

Infrastructure Resilience Conference

Karen Boyes, Executive Director



**Promoting
a robust
electricity
market**



**Major Electricity
Users' Group**

Major Electricity Users' Group

- We are a trade association working to improve New Zealand's electricity sector
- We promote a robust electricity market
- We advocate for affordable and reliable electricity supply that supports a productive economy

Our members



Overview

- Current state of the electricity sector
- Winter 2024
- Implications for winter 2025
- Implications for users
- MEUG's focus
- What are our members doing?
- Government market intervention

Current state of the electricity sector

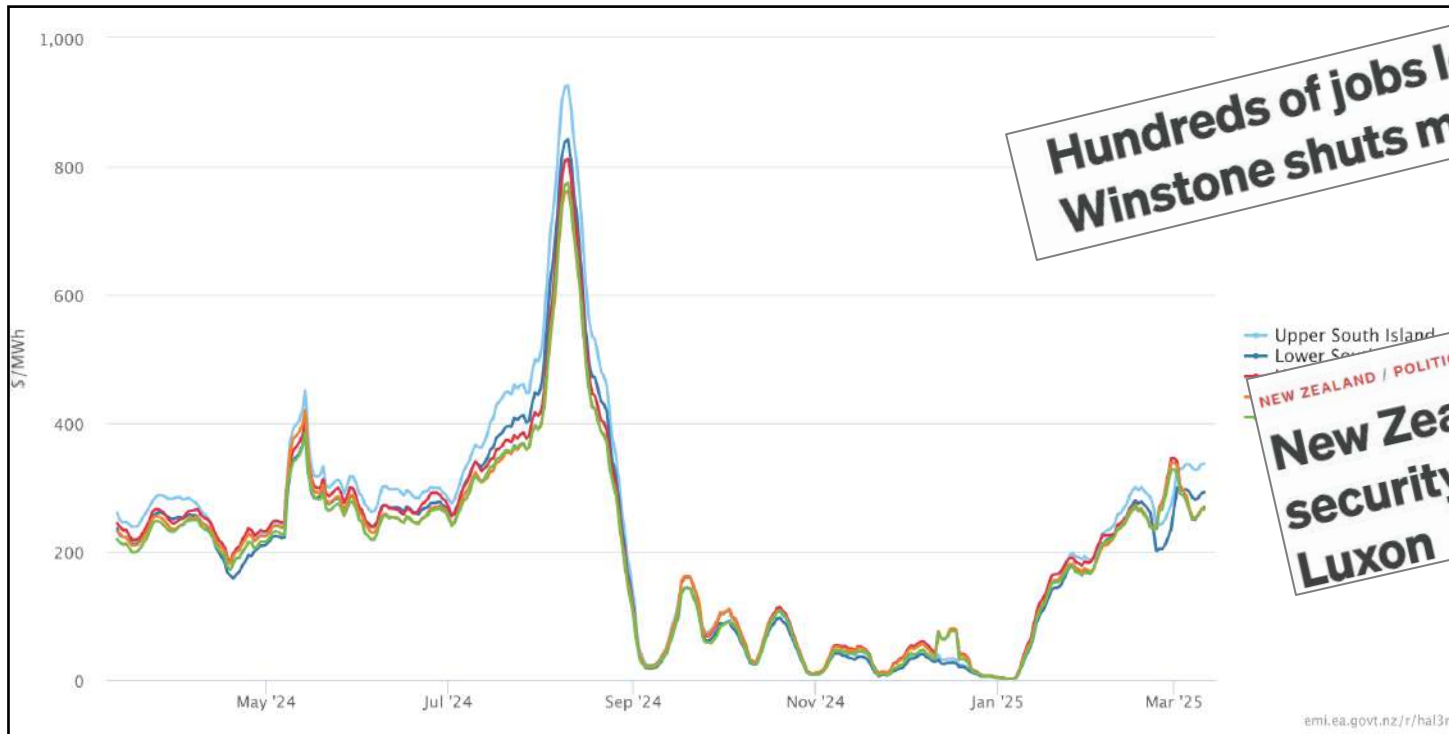
- Nearly 90% of NZ's electricity is generated from renewable energy sources, with many more projects being developed. This is a marketable point of difference
- However, the system relies on a decreasing proportion of thermal generation from coal and natural gas, and this is having an impact on the electricity sector
- With less firming capacity to support intermittent renewables, the wholesale market can face shortages of supply, and prices become highly volatile
- At a time when forecasting increased demand and a focus on electrification

