System Operator Industry Forum

14 October 2025

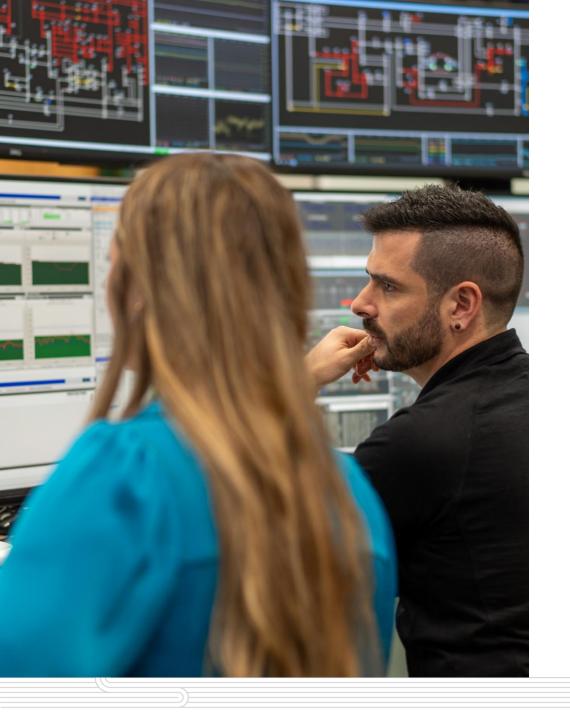


Today's agenda

Market and Operational updates

- Key messages
- Market update
- NZGB update
- Outage update next 4 weeks
- Operational update Tokaanu Black Start
- 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.
- Continued focus on fuel (both hydro and thermal) and asset availability is needed to reduce energy and capacity risks going into 2026.
- Moving into spring we have seen demand soften due to warmer weather but are also seeing less firm generation in the stack due to outages and Huntly 5 not running as baseload.



Energy: National hydro storage

| | Hydro storage level (% of mean ▲ / ▼) | | |
|------------|---------------------------------------|--------------|---------------|
| | New Zealand | South Island | North Island |
| Last forum | 107% | 102% | 137% |
| Now | 115% 🔺 | 112% 🔺 | 135% ▼ |

