



TRANSPower

System Operator Industry Forum

25 November 2025



Today's agenda

- Key messages
- Market update
- NZGB update
- Outage update – next 4 weeks
- Operational update
- SO generation commissioning update
- Operations Customer Portal update
- Consultations, publications and events
- Questions / Patai





Key Messages

- National hydro storage remains very strong and we continue to have high levels of renewables and low thermal generation on the system
- Outage volumes are at their peak for the year with critical outages on the Wairakei ring taking place over the next three weeks.
- A challenge with the highly renewable system is some outages are much more secure with thermal generation running and some constraining off element.
- Participants are asked to be responsive when needed and keep offers up-to-date.



Market update

Energy: National hydro storage

Hydro storage is at the second highest level on record for this time of year, behind 1983

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

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

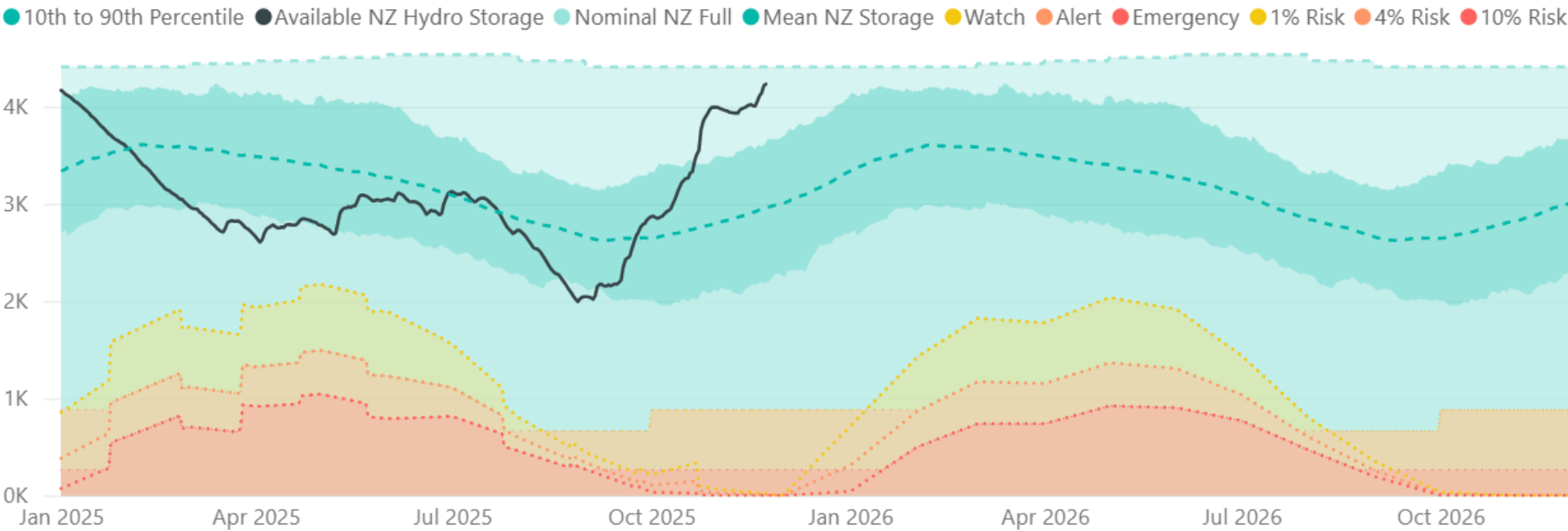
New Zealand Energy Risk



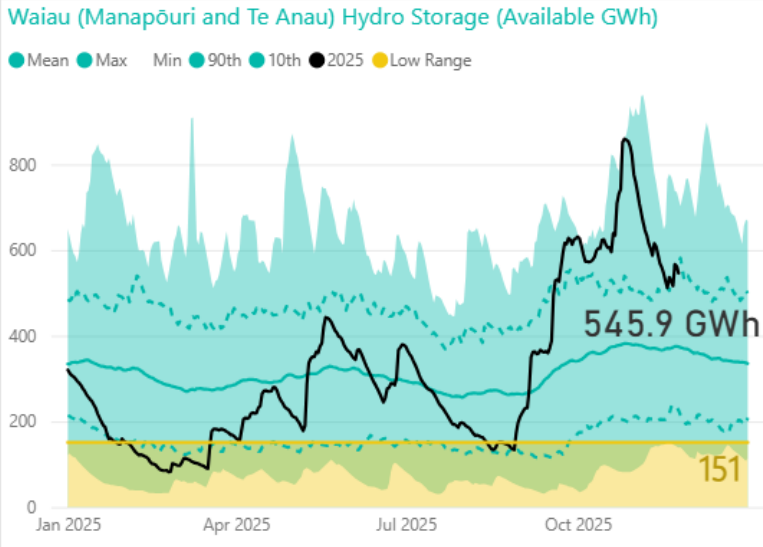
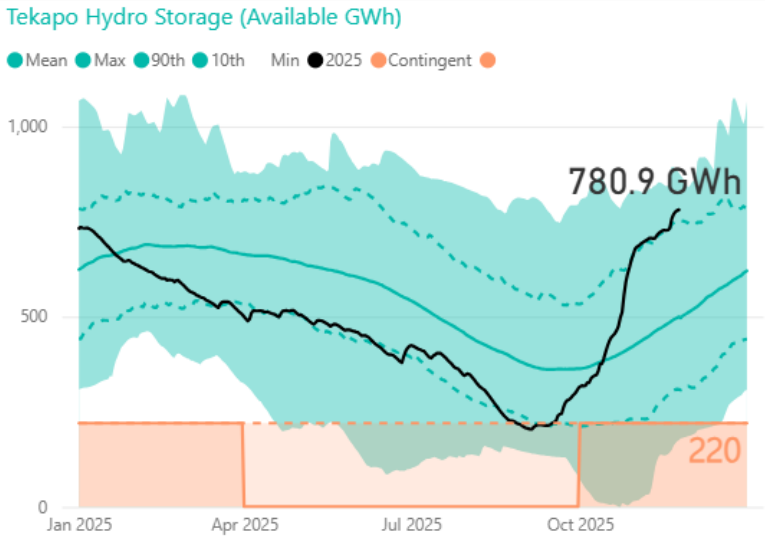
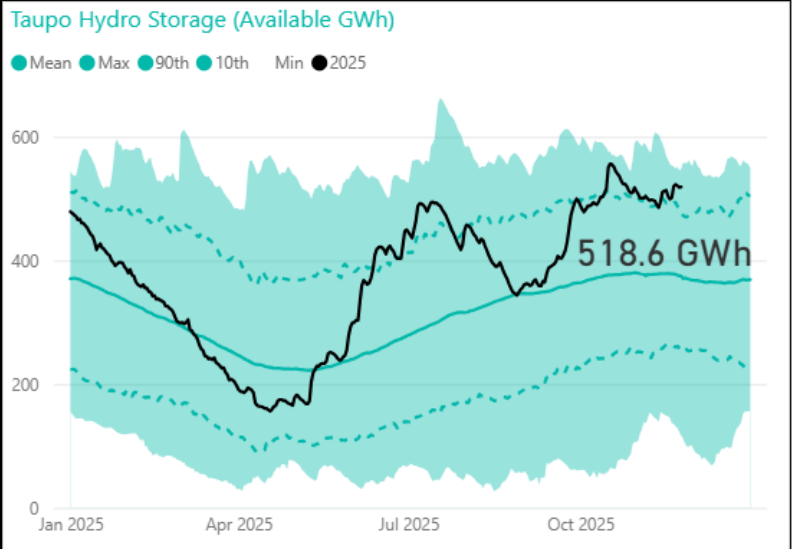
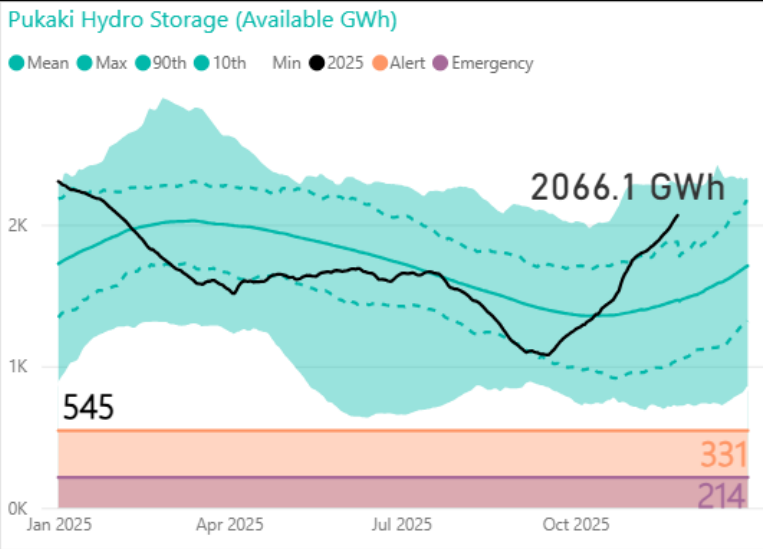
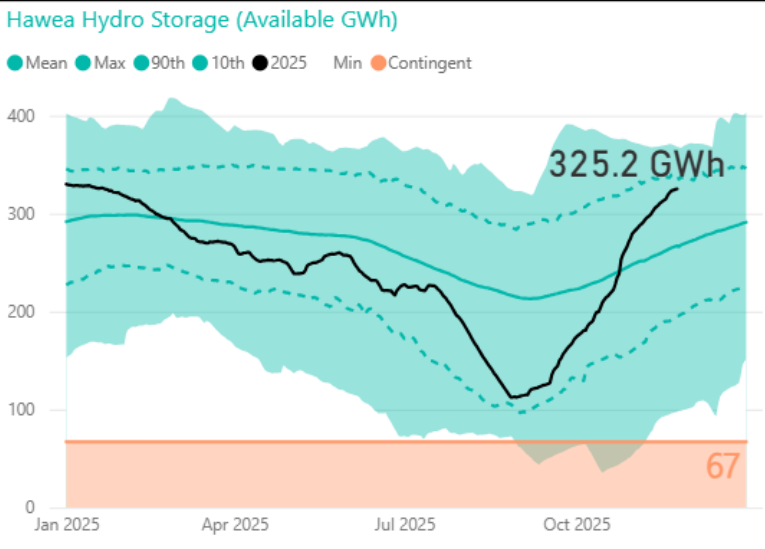
South Island Energy Risk



