



Meridian.

# Monthly Operating Report

October 2023

## October highlights

In the month to 10 November 2023, national hydro storage decreased from **116%** to **100%** of historical average

South Island storage decreased to **99%** of average and North Island storage increased to **106%** of average by 10 November 2023

Meridian's October 2023 monthly total inflows were **107%** of historical average

Waiau catchment inflows in October 2023 were **97%** of historical average

Meridian's Waitaki catchment water storage at the end of October 2023 was **125%** of historical average

Snow storage in Meridian's Waitaki catchment was **109%** of average in early November

Water storage in Meridian's Waiau catchment was **107%** of average at the end of October 2023

National electricity demand in October 2023 was **-1.9%** lower than the same month last year

October 2023 saw large temperature swings, with the overall national monthly temperature slightly above average. Rainfall was above normal in Northland and South Canterbury and below average for most other parts of the country

New Zealand Aluminium Smelter's average load during October 2023 was **570MW**

Meridian's retail sales volumes in October 2023 were **-1.7%** lower than October 2022

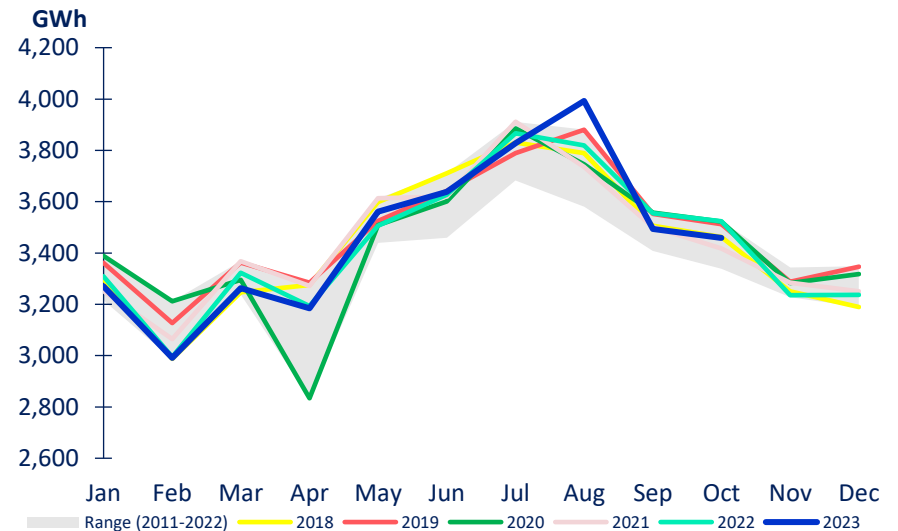
Compared to October 2022, segment sales increased in large business +27.7% and corporate +2.4%, with decreases in residential -5.0%, small medium business -7.8% and agricultural -10.0%

In October 2023, Meridian and NZ Windfarms announced a joint venture to repower and extend the Te Rere Hau wind farm

## Market data

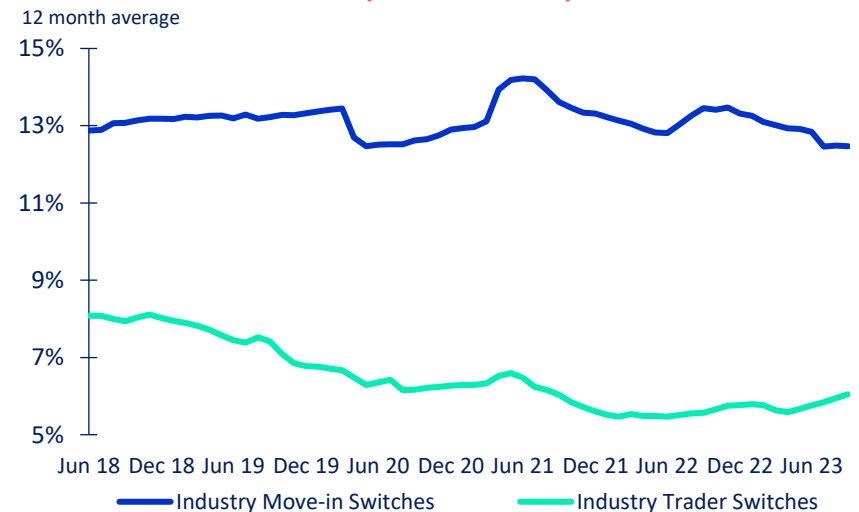
- National electricity demand in October 2023 was -1.9% lower than the same month last year
- October 2023 saw large temperature swings, with the overall national monthly temperature slightly above average. Rainfall was above normal in Northland and South Canterbury and below average for most other parts of the country
- Demand in the last 12 months was 0.2% lower than the preceding 12 months
- New Zealand Aluminium Smelter's average load during October 2023 was 570MW
- 12-month average switching rate of customers changing retailers but not moving ("trader" switch) was 6.1% at the end of September 2023
- 12-month average switching rate of customers moving and changing retailers ("move-in" switch) was 12.5% at the end of September 2023

### NATIONAL DEMAND



Source: Electricity Authority (reconciled demand)

