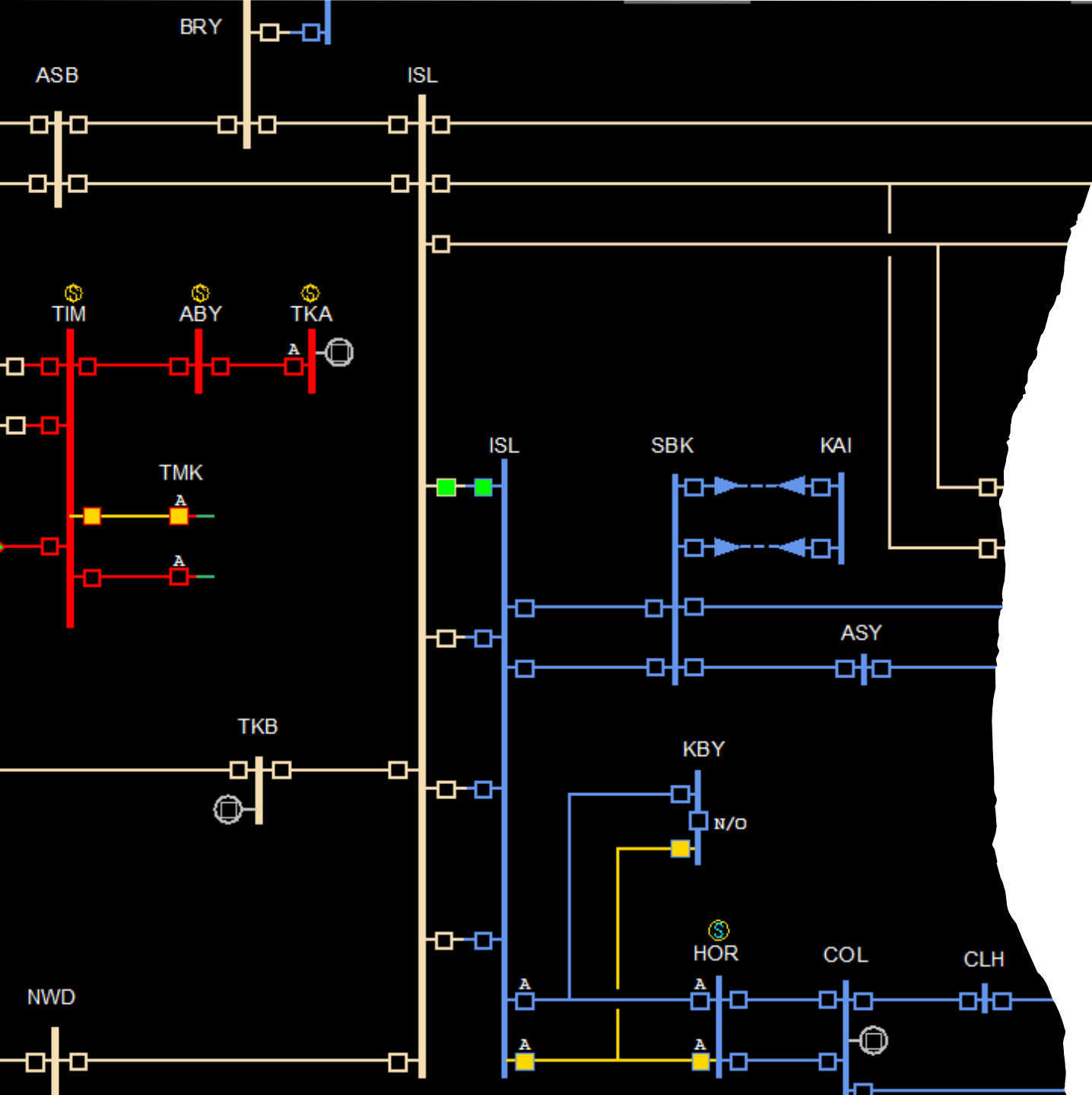
- Week of 17 Nov
 - OTA_PEN_5
 - OHW_OTA_2
 - OTA_HTU_WKM_1
- Week of 24 Nov
 - OTA_HTU_WKM_1
 - DRY_TAK_OTA_2
 - KAW_OHK_1
- Week of 1 Dec
 - HEN_SWN_1
 - OTA_HTU_WKM_2
 - DRY_TAK_OTA_1
 - EDG_TRK_1
- Week of 8 Dec
 - HLY_OHW_2
 - EDG_TRK_2