New Zealand Electricity Risk Status Curves (Available GWh)



Hydro storage by catchment



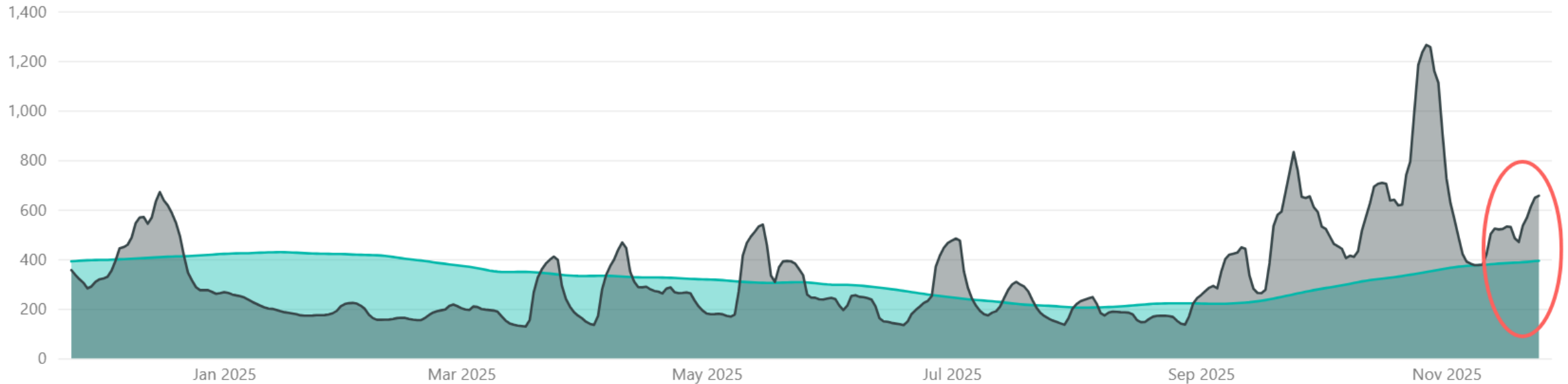
Lake	Current (%) avg
nz_controlled	142
si_controlled	142
hawea	122
pukaki	141
manapouri	138
te_anau	150
tekapo	156
taupo	139



Hydro inflows

South Island Mean 7 Day Inflows (Available GWh)

● SI Inflows - Average ● SI Inflows



North Island Mean 7 Day Inflows (Available GWh)

● NI Inflows- Average ● NI Inflows

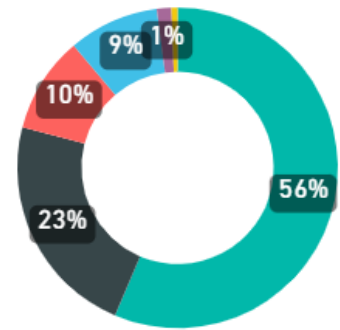


Generation mix

- Hydro generation share very high at 72%
- Wind generation below average at 7%
- Thermal generation low at 1% with high hydro, low prices
- Geothermal below average at 17% due to a combination of planned and unplanned outages
- Renewable contribution 97% for the seventh week in a row

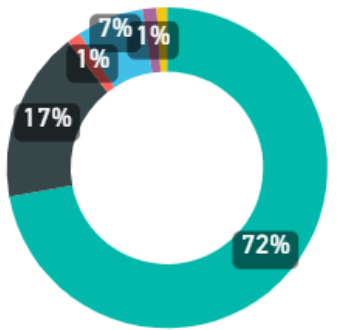
Last 52 Weeks Generation Mix - Weekly GWh