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

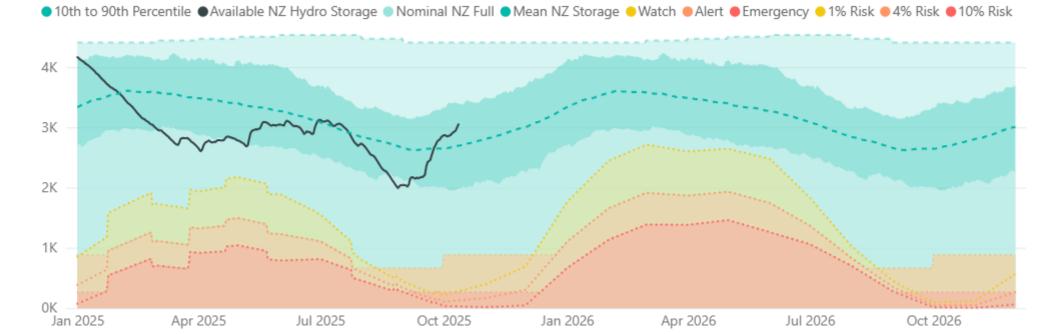
New Zealand Energy Risk



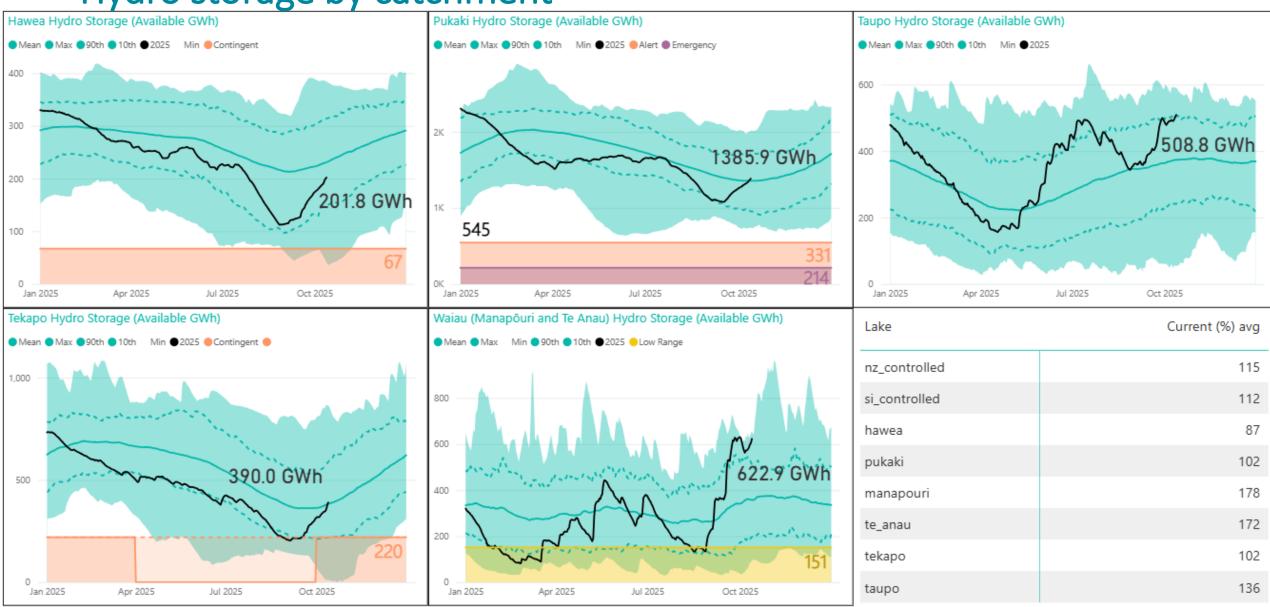
South Island Energy Risk



New Zealand Electricity Risk Status Curves (Available GWh)

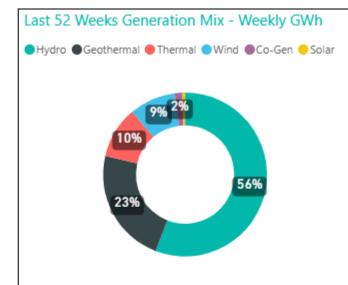


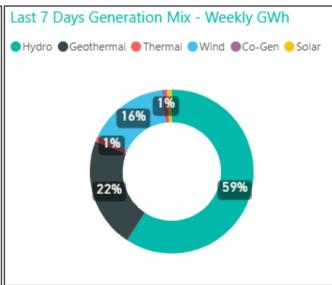
Hydro storage by catchment



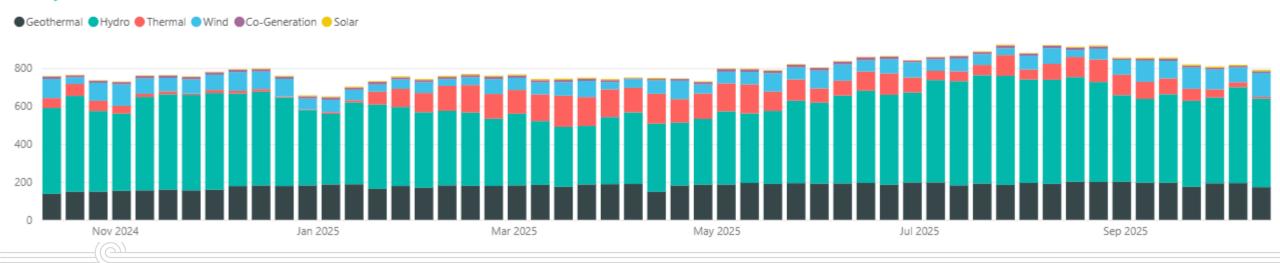
Generation mix

- Hydro generation share above average at 59%.
- Wind generation above average at 16%
- Thermal declined to just 1%
- Geothermal slightly below average at 22% with planned outages