SNI Outages

- Week of 17 Nov
 - BPE_PRM_HAY_2
 - BPE_TNG_1
- Week of 24 Nov
 - HLY_SFD_1
 - THI_WKM_1
 - BPE_PRM_HAY_2
 - BPE_TNG_1
- Week of 1 Dec
 - HLY_SFD_1
 - HAY_WIL_LTN_1
 - THI_WRK_1
- Week of 8 Dec
 - HAY_WIL_LTN_2
 - WKM_WRK_1

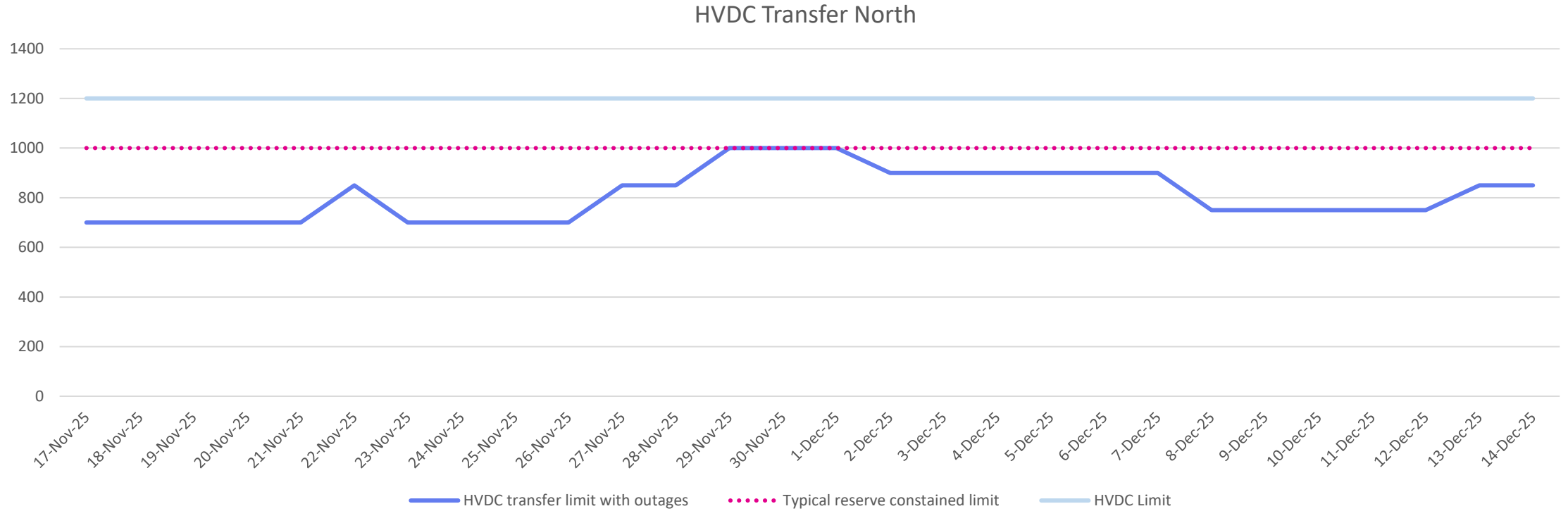


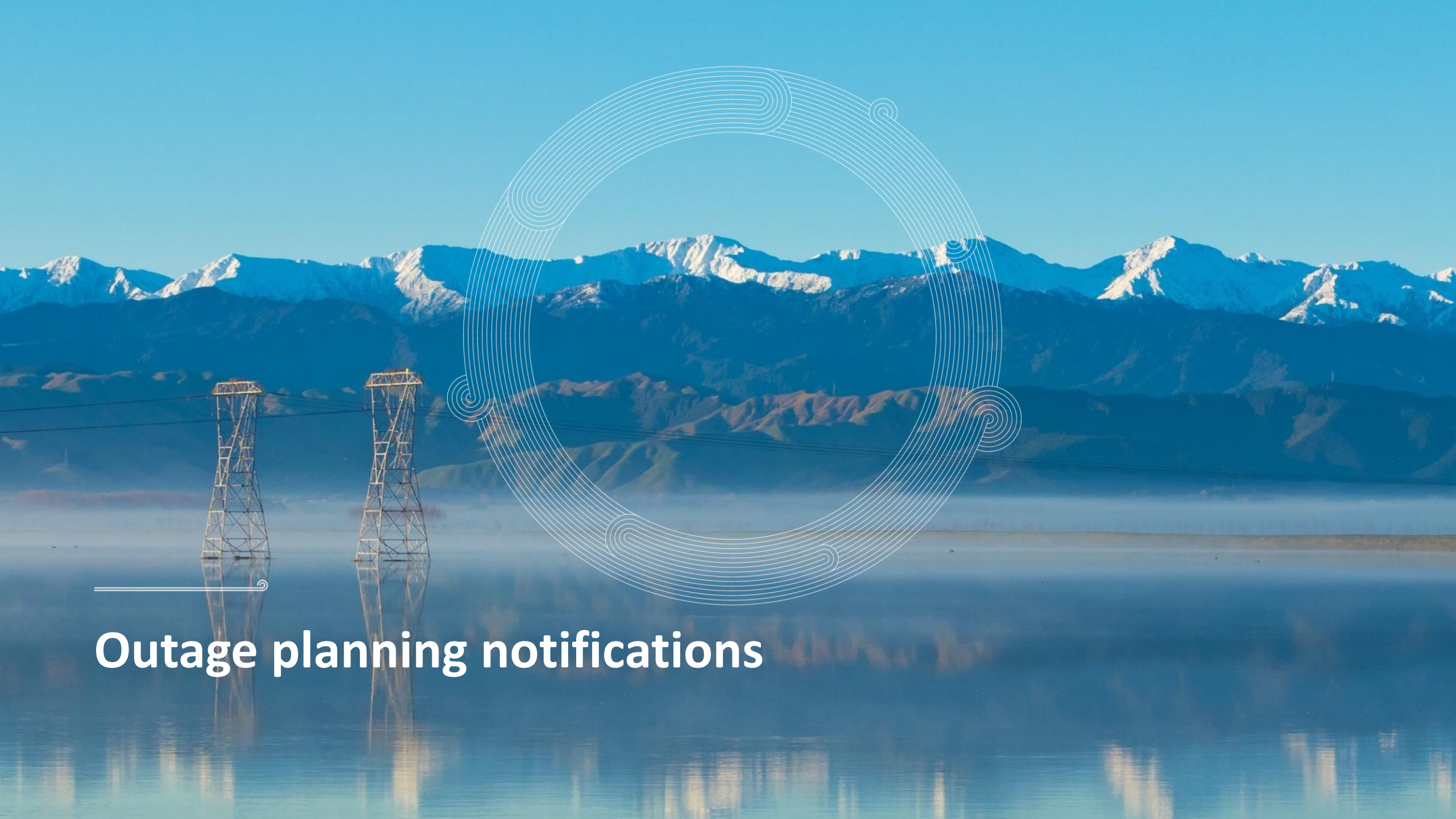


SI Outages

- Week of 17 Nov
 - ISL_WPR_CUL_KIK_3
 - MAN_NMA_1
- Week of 24 Nov
 - CUL_KIK_2
 - MAN_NMA_2
- Week of 1 Dec
 - ASB_BRY_1
 - KIK_STK_2
 - ISL_WPR_CUL_KIK_3
 - MAN_NMA_1
 - INV_ROX_2
- Week of 8 Dec
 - KIK_STK_1
 - HWB_SDN_1
 - MAN_NMA_3
 - INV_MAN_2

HVDC North transfer limit





Outage planning notifications

Outage planning notifications

We are changing the way you receive and view outage notifications as we transition to our new outage planning tool.

- From Tuesday 31st March 2026, we will be using the Grid Operations Customer Portal to view and respond to outage notifications.
- You will continue to receive email alerts when a notification has been created that impacts you.
- In January, we will email our Connected Parties directly with instructions on how to set-up access.

If you're not yet registered as an interested participant and would like to be, contact outageplanners@transpower.co.nz and we will make sure you're ready to in March 2026.