Hydro Geothermal Thermal Wind Co-Gen Solar



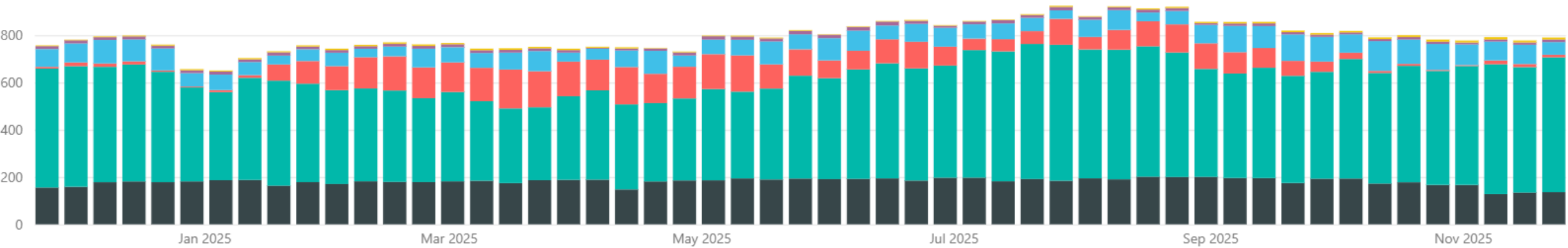
Last 7 Days Generation Mix - Weekly GWh

Hydro Geothermal Thermal Wind Co-Gen Solar



Weekly Generation Mix - GWh

Geothermal Hydro Thermal Wind Co-Generation Solar

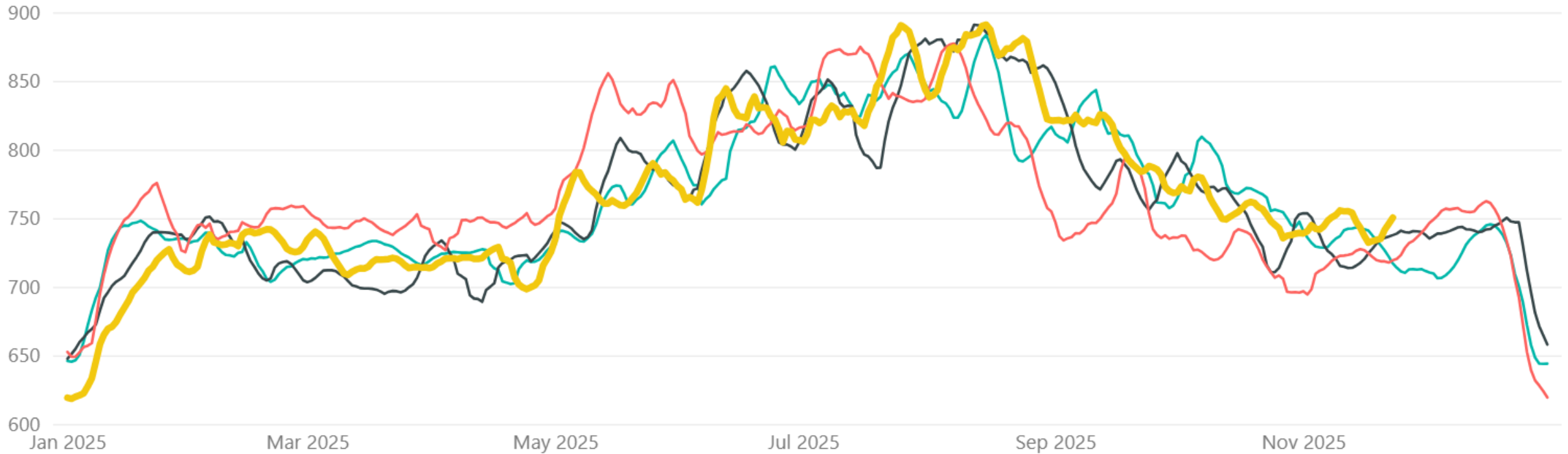


Demand

- Demand slightly higher than the average of the last three years
- 750 GWh last week, and 737 GWh the week before

National Weekly Demand - GWh - 7 Day Rolling

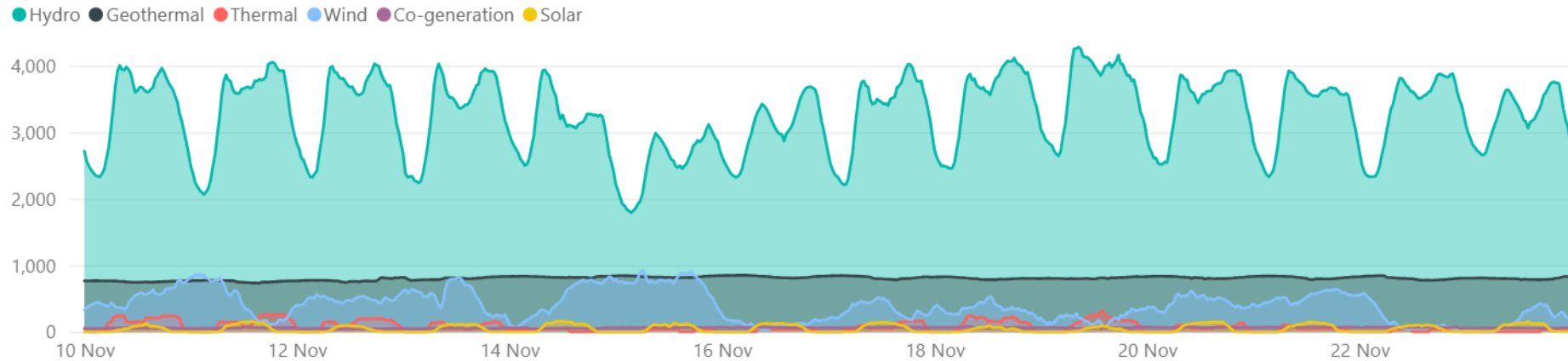
year ● 2022 ● 2023 ● 2024 ● 2025



Pricing

- Average Ōtāhuhu price was \$67/MWh last week, and \$72/MWh the week prior
- Higher prices weekdays and when wind was lower
- Peak of \$256/MWh at Ōtāhuhu, 15:00 on Tuesday 18 November with the HVDC link at its maximum northward capacity and higher priced North Island hydro dispatched

Generation - MW



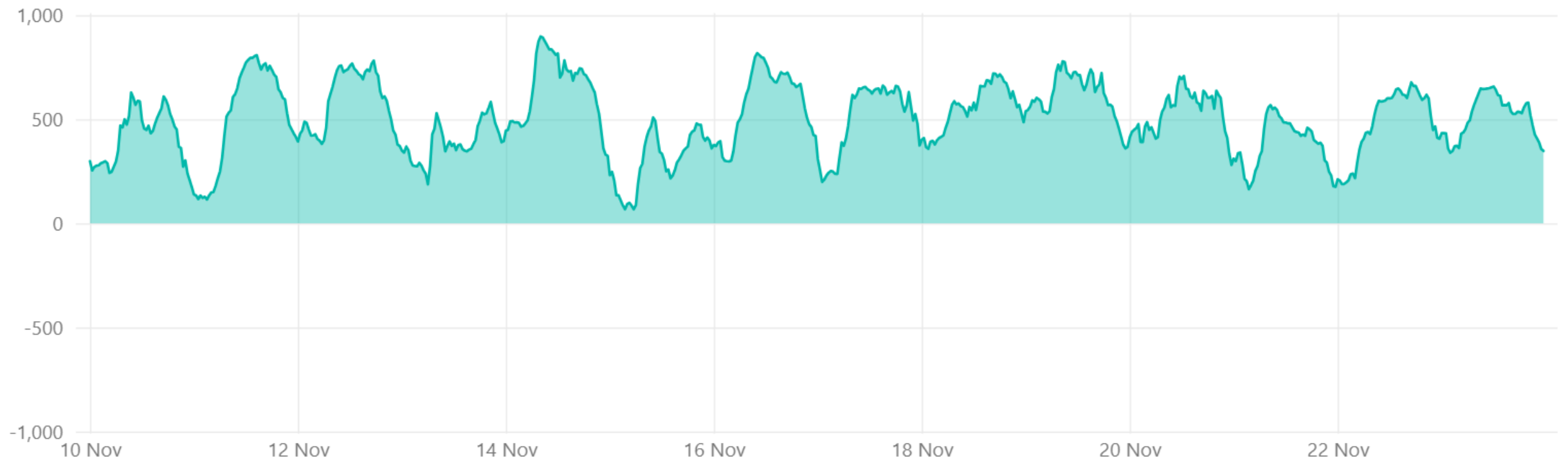
Prices - \$/MWh



HVDC transfer

- HVDC transfer exclusively northward with very high South Island hydro storage
- Daytime transfer often limited by HVDC physical capacity with multiple AC assets on outage
- Last week 86 GWh sent north, 0 GWh sent south

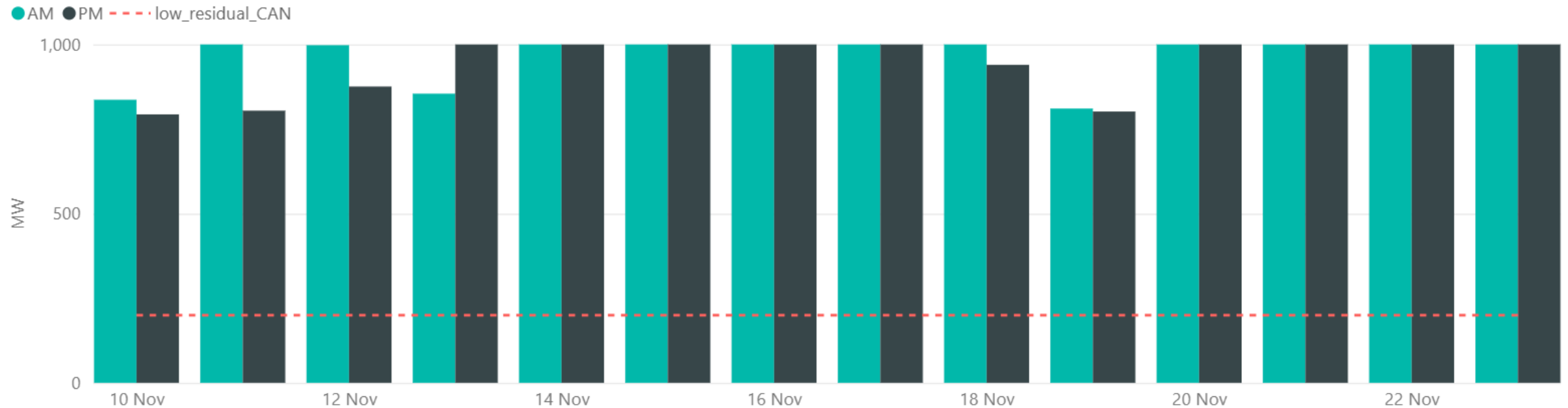
Net HVDC Transfer - MW (Northward positive)