Winter 2024

- Fuel security issues, low lake levels, declining gas production, high prices
- June: Meridian Energy called upon the NZAS Tiwai point smelter to implement its demand response agreement which allowed the preservation of crucial hydro storage
- August: Contact Energy and Genesis Energy purchased gas from Methanex to support electricity system security, getting New Zealand through the winter

Winter 2024

- A shortage of gas combined with low rainfall in hydro lakes, low wind, led to a severe fuel shortage and wholesale price volatility



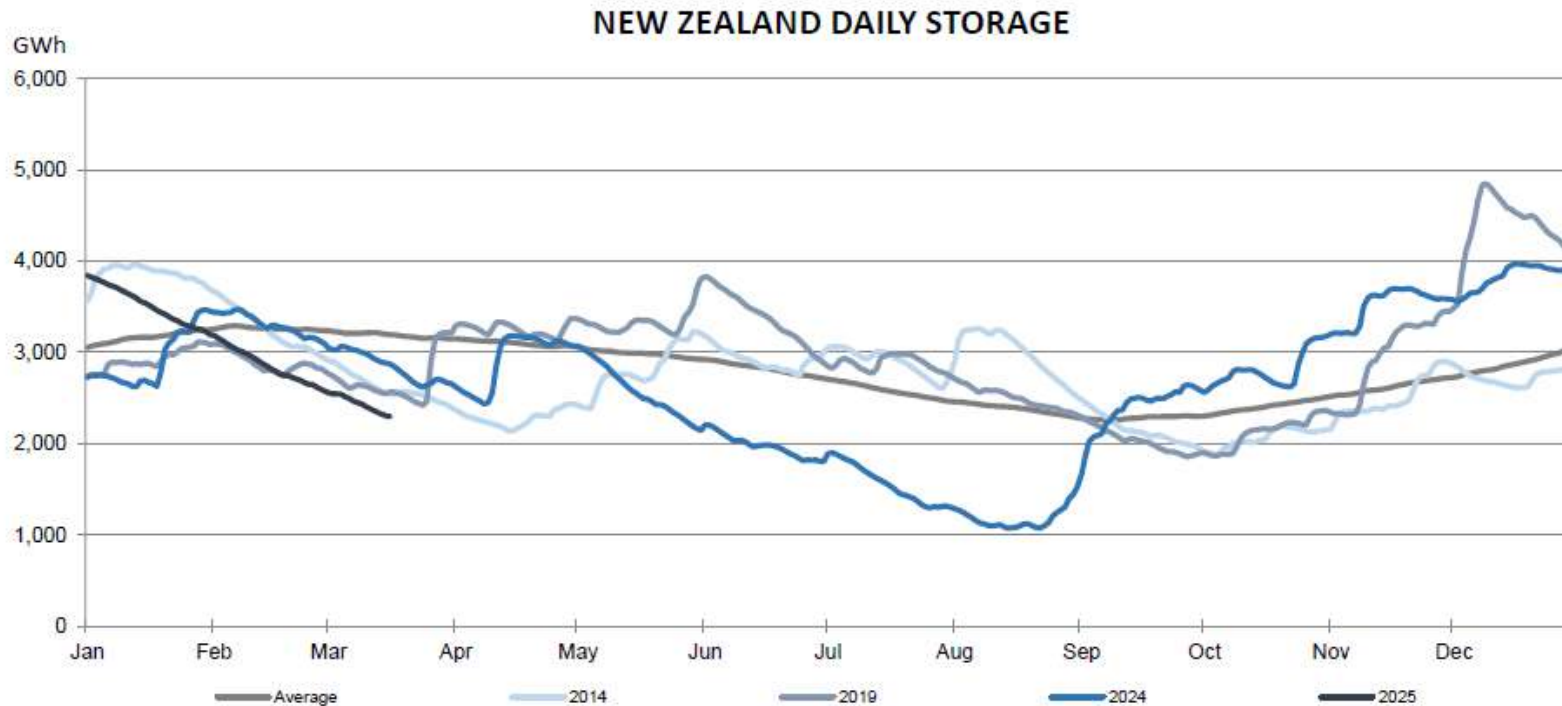
Hundreds of jobs lost as Winstone shuts mills

