## Week ending 31 July 2023

**Issue 1368** 

#### A weekly review of New Zealand electricity markets compiled by Energy Link Ltd

#### Prices:

South Island		BEN		ISL			
South Island	31-Jul-23	24-Jul-23	24-Jul-23 Change		24-Jul-23	Change	
Average Prices (\$/MWh)	\$124.27	\$105.71	<b>18%</b>	\$133.88	\$113.94	<b>18%</b>	
Ratio Day/Night	1.04	1.17	<b>↓</b> -11%	1.05	1.19	<b>↓</b> -12%	
Ratio Week/Other Day	0.92	0.73	♠ 26%	0.93	0.73	<b>1</b> 27%	

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Ŷ	>=	10%
₹ <b>N</b>	>=	5%
$\Rightarrow$	>=	0%
2	<=	-5%
•	<=	-10%

North Island		HAY		ОТА			
North Island	31-Jul-23	24-Jul-23	Change	31-Jul-23	24-Jul-23	Change	
Average Prices (\$/MWh)	\$128.50	\$107.30	<b>1</b> 20%	\$139.87	\$117.76	<b>19%</b>	
Ratio Day/Night	1.07	1.19	<b>↓</b> -10%	1.14	1.24	-8%	
Ratio Week/Other Day	0.93	0.75	<b>1</b> 24%	1.00	0.80	<b>↑</b> 24%	

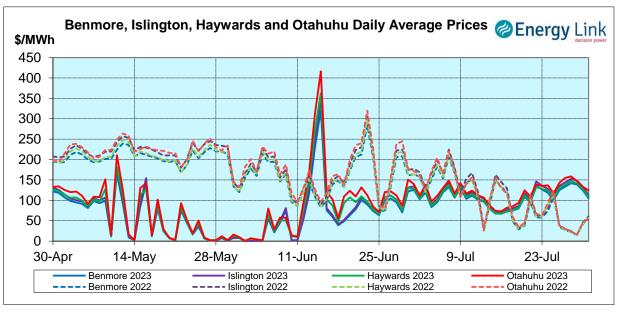
Price Differences		OTA-BEN		HAY-BEN			
Frice Differences	31-Jul-23	24-Jul-23	Change	31-Jul-23	24-Jul-23	Change	
Average differences	\$15.60	\$12.05	<b>1</b> 29%	\$4.23	\$1.59	<b>166%</b>	

# **All Prices are Final Prices**

### **Price Highlights:**

	Price \$/MWh	Day	Location	Period
Maximum nodal price	\$633.60	Tuesday, 25 July 2023	Maungaturoto	36
Minimum nodal price	\$12.37	Tuesday, 25 July 2023	Tuai	48
Maximum Ben_Hay differential	\$42.46	Wednesday, 26 July 2023		36
Maximum NI reserve price	\$113.29	Tuesday, 25 July 2023		16

Please note: Any Provisional Prices are not included in Price Highlights



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## **Average Wholesale Spot Prices**

Date	Benmore (\$/MWh)		Islington (\$/MWh)		Haywards (\$/MWh)		Otahuhu (\$/MWh)	
	Day	Night	Day	Night	Day	Night	Day	Night
31/07/2023	\$107.80	\$100.02	\$116.39	\$107.13	\$112.73	\$101.16	\$132.28	\$109.01
30/07/2023	\$122.51	\$129.42	\$131.83	\$137.61	\$126.62	\$130.66	\$135.27	\$129.05
29/07/2023	\$141.84	\$132.02	\$152.78	\$140.71	\$146.15	\$132.43	\$154.31	\$132.24
28/07/2023	\$137.83	\$150.54	\$148.78	\$160.79	\$145.08	\$152.19	\$159.25	\$157.41
27/07/2023	\$140.92	\$118.92	\$152.89	\$127.40	\$147.26	\$120.17	\$167.09	\$131.63
26/07/2023	\$138.07	\$99.18	\$150.22	\$106.34	\$145.84	\$99.47	\$161.73	\$106.01
25/07/2023	\$91.69	\$118.19	\$99.48	\$126.76	\$95.96	\$123.16	<b>\$110.</b> 85	\$130.33