Capacity residual margins

- Healthy residuals with low late-spring demand
- Lowest residual 802 MW (Wednesday 19 November)

Lowest Residual Points - MW





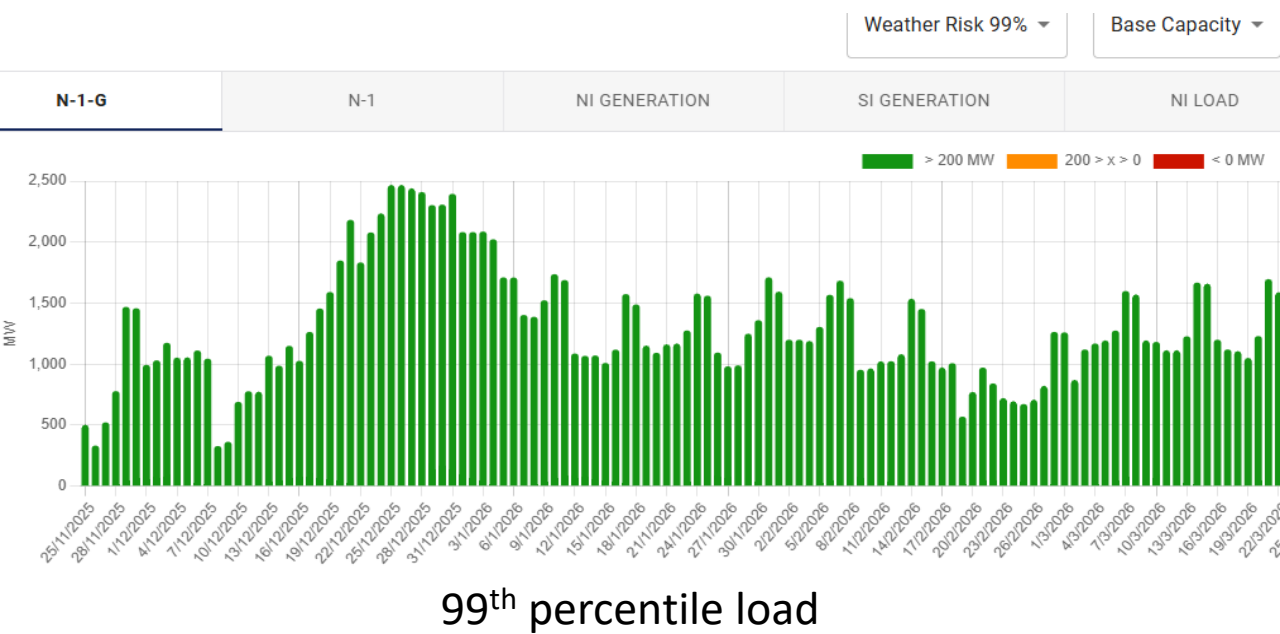
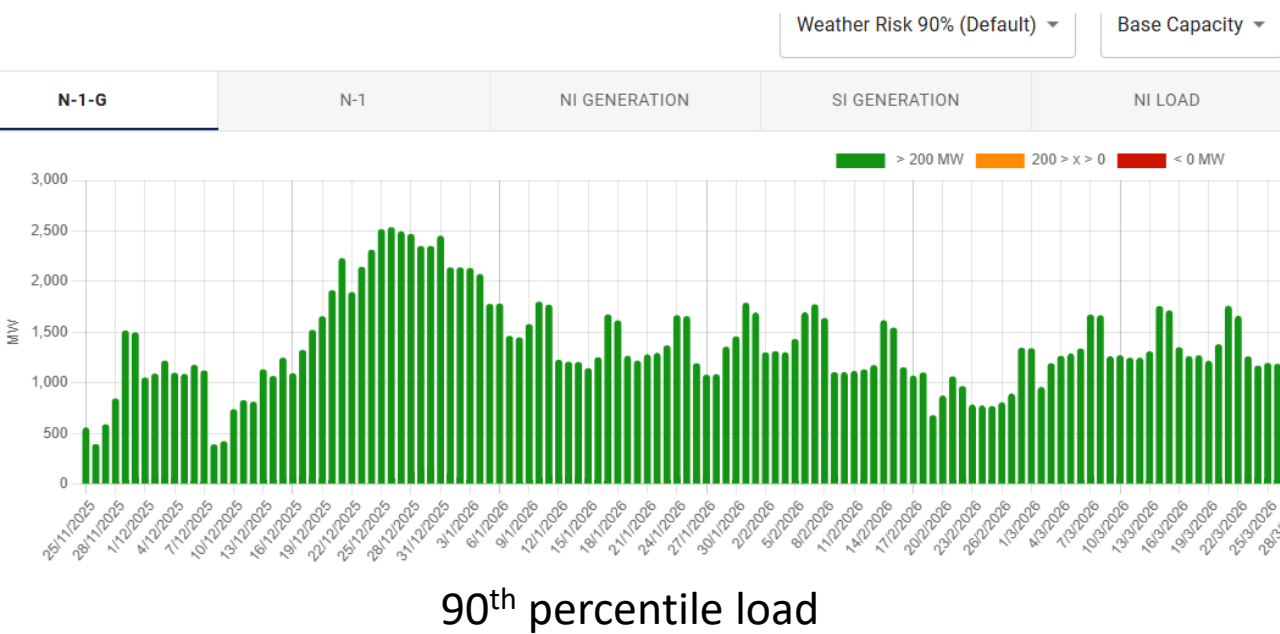
NZGB update