Updated: Methanex paid \$200m to sell its gas and idle operations

NEW ZEALAND / POLITICS
New Zealand has an 'energy security crisis' - Christopher Luxon

26 AUGUST 2024
Urgent action taken to bolster energy security
HON SIMEON BROWN
HON SHANE JONES

Winter 2025



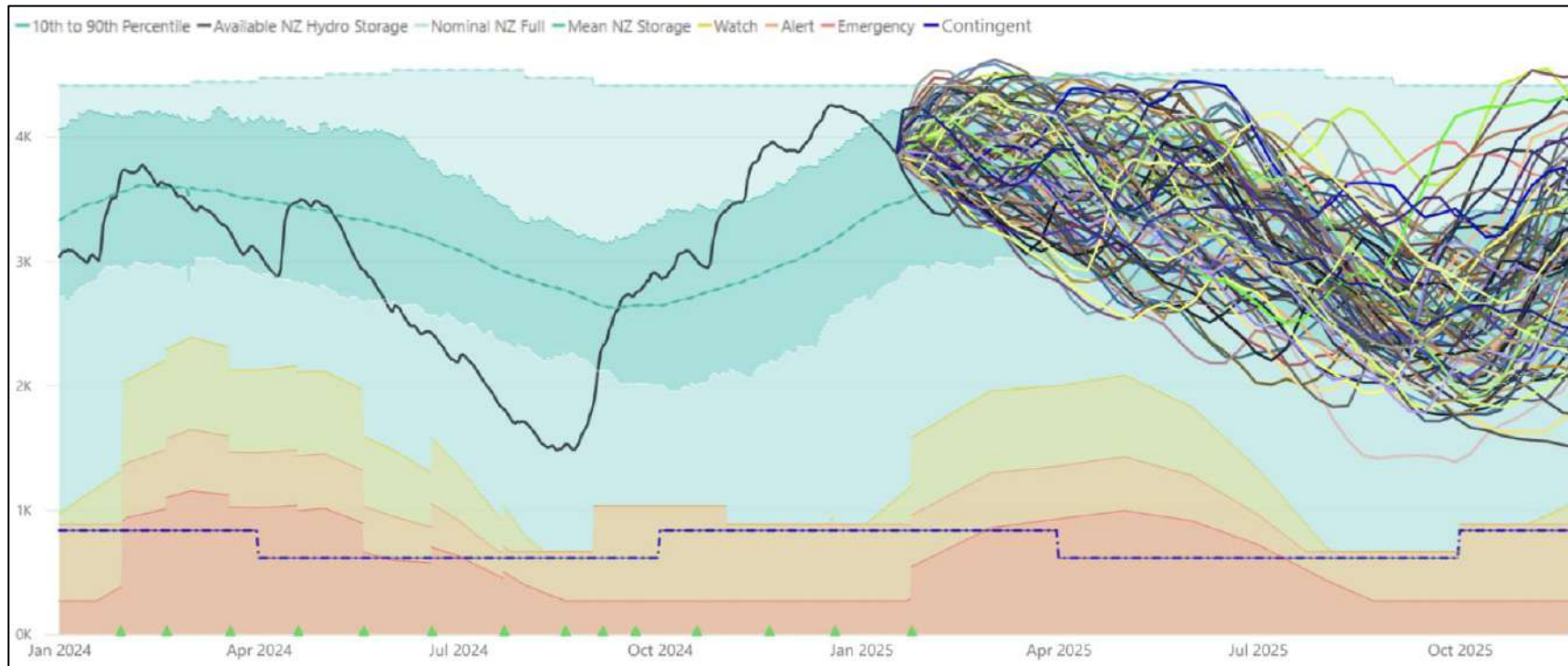
- Rapid decline in hydro storage is largely due to historically low inflows from the start of the year
- Coincident with low wind generation and planned thermal outages