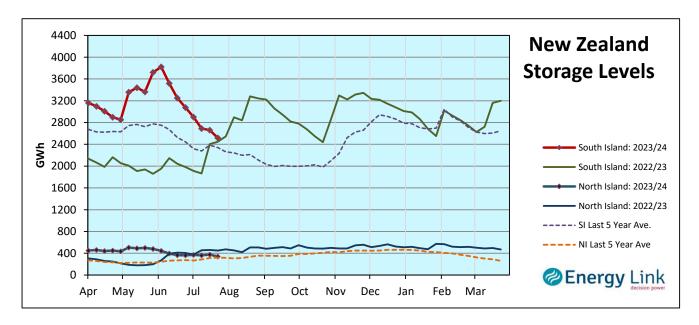
Note: Night: 00:00 - 08:00 and Day 08:00 - 24:00

Indicator (\$/MWh)	Benmore	Movement	Islington	Movement	Haywards	Movement	Otahuhu	Movement
Average June 23 Price	\$70.36	-	\$75.85	-	\$83.37	-	\$95.81	-
Average July 23 Price	\$107.32	-	\$115.55	-	\$110.15	-	\$119.84	-
4 Week Moving Average Price	\$106.41	4.6%	\$114.57	4.6%	\$109.19	4.2%	\$118.77	3.7%
Weekly Average Price	\$124.27	17.6%	\$133.88	17.5%	\$128.50	19.8%	\$139.87	18.8%
Weekday Day Average Price	\$123.26	25.0%	\$135.35	35.1%	\$129.37	27.1%	\$146.24	25.8%
Weekday Night Average Price	\$117.37	30.9%	\$119.62	21.7%	\$119.23	31.8%	\$126.88	29.9%
Weekend Day Average Price	\$132.18	-7.2%	\$150.78	10.9%	\$136.39	-4.2%	\$144.79	-3.7%
Weekend Night Average Price	\$130.72	20.9%	\$150.75	47.0%	\$131.55	23.2%	\$130.64	18.3%
Day - Night Differential	1.04	-11.3%	1.05	-11.6%	1.07	-10.2%	1.14	-8.3%
Weekday - Weekend Differential	0.92	26.2%	0.93	27.1%	0.93	24.4%	1.00	24.3%
Note: Movement represents di	fference fro	m last week	ί.					

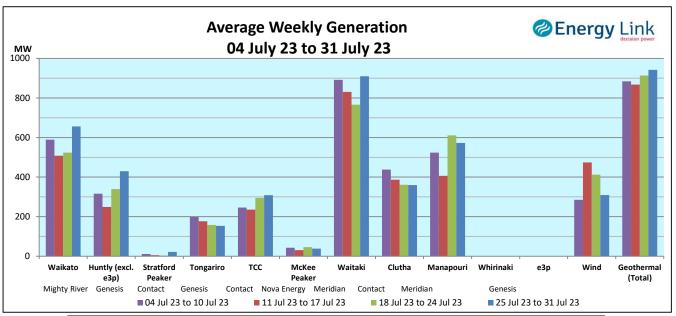
Storage: (as at last Thursday)

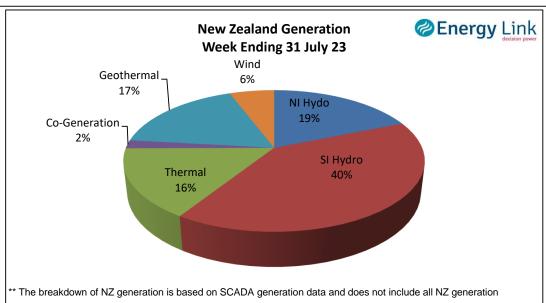
Total Storage decreased to 2859 GWh.

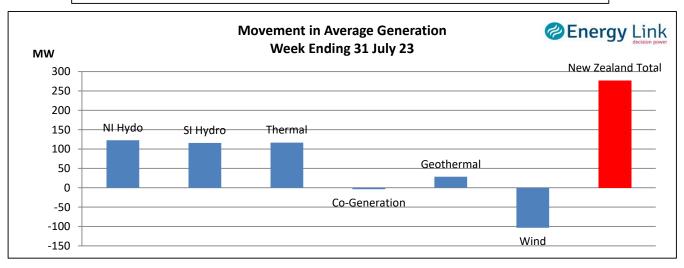
NI storage decreased by 10 % to 341 GWh while SI storage decreased by 5% to 2518 GWh.