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

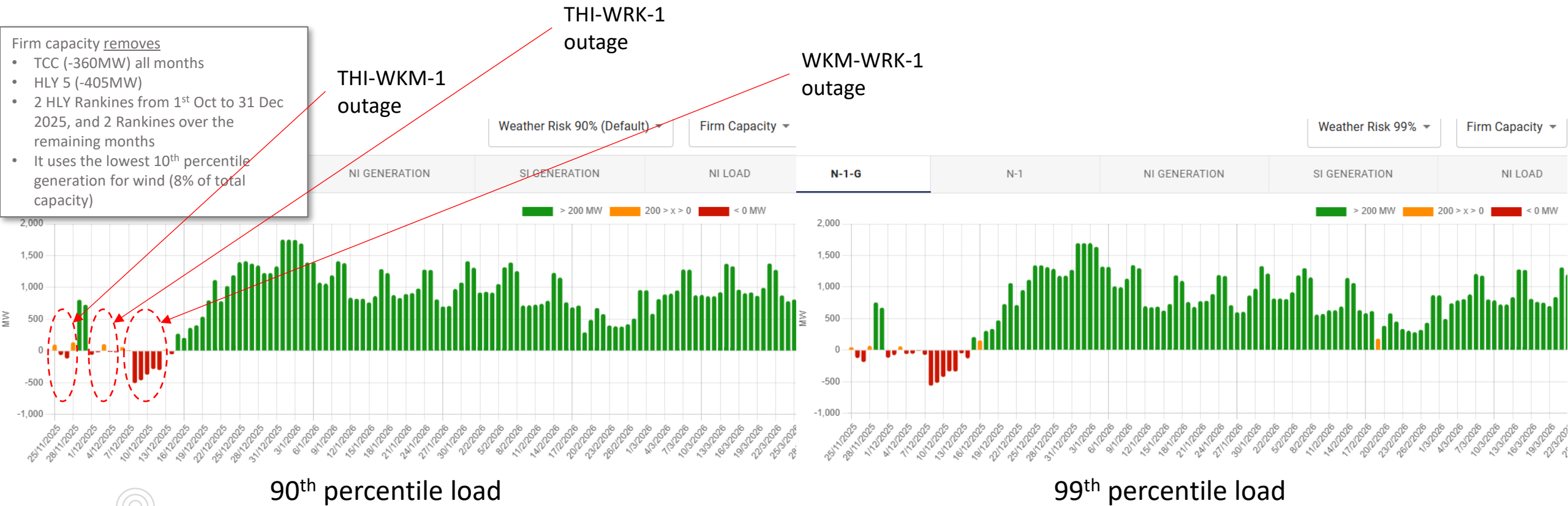
Base case capacity at 90%

- ***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



NZGB update: Information

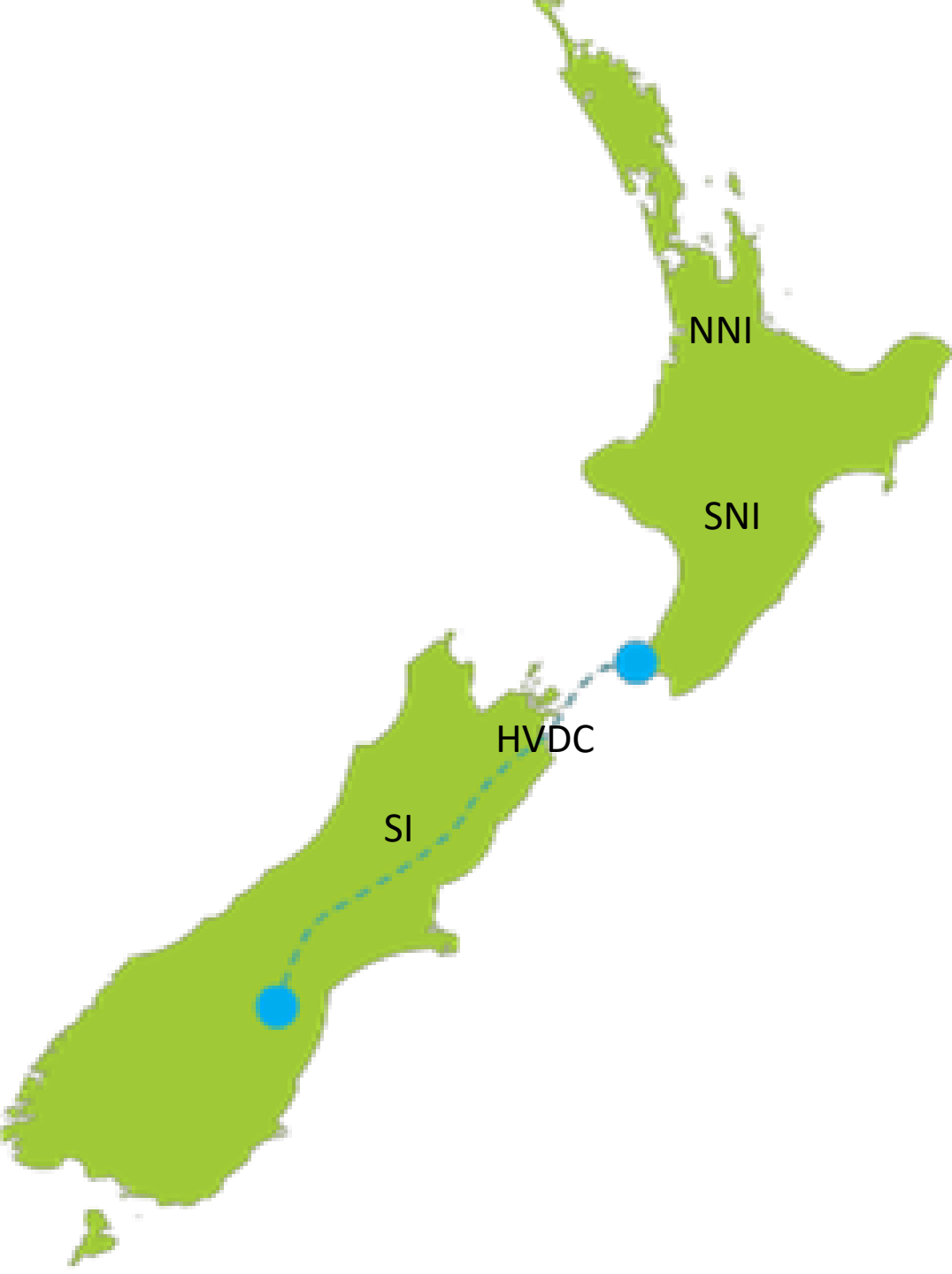
Recommendations from SO:

- 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

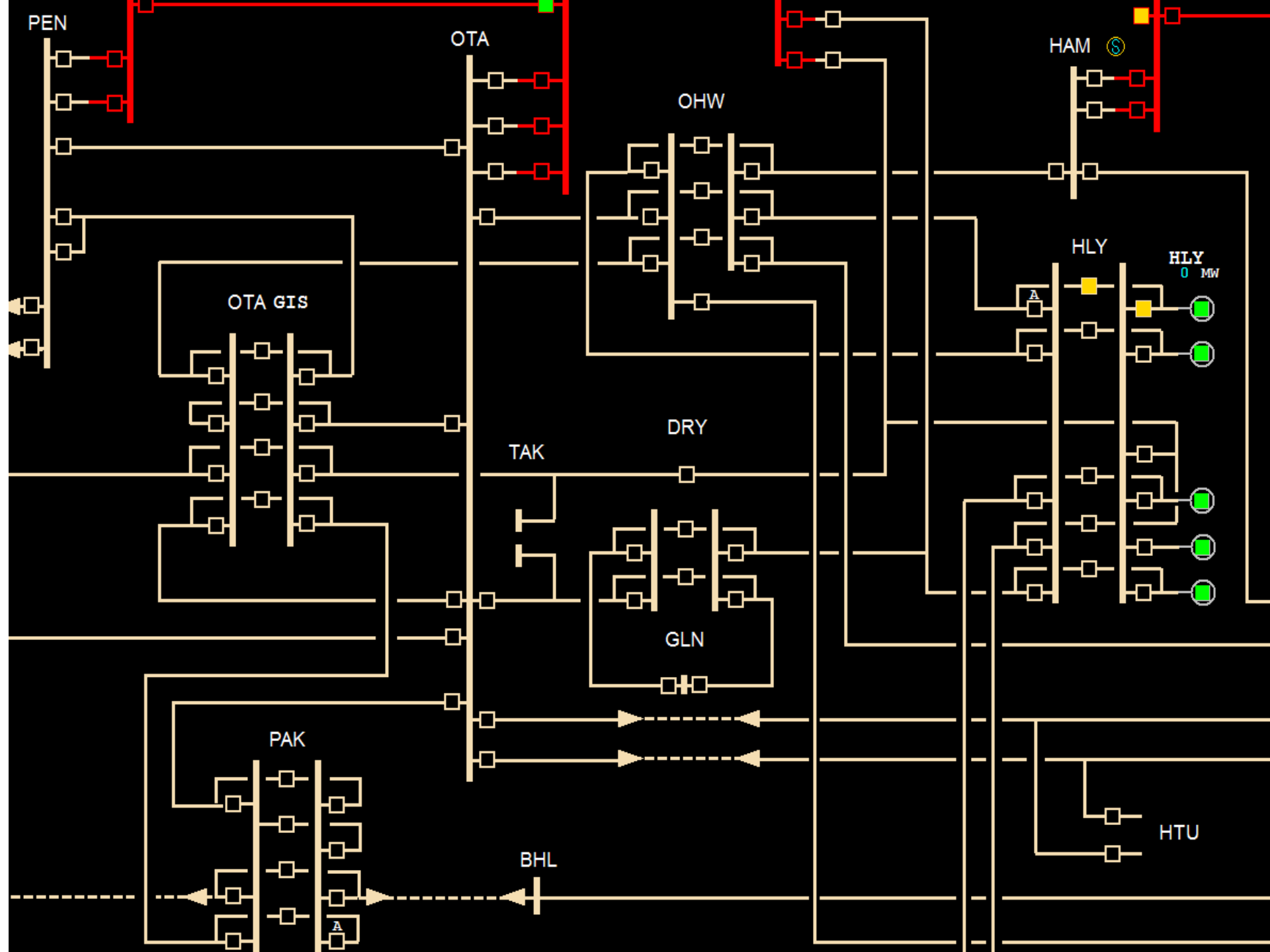
Asset owners

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



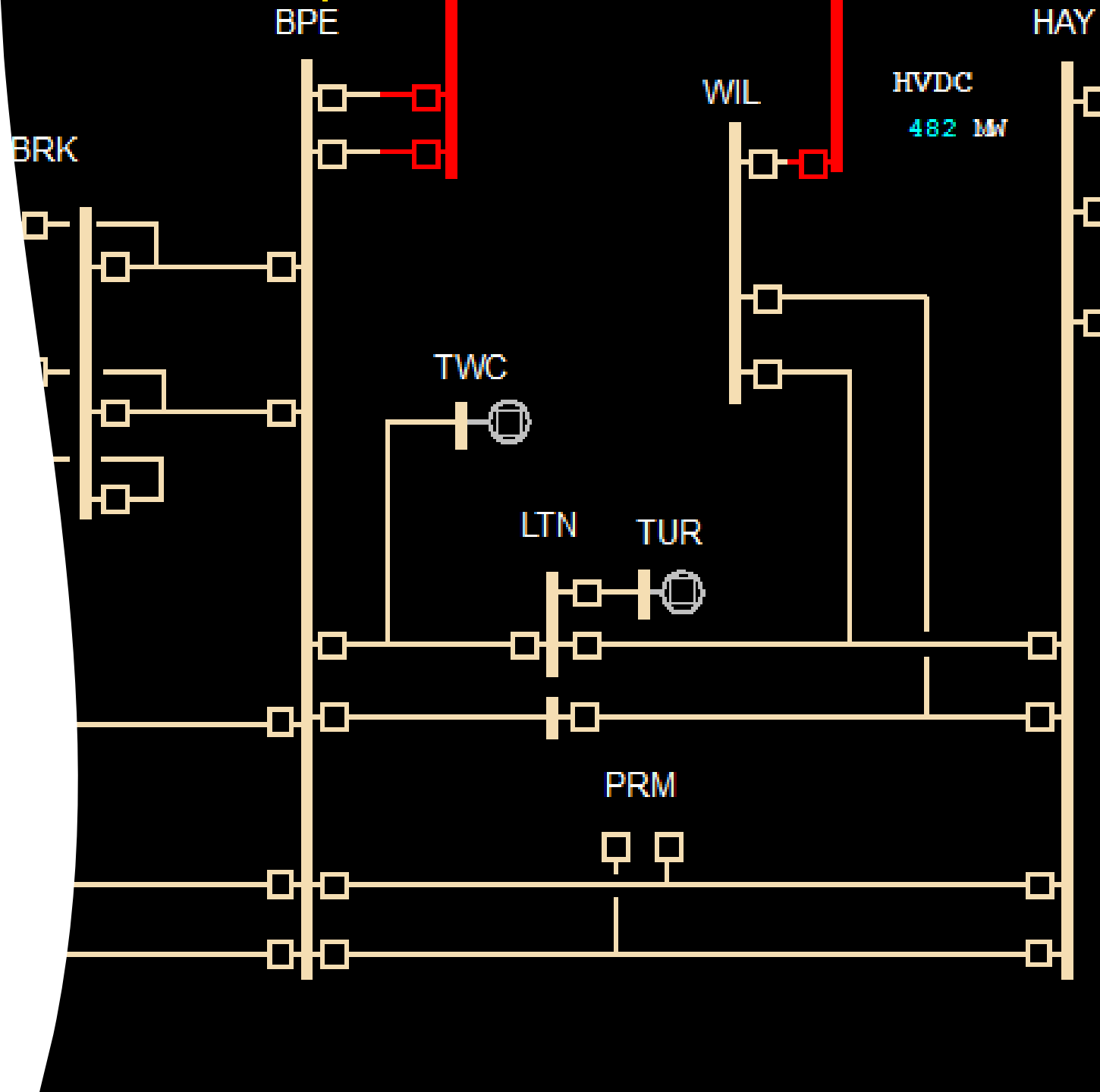
NNI Outages

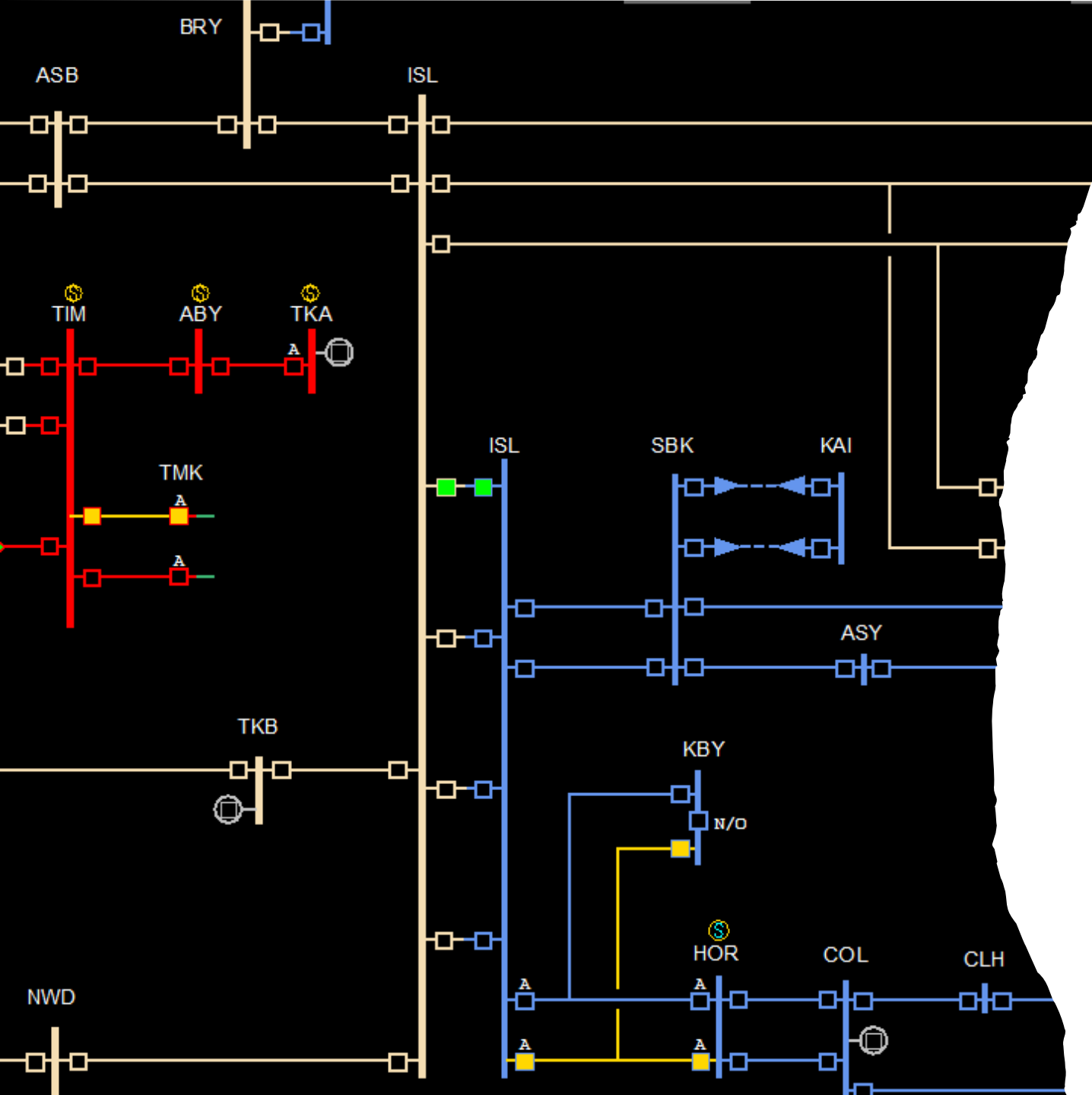
- Week of 1 Dec
 - HEN_SWN_1
 - OTA_HTU_WKM_2
 - DRY_TAK_OTA_1
 - EDG_TRK_1
- Week of 8 Dec
 - HLY_OHW_2
 - EDG_TRK_2
- Week of 15 Dec
 - No significant outages
- Week of 22 Dec
 - No significant outages



SNI Outages

- Week of 1 Dec
 - HLY_SFD_1
 - HAY_WIL_LTN_1
 - THI_WRK_1
 - HAY_T5
- Week of 8 Dec
 - HAY_WIL_LTN_2
 - WKM_WRK_1
- Week of 15 Dec
 - TKU_WKM_1
 - BPE_TKU_1
- Week of 22 Dec
 - No significant outages