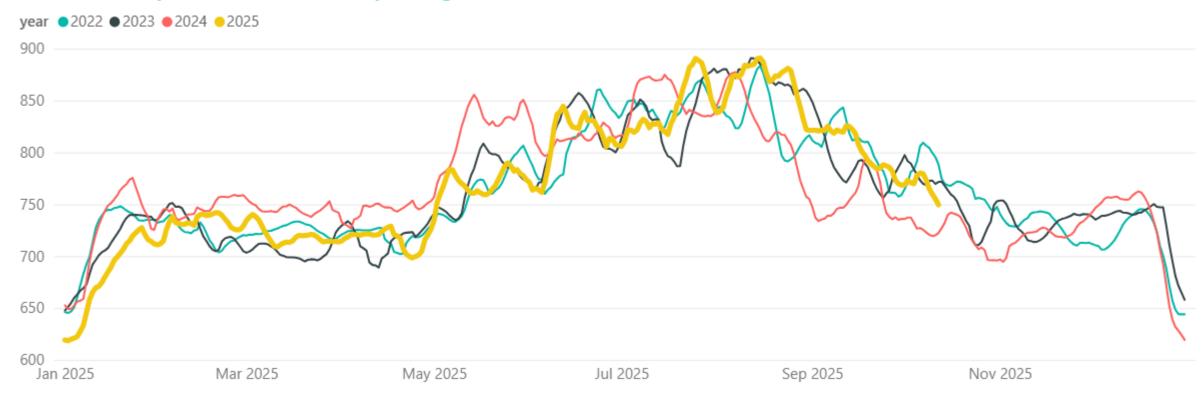
Weekly Generation Mix - GWh



Demand

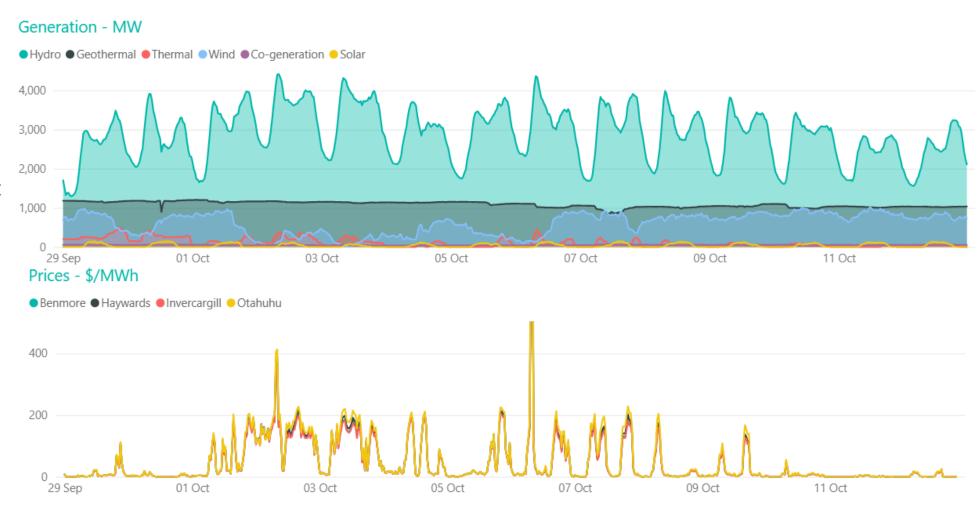
- Declining demand with warmer weather and daylight savings
- 750 GWh last week, and 778 GWh the week before

National Weekly Demand - GWh - 7 Day Rolling



Pricing

- Average Ōtāhuhu price was \$34/MWh last week, and \$65/MWh the week prior
- Peak of \$1193/MWh at Ōtāhuhu, 8am on Monday 6 October
- Volatile prices



HVDC transfer

• 77 GWh sent north and 6 GWh south over past fortnight.

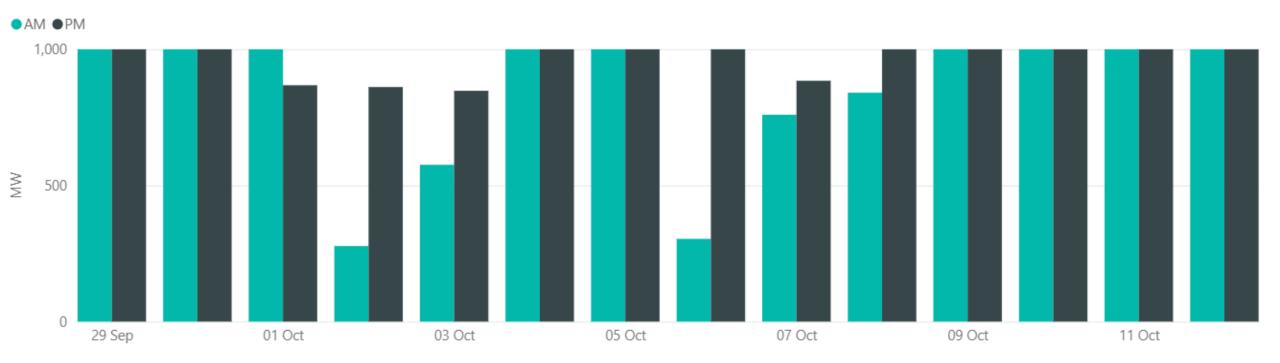
Net HVDC Transfer - MW (Northward positive)



Capacity residual margins

- Mostly healthy residual margins in line with decreasing demand
- Lowest residual 300 MW during 2 October morning peak