### **Generation:**



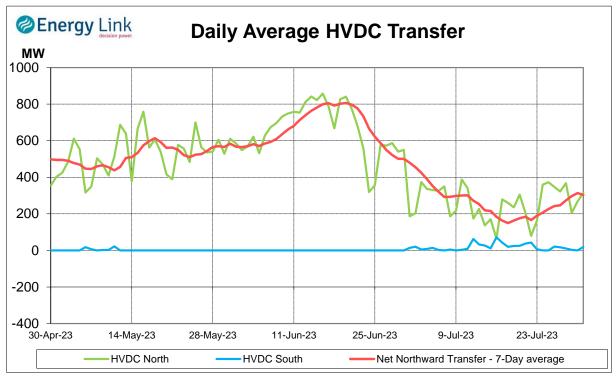


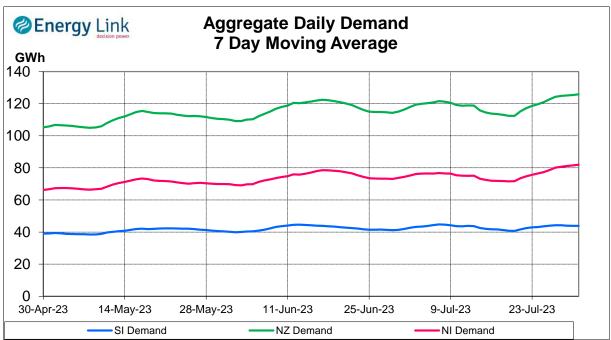


### Average Generation Market Share 1

Contact	Mercury	Genesis	Meridian	Manawa	Other
21% (21%)	23% (23%)	17% (16%)	30% (31%)	4% (4%)	5% (6%)

<sup>&</sup>lt;sup>1</sup> Generation market share figures are based on SCADA data. The number in brackets represents the generation market share % from the previous week.



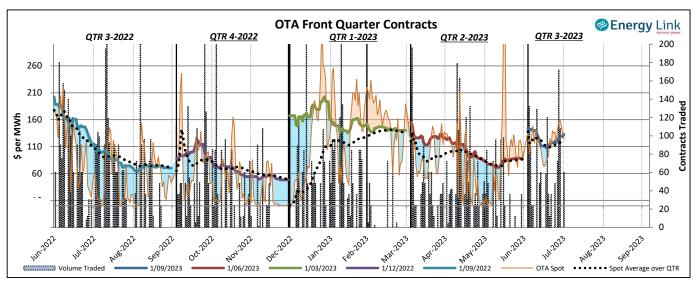


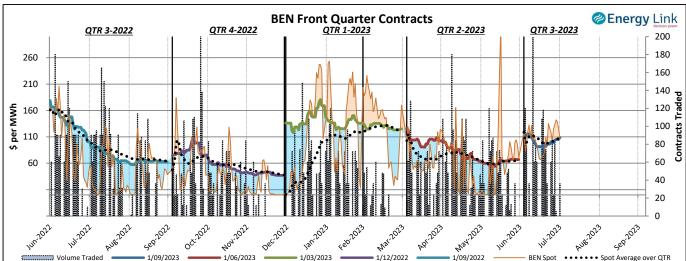
Demand data based on un-reconciled SCADA data.

### **ASX Electricity Futures**

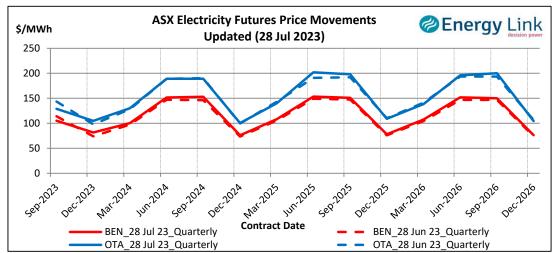
The **Australian Securities Exchange** (**ASX**) listed Base Load Electricity Futures, Strip Futures and Calendar year Strip Options for two grid reference points (Otahuhu and Benmore) in the New Zealand electricity market in July 2009. The ASX New Zealand Electricity Futures contracts are cash settled using the arithmetic average of half-hourly prices at the designated node over the period of a calendar quarter.

The two charts below display the price movements of the front quarter futures contract during the current quarter and for the four quarters prior to the current quarter. Also shown is the volume of contracts traded, the relevant spot price and the spot average price over the quarter during the time when each contract was the front quarter contract.





The chart to the right shows the most recent transactions for all currently traded futures contracts at both the BEN & OTA nodes. For comparison these prices are mapped against the prices for the same contracts four weeks prior to the current Market Review.



#### **Carbon Dioxide Emissions**

The chart below shows the estimated Carbon Dioxide (CO2) emissions for New Zealand's major thermal power stations. The estimates are based on weekly generation output and assumptions on each plant's thermal efficiency.

Note: Since 22 Feb 2016, Geothermal plant is now also included in the total carbon emissions.