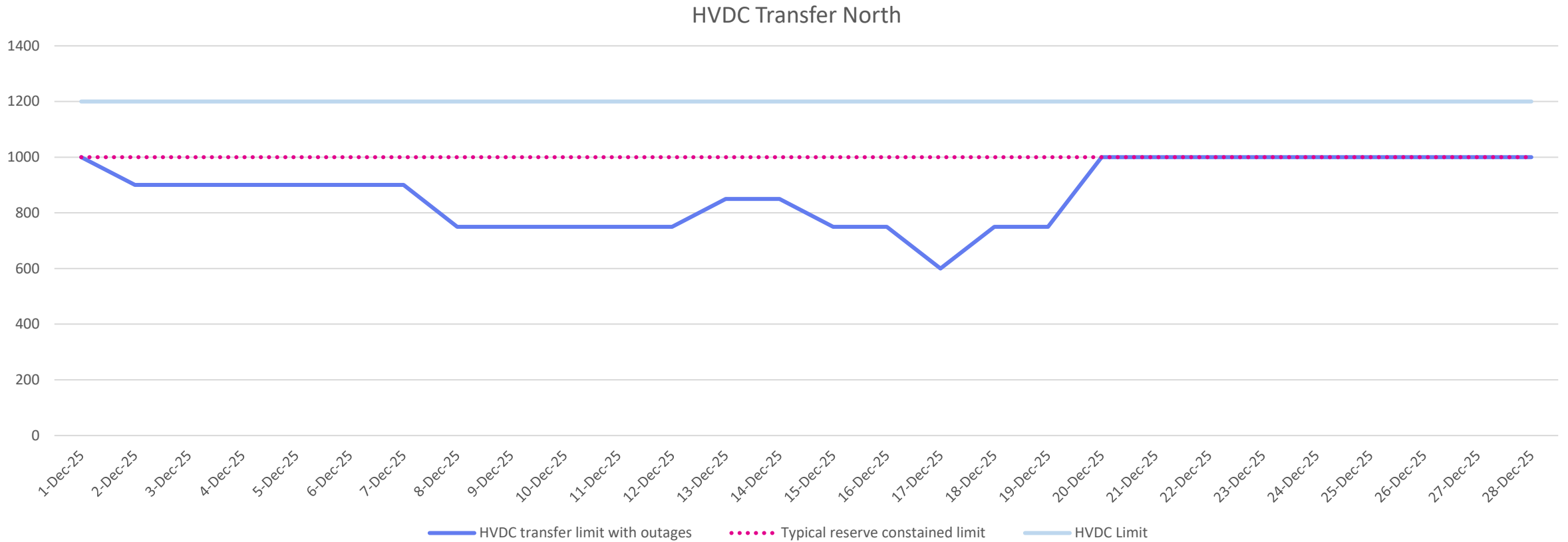




SI Outages

- Week of 1 Dec
 - ASB_BRY_1
 - KIK_STK_2
 - ISL_WPR_CUL_KIK_3
 - INV_ROX_2
- Week of 8 Dec
 - KIK_STK_1
 - CUL_KIK_2
 - HWB_SDN_1
 - MAN_NMA_3
 - INV_MAN_2
- Week of 15 Dec
 - ISL_KIK_1
 - MAN_NMA_1
 - MAN_NMA_2
- Week of 22 Dec
 - No Significant Outages

HVDC North transfer limit





Operational update

Wairakei Ring Outages

- THI_WKM 1 outages starts tomorrow
- THI_WRK 1 next week and WKM_WRK 1 the following week
- These outages scheduled can result in the following:
- Binding constraints being created in forward schedules.
- These constraints are designed to protect remaining circuits for a tripping of and another circuit by pre-contingently reducing generation in the area.
- This generation reduction is, at times, significant.
- Generation being reduced can include must-run (zero priced) and inflexible generation such as geothermal units.
- Action may be required in scheduling and real-time to manage 13.82 (2)(a) claims from multiple generators.
- Post event action may require generation to be shed to resolve post event overloads





SO Generation Commissioning & Testing update

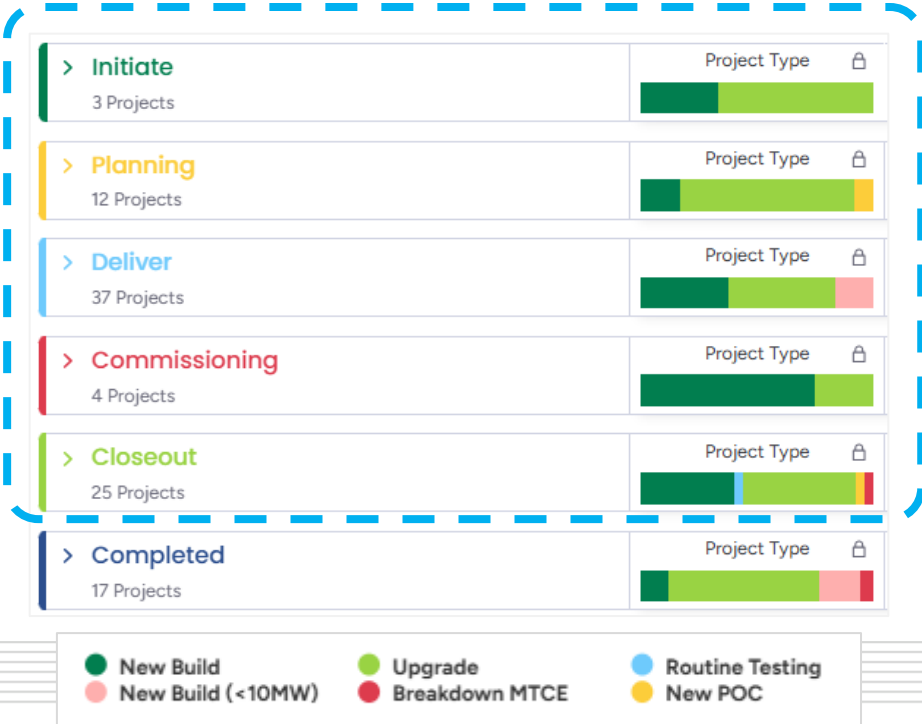
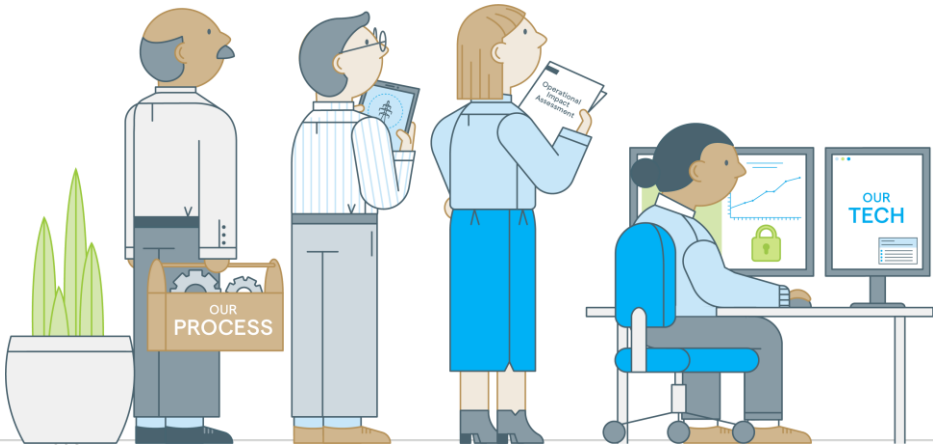
In-flight commissioning, routine testing & upgrade projects

Current Commissioning: 4



Commissioning								
☐	Project	Project Type	Stage	1st Sync ...	EIPC Te...	Net New Capac...	Energy Type	
☐	TOH - Taiohi Solar Farm	New Build	Commissioning	6 Oct, 2025	15 Dec, 2025	22.4	Solar	
☐	GDS - Golden Stairs Solar Farm	New Build	Commissioning	13 Nov, 2025	3 Dec, 2025	17.6	Solar	
☐	MHO - Mangahao G2 Governor Replacement	Upgrade	Commissioning	19 Nov, 2025	28 Nov, 2025		Hydro	
☐	WTA - Whitianga Solar Farm	New Build	Commissioning	24 Nov, 2025	27 Feb, 2026	23.75	Solar	

Inflight Projects: 81





Operations Customer Portal Update

Update to portal on 27th November 2025

NZGB:

- Registered user role type removed. All functionality available for Guest users.
- NZGB report upload notifications can be enabled by submitting email address through NZGB website.

POCP:

- The Registered user role type (with no asset owner association) is removed. All functionality available for Guest users.
- Saved searches, outage change notifications and SO POCP assessment notifications functionality will still exist.