Lowest Residual Points - MW



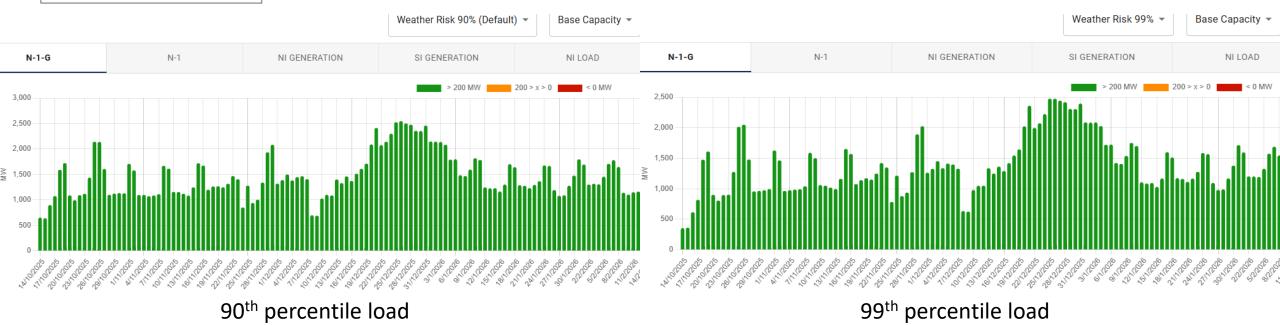


NZGB update: base capacity N-1-G

- 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

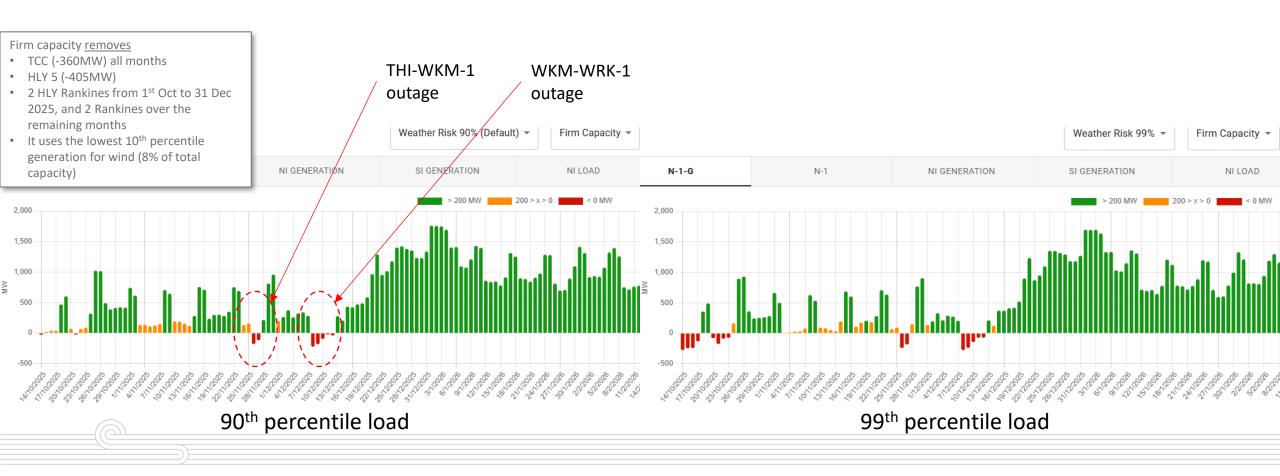
Base case capacity at 90%

- 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



NNI SNI **HVDC** SI

Outages

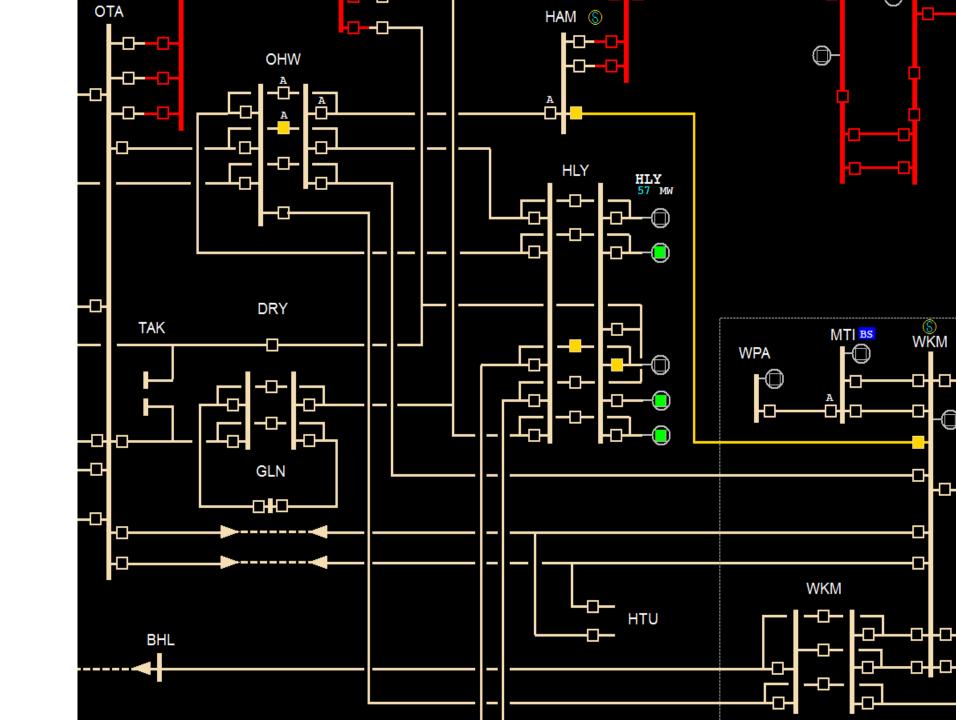
- NNI outages
- SNI outages
- SI outages