Implications for Winter 2025

- NIWA are indicating a larger likelihood of average to below average rainfall expected over the next 3 months in regions of the South Island with major hydro catchments
- Largest Tiwai demand response options (100MW and 185MW) not available for 2025
- Increased winter 2025 security of supply risk level compared to the December update, largely due to reductions in modelled thermal fuel availability including reduced forecast gas and coal stockpiles

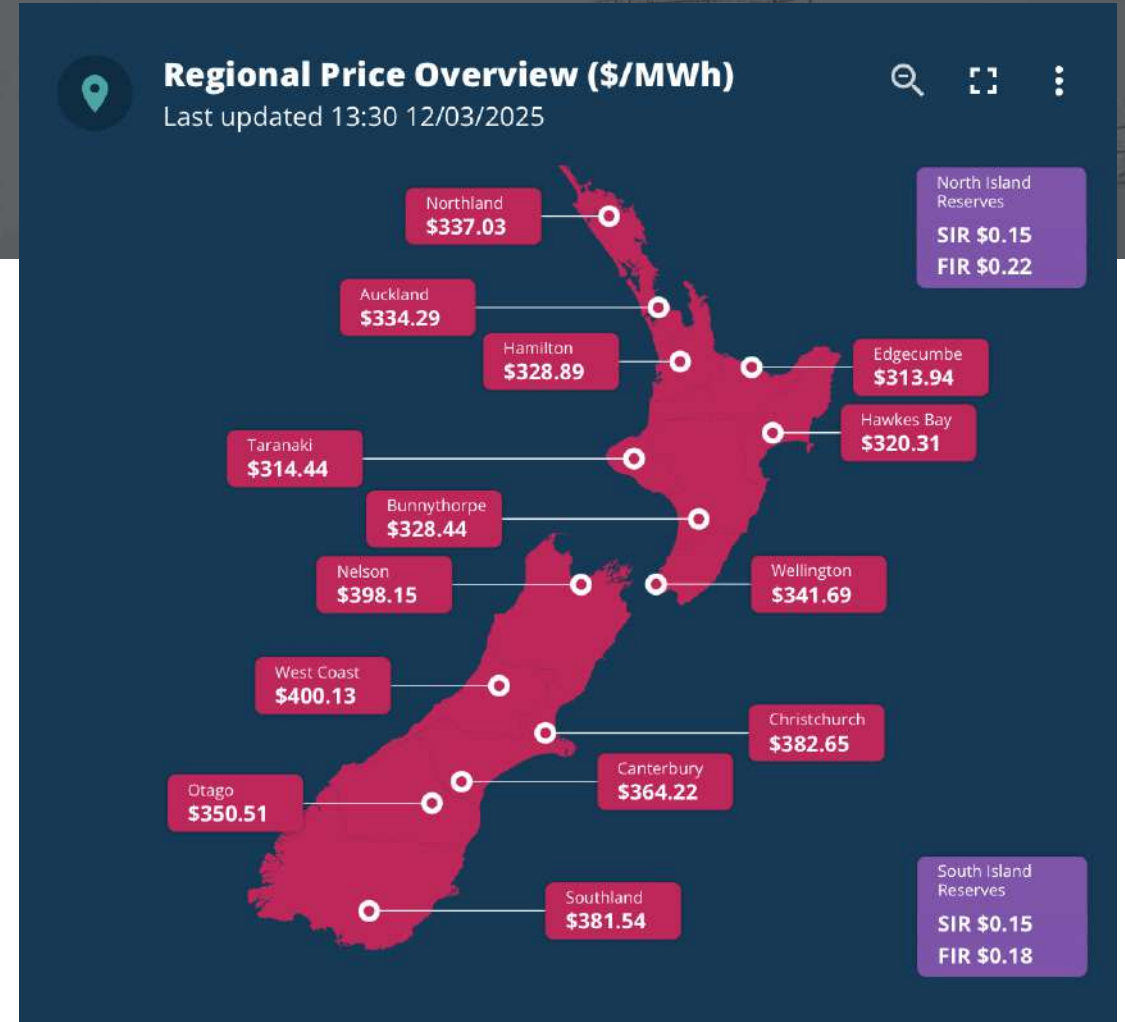
Implications for Winter 2025

- Variability in outcomes, but no forecast crossing of electricity risk curves



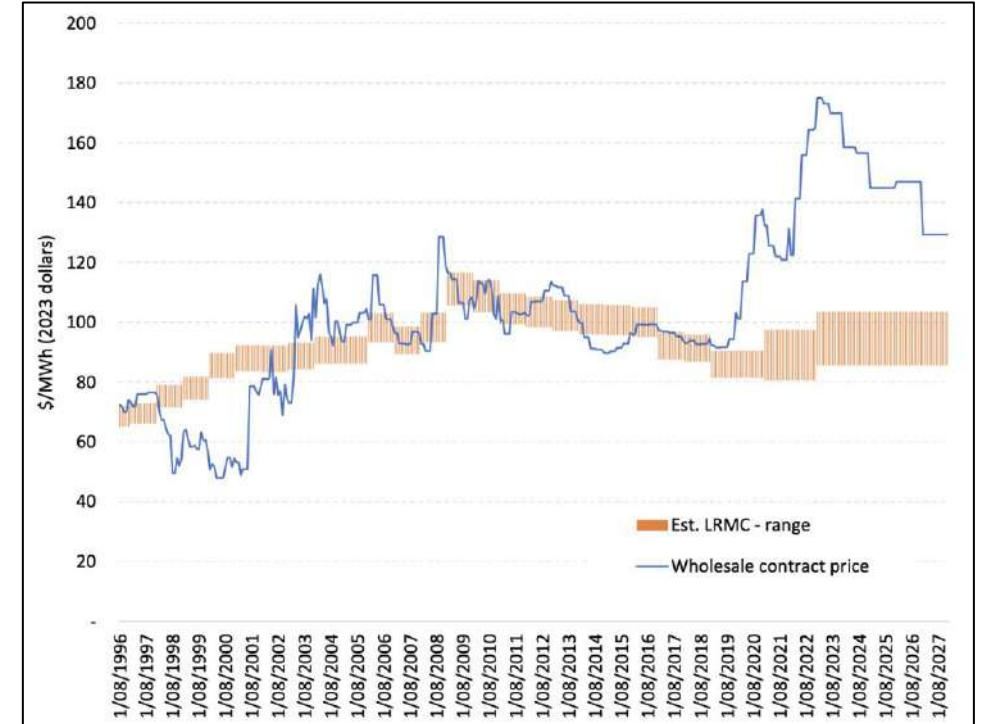
Implications for users

- Prices remain high
- Another dry year with minimal wind will result in prices spiking
- With fewer parties supplying gas, businesses are having trouble getting long term gas contracts alongside electricity at reasonable prices.



Implications for users

- High hedge prices are deterrents for large users and concerns with risk premium built into the prices
- Hedges reduce risk but aren't always the best commercial solution
- Increase in both transmission and distribution charges from 1 April for all consumers



Implications for users

- Bi-lateral demand response agreements are an ideal option but must offer compensation beyond just the avoided electricity costs, while also covering loss of production
- Must be voluntary



MEUG's focus

- **Maintaining sufficient flexible firming generation to manage risk** – uncertainty around the available level of ongoing firming is leading to increased volatility and an overall increase in electricity prices
- **Single party oversight of security of supply** – no clear line of accountability as the responsibility for security of supply is spread across multiple parties; this is increasingly concerning when the system is facing times of stress

What are our members doing?

- **Amazon Web Services (AWS) and Mercury partnership deal launched in 2024:** AWS secured 50% of the output from Mercury's Turitea South wind farm to power its Auckland data centre
- **NZ Steel:** Building an electric arc furnace that will almost halve the carbon emissions for steel making
- **Fonterra:** Investments into electric boilers at the Whareroa, Edgecumbe and Waitoa sites, along with further fleet decarbonisation

Government market interventions

- **Energy Competition Task Force** - Investigate ways to improve electricity market performance
- **Government Policy Statement** – Clarifying the Government’s role in the sector to create a stable investment environment; New Zealand should have abundant and affordable energy at internationally competitive prices
- **Electricity market review** – Frontier to advise on the impact of market structure, market design, and market rules on electricity market performance, and on options to improve market performance

Thank you

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