Electricity Authority weekly security of supply report 18 July 2024

Key points

National average spot price between 10-17 July was \$363/MWh, with most prices (middle 50%) sitting between \$308-\$395/MWh. The Benmore spot price reached a maximum of \$646/MWh at 1:30pm on Wednesday 17 July, when wind generation was very low. Prices were high this week, but this was expected given low hydro storage and gas shortages.

The proportion of generation from hydro was low this week due to hydro storage continuing to decrease. Hydro generation was higher when wind generation was low on Wednesday 10 July, Thursday 11 July and Wednesday 17 July. On Friday to Sunday. lower weekend demand and high North Island wind generation allowed for decreased hydro generation, with HVDC flow almost entirely southward.

The coal stockpile at Huntly was estimated at 188kt as of 14 July. Genesis intends to import more coal to maintain a stockpile of 350kt.

The amount of generation on outage between 10-17 July was close to average or below average for this time of year. The amount of generation on outage next week is expected to be below average most days.

National controlled hydro storage has decreased. As of 16 July, controlled hydro storage is ~43% nominally full and ~66% of historic mean. The electricity risk curves were last updated on 19 June and are constantly reviewed.

In order to conserve South Island hydro storage, Meridian has requested the Tiwai Point aluminium smelter reduce demand even further as per their 2024 demand response agreement. Meridian previously requested a reduction in June. Meridian is now requesting an increased reduction of 100MW in total.

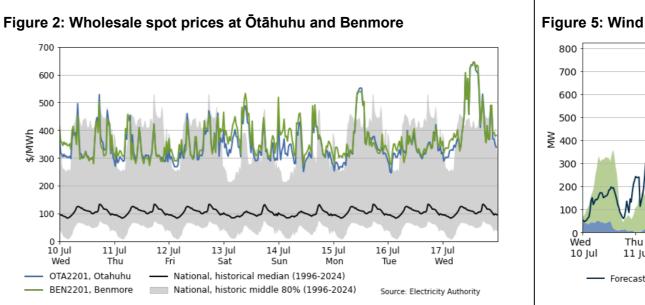
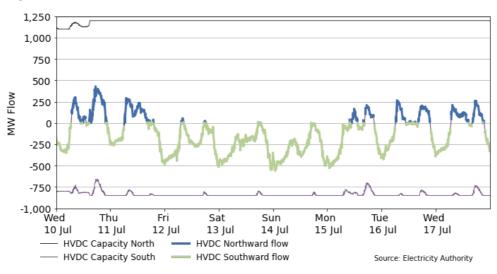
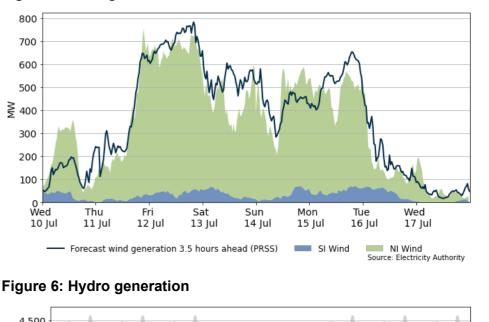
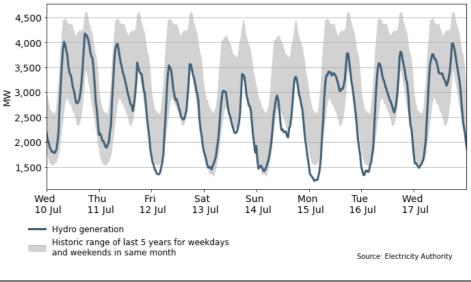


Figure 3: HVDC flow







Plant	MW Loss	Start	End
Manapouri Unit 4	128	16-Feb-24	18-Sep-25
Manapouri Unit 5	128	23-Jul-24	24-Jul-25
Manapouri Unit 6	128	13-Nov-23	10-Mar-25
Clyde Unit 4	116	16-Feb-24	18-Sep-25
Stratford Peaker 2	100	28-Aug-23	02-Sep-24

Figure 1: Hydro storage and Electricity Risk Curves

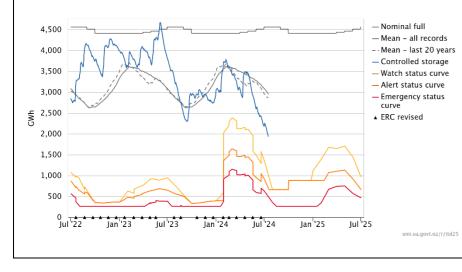


Figure 4: Generation by type on outage

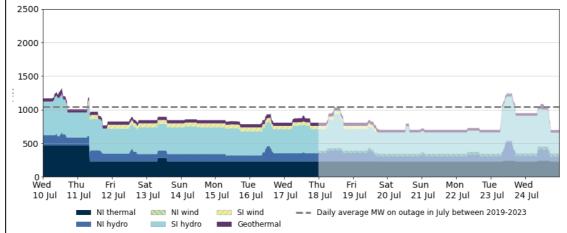




Figure 5: Wind generation and forecast

Table 1: Notable planned outages (active 18-25 July)