### MARKET ICP SWITCHING (ALL RETAILERS)

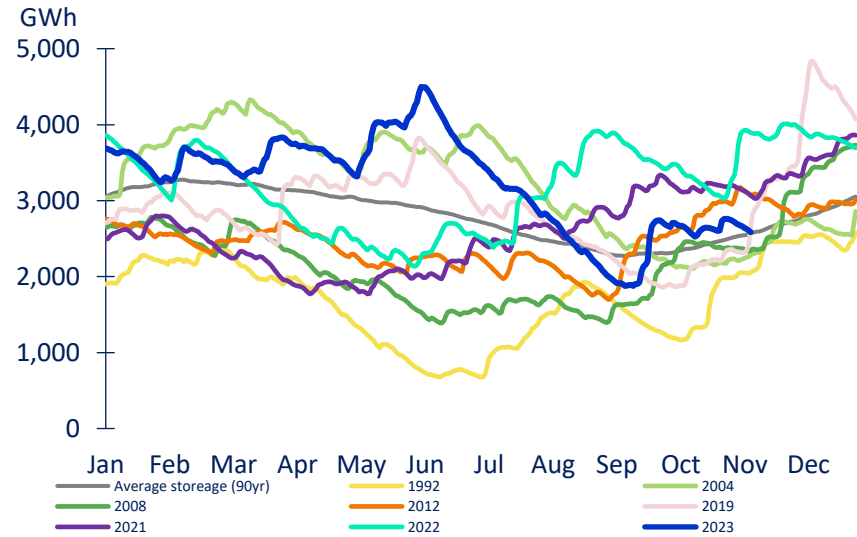


Source: Electricity Authority

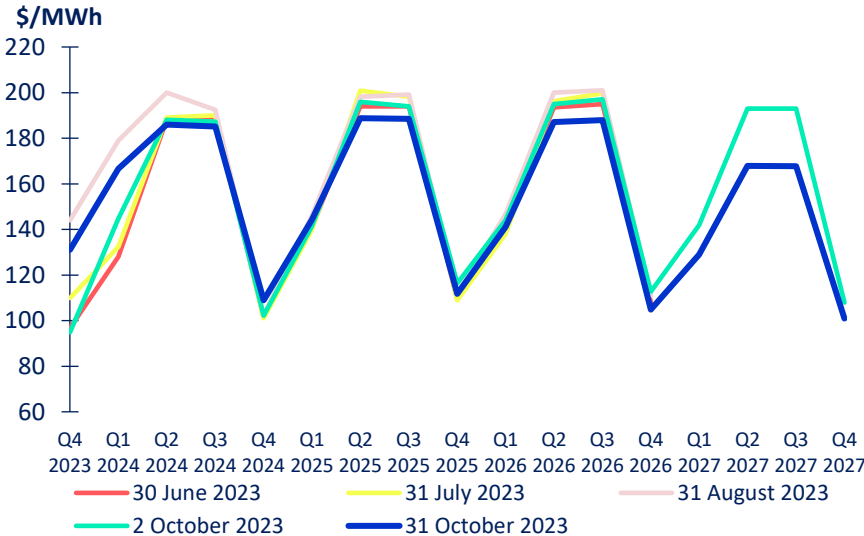
# Market data

- Longer dated electricity futures prices reduced slightly during October
- National storage decreased from 116% of average on 5 October 2023 to 100% of average on 10 November 2023
- South Island storage decreased to 99% of historical average by 10 November 2023. North Island storage increased to 106% of average

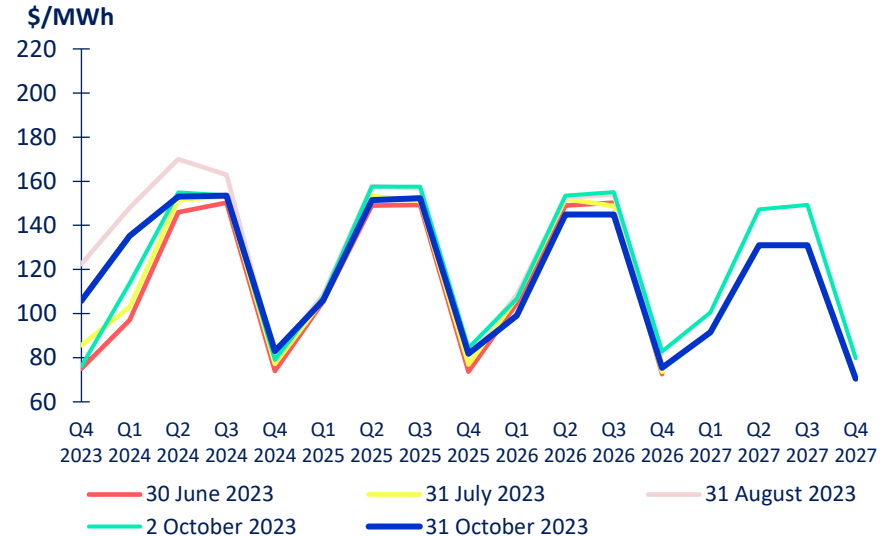
## NATIONAL HYDRO STORAGE (10 November 2023)



## OTAHUHU ASX FUTURES SETTLEMENT PRICE



## BENMORE ASX FUTURES SETTLEMENT PRICE