Asset owners

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

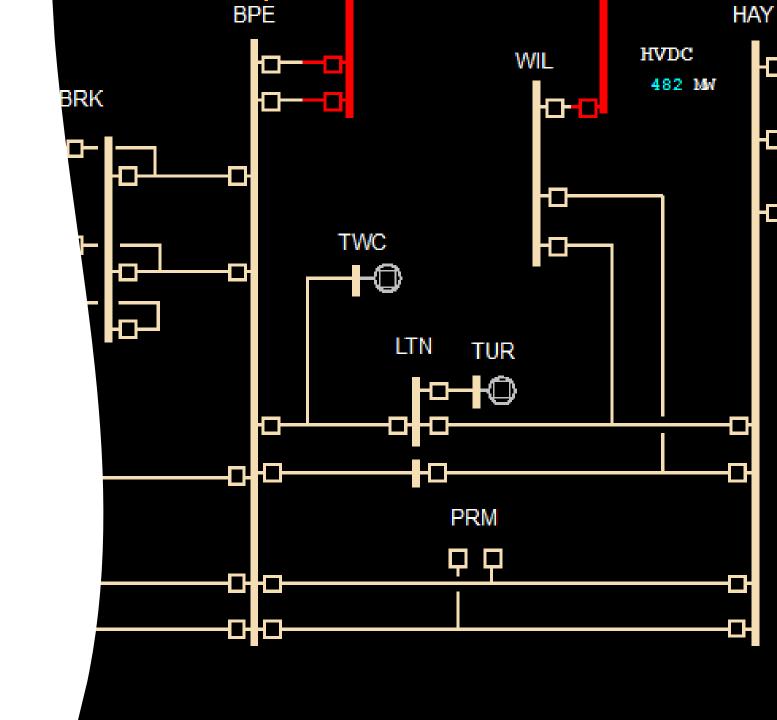
NNI Outages

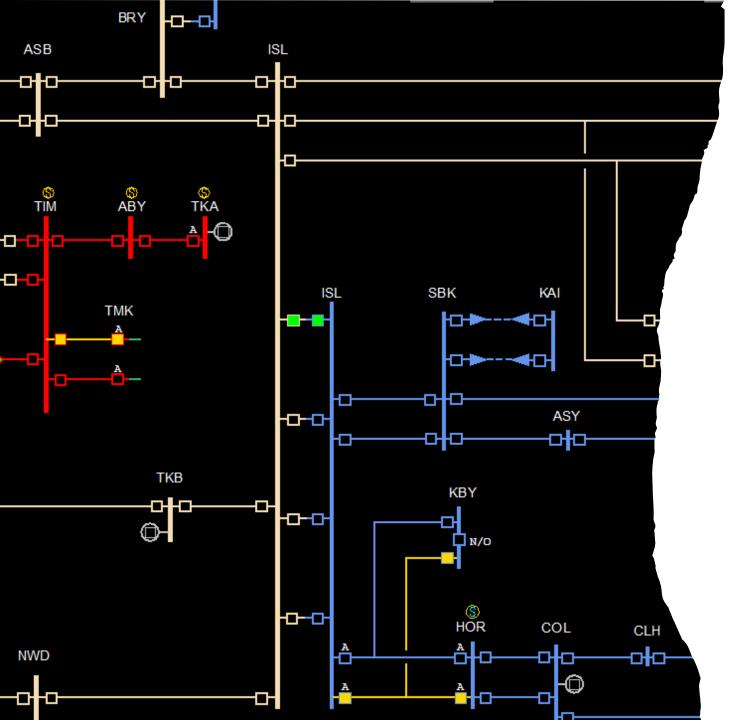
- Week of 20 Oct
 - None
- Week of 27 Oct
 - HAM_WKM_1
- Week of 3 Nov
 - OTA_PAK_4
 - OTA_TIE_5
 - DRY_BOB_HLY_1
- Week of 10 Nov
 - DRY_BOB_HLY_2
 - OTA_HTU_WKM_2
 - HAM_T6