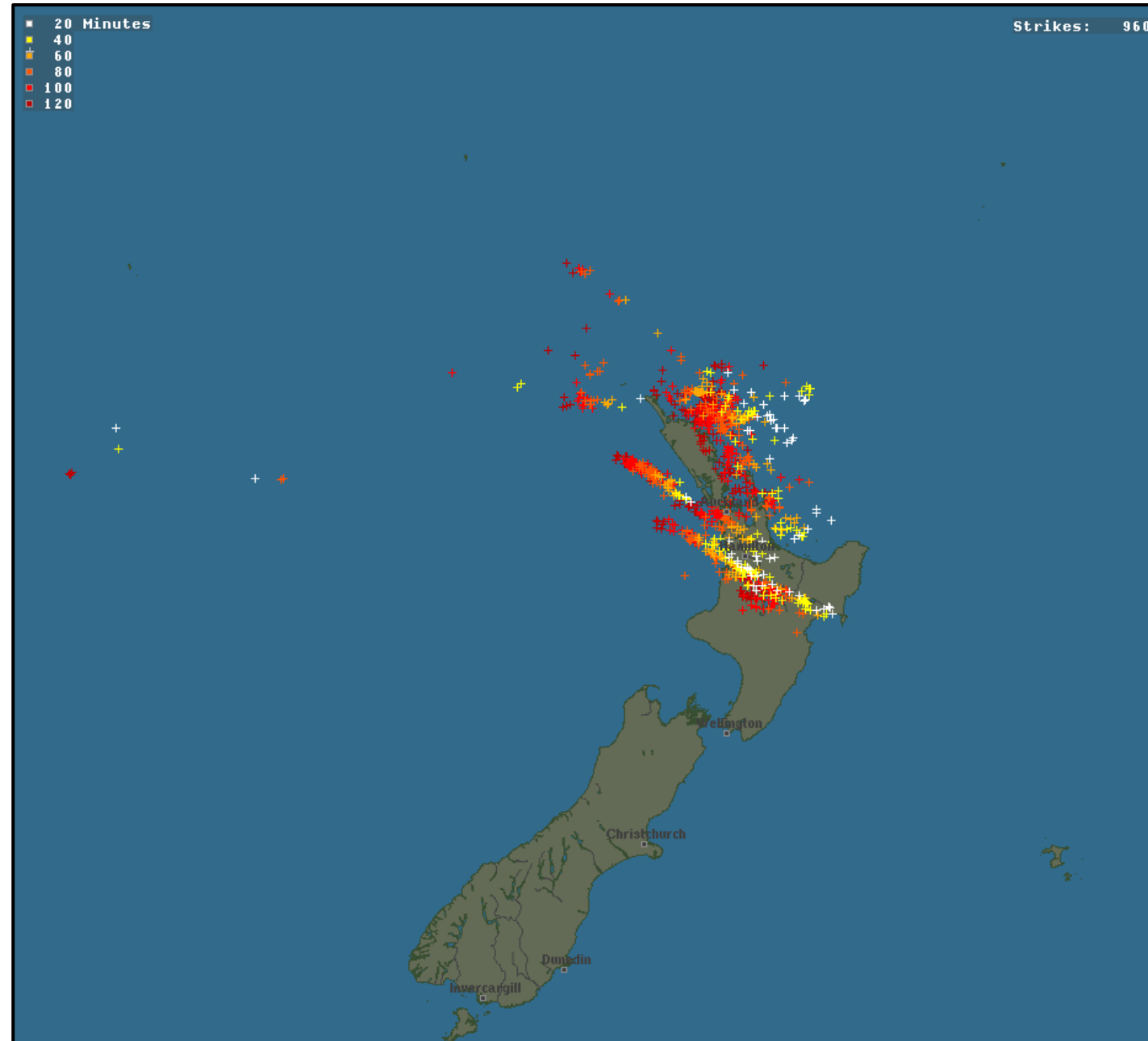




Operational update

28 October 2025 Hawke's Bay LOS

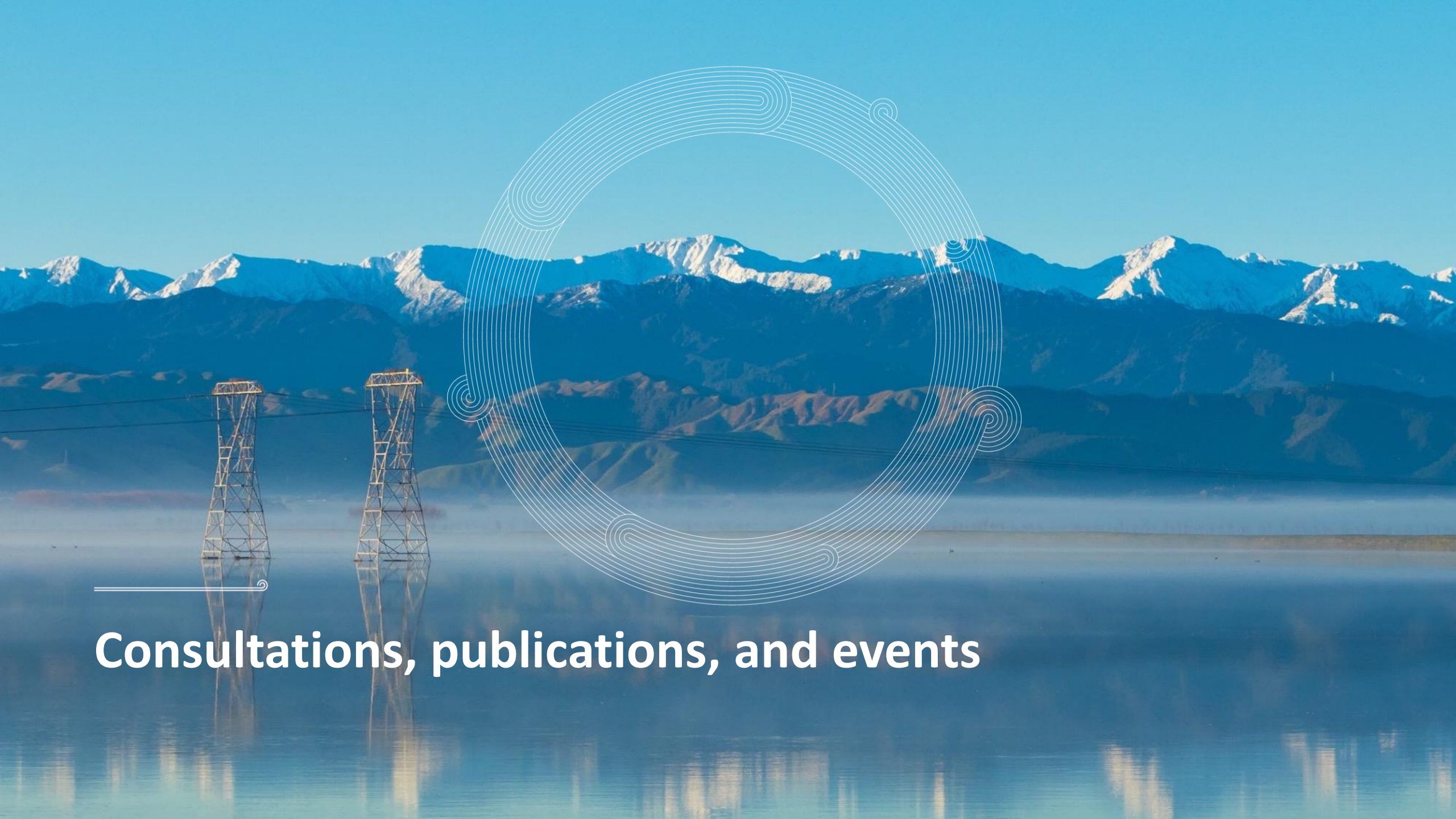
- 02:33: Double circuit tripping of the two 220kV circuits between Hawke's Bay and Wairakei (Taupo).
- Loss of 120 MW load (including Napier, Hastings & Gisborne)
- Loss of 135 MW generation.
- 02:51: Grid Emergency declared and restoration initiated.
- 04:40: Restoration completed



28 October 2025 Morning Peak Low Residual

- Low residual was identified for the morning peak in the 06:30 NRSS schedule.
 - <200 MW NI residual at 08:00.
- A CAN was issued to notify the industry.
- Cause: Relatively small reductions across multiple generators.
 - These added up to a ~400 MW drop in NI generation for the morning peak (when comparing 02:00 and 06:30 schedules).
- Actual residual over the peak exceeded 200 MW.
 - Wind generation was slightly higher than forecast.





Consultations, publications, and events

Consultations, publications, and events

We received 6 submissions to our [draft SOSFIP amendment proposal consultation](#). Thanks to those who submitted. The period for cross-submissions closes at 5pm today!