Update to portal on 27th November 2025

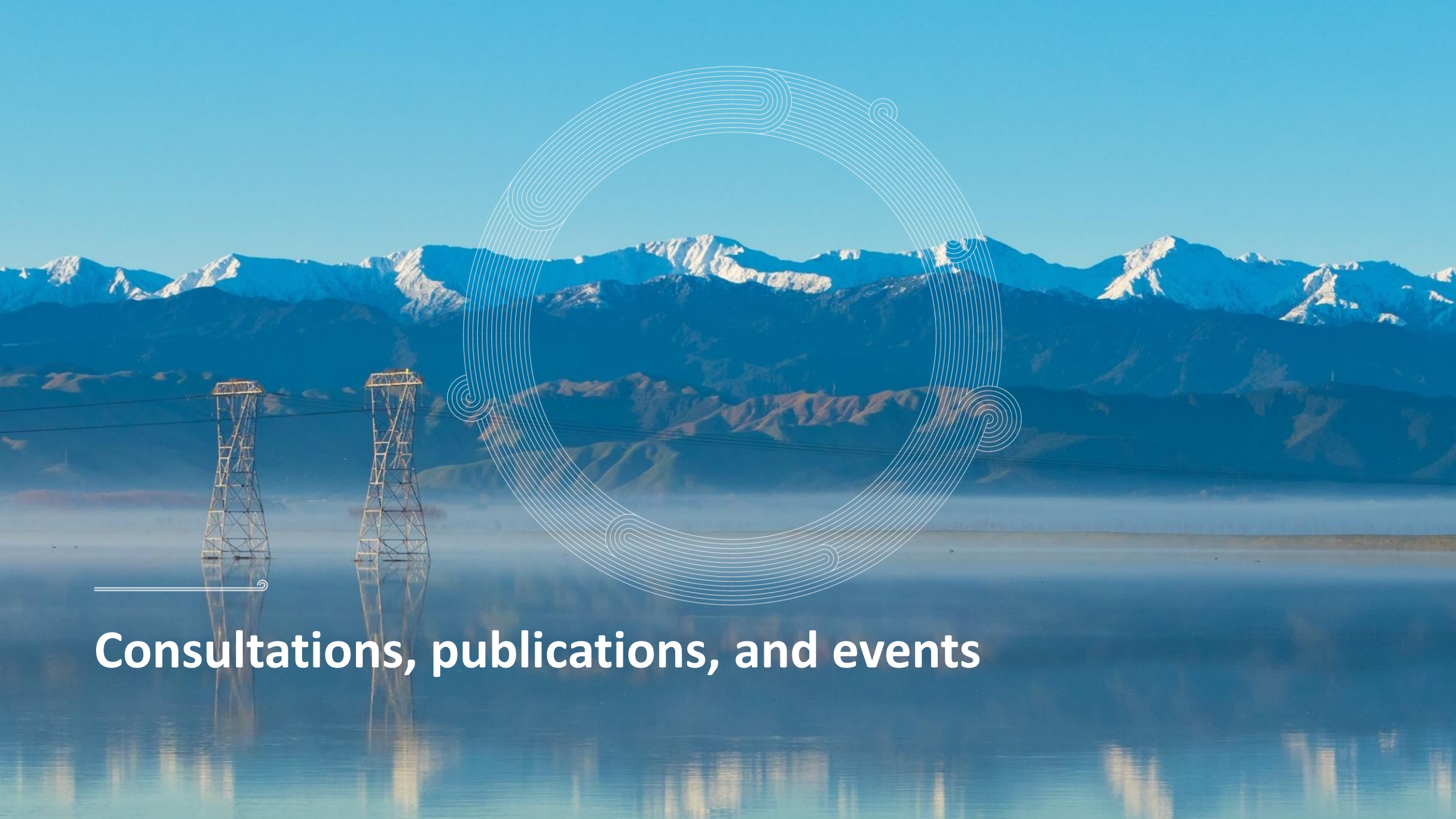
SO Register:

- Registered user role type removed. All functionality available for Guest users.
- Added functionality for storing contact details for applications and adding a purchase order number.

AUFLS:

- Added functionality to introduce feeder deactivation notifications





Consultations, publications, and events

Consultations, publications, and events

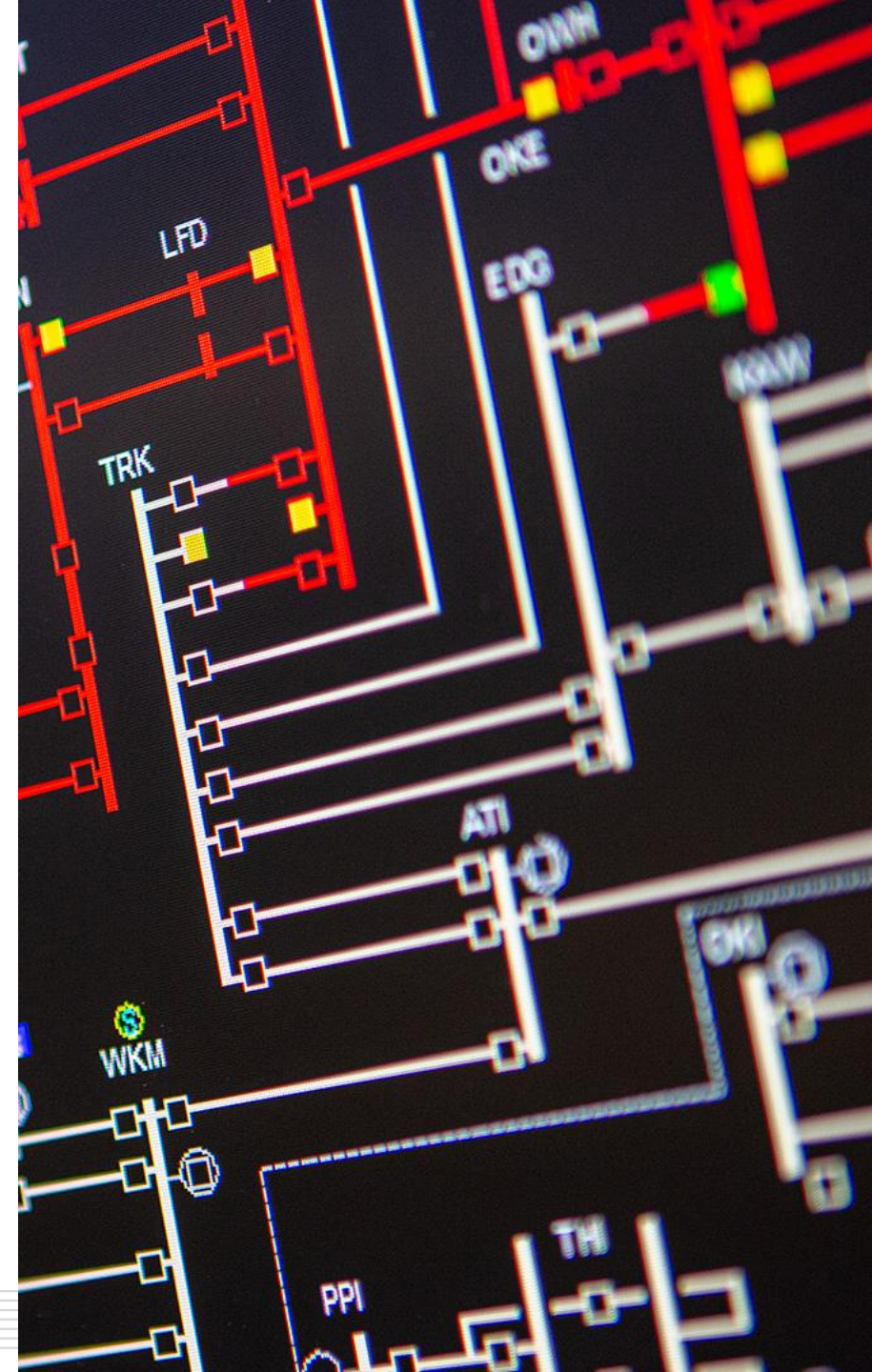
We will publish our **Winter 2025 Review** on our [system and market insights webpage](#) this week.

Thanks to those who provided feedback to our [draft SOSFIP amendment proposal consultation](#). Work is underway to finalise our amendment proposal for submission to the Authority.

We will publish the November [Energy Security Outlook](#) on our website this week.

The [2026 SOSA reference case assumptions and sensitivities](#) consultation closed yesterday.

Operations **Customer Portal update** will occur on Thursday 27 November.



Questions / Patai



Please raise your hand

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

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