SNI Outages

- Week of 20 Oct
 - SFD_TMN_1
 - TAB_WRK_1
- Week of 27 Oct
 - TMN_TWH _1
 - OHW_WKM_1
- Week of 3 Nov
 - ATI_WKM_1
 - RPO_TNG_1
 - BPE_PRM_HAY_1
- Week of 10 Nov
 - RPO_WRK_1
 - BPE_PRM_HAY_1

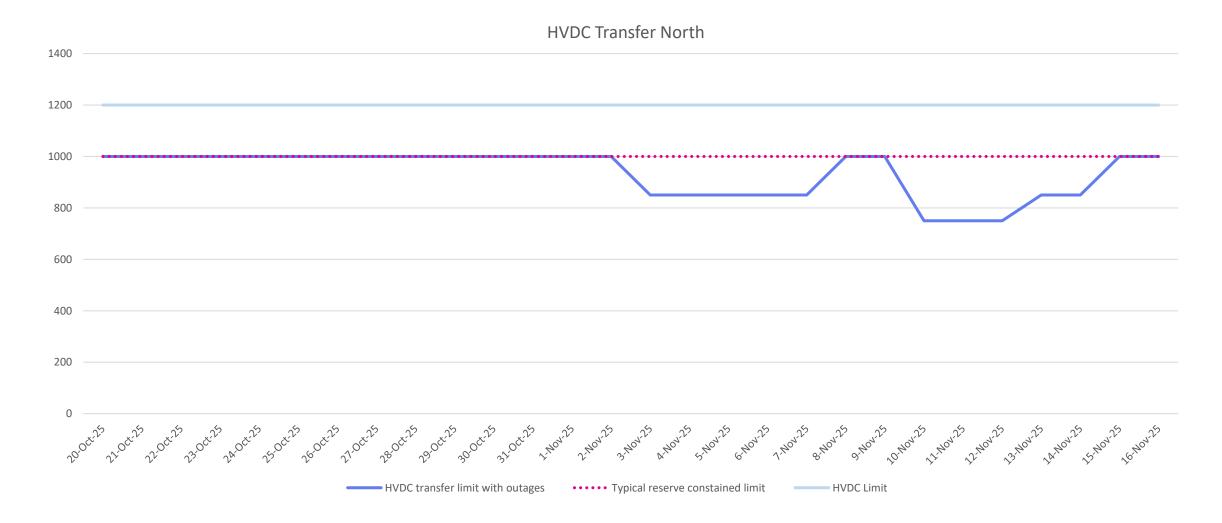




SI Outages

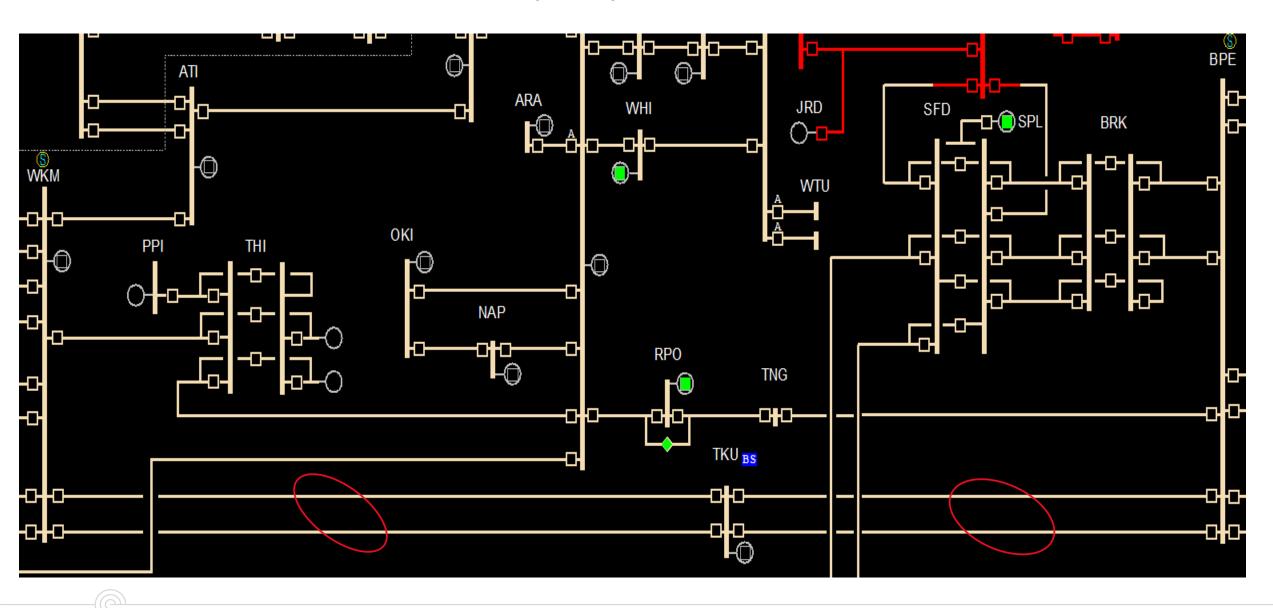
- Week of 20 Oct
 - ASB_BRY_1
 - INV_ROX_1
 - INV_MAN_1
- Week of 27 Oct
 - ROX_TMH_2 followed by ROX_TMH_1
 - NMA_GOR_TMH_2
 - NMA_TWI_1
- Week of 3 Nov
 - ISL_KIK_1
 - INV ROX 2
 - MAN_NMA_3
- Week of 10 Nov
 - BRY_ISL_1
 - NMA_GOR_TMH_1
 - INV_ MAN_2