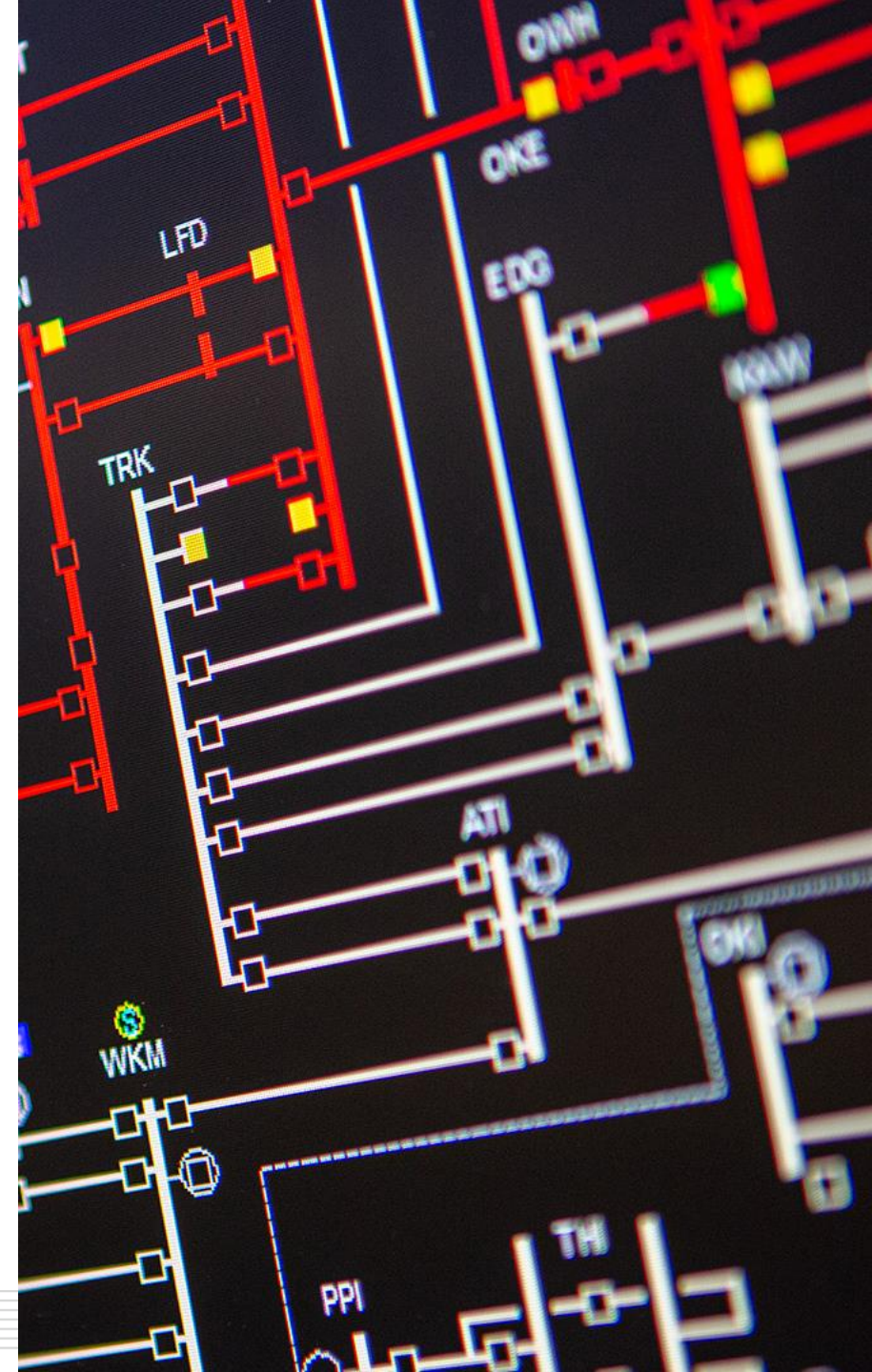
The [2026 SOSA reference case assumptions and sensitivities](#) consultation is open. Submissions are due by 5pm Monday 24 November.

Last week we published our [CACTIS summary of submissions and recommendations](#) to the recent CACTIS consultation.

Our [2025 Ancillary Services tender](#) closed last Wednesday, we are now processing the tender responses as we work to contract the successful providers by early December.

The October [Energy Security Outlook](#) is available on our website.

The **GridEx industry exercise is taking place on 17/18 November**, any queries contact GridEx@transpower.co.nz



Questions / Patai



Please raise your hand

If you have feedback let us know via our [Feedback Form](#)

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