HVDC North transfer limit

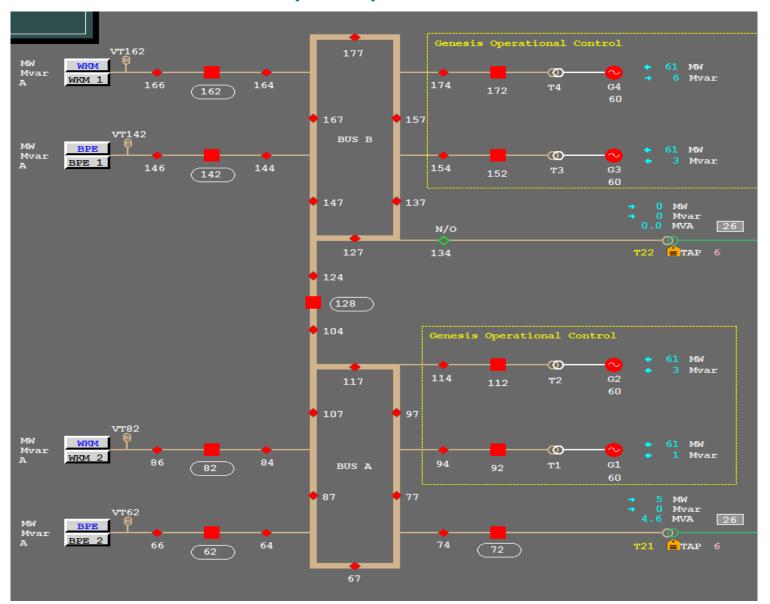




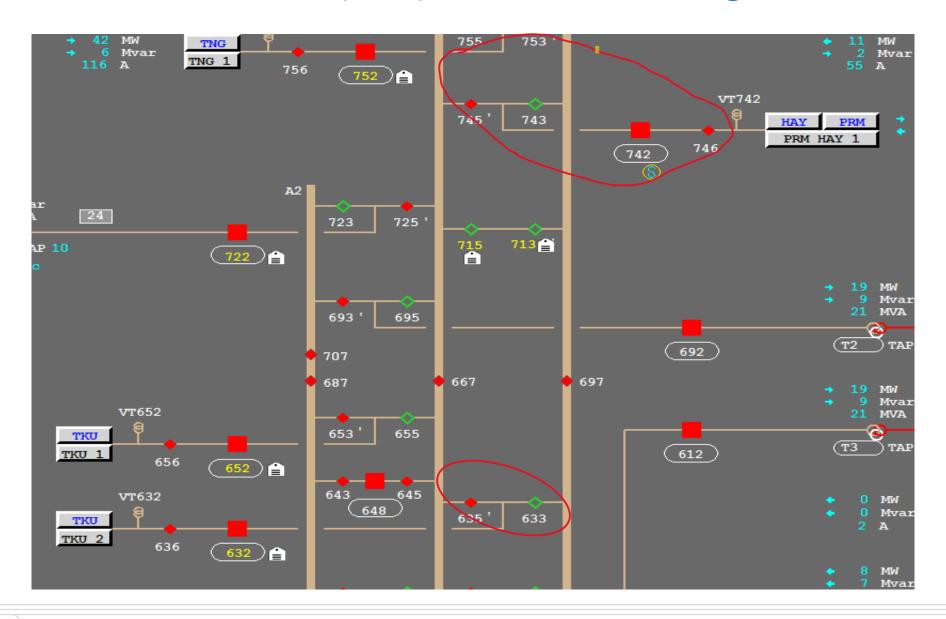
Tokaanu (TKU) Black Start Test

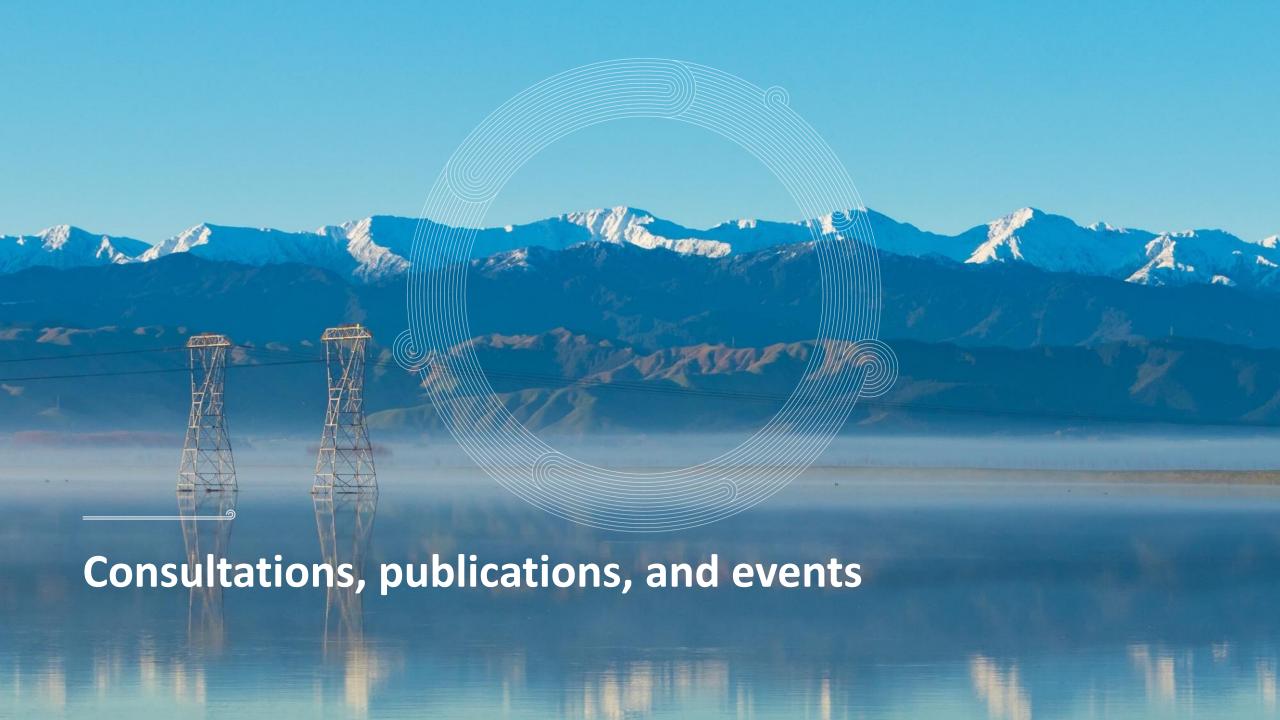


Tokaanu (TKU) Black Start Test



Tokaanu (TKU) Black Start Testing





Consultations, publications, and events

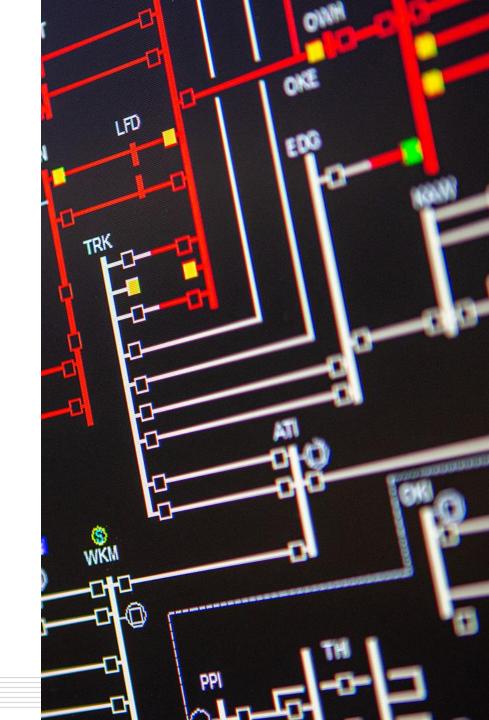
Our <u>draft SOSFIP amendment proposal consultation</u> is now open. Submissions are due by 5pm Tuesday 4 November, followed by a week for cross-submissions.

Our <u>2025 Ancillary Services tender</u> is now open. We are contracting for Instantaneous Reserves, Frequency Keeping (MFK and BSFK), and North Island Black Start services. Tenders close 5pm, Wednesday, 5 November.

We will publish the next **Quarterly Security of Supply Outlook** later this month.

The **September Energy Security Outlook** is available on our website.

Transpower is facilitating the fourth biennial **GridEx** exercise in November, for more information or to register contact: <u>GridEx@transpower.co.nz</u>.



Questions / Patai

Please raise your hand

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

TRANSPOWER.CO.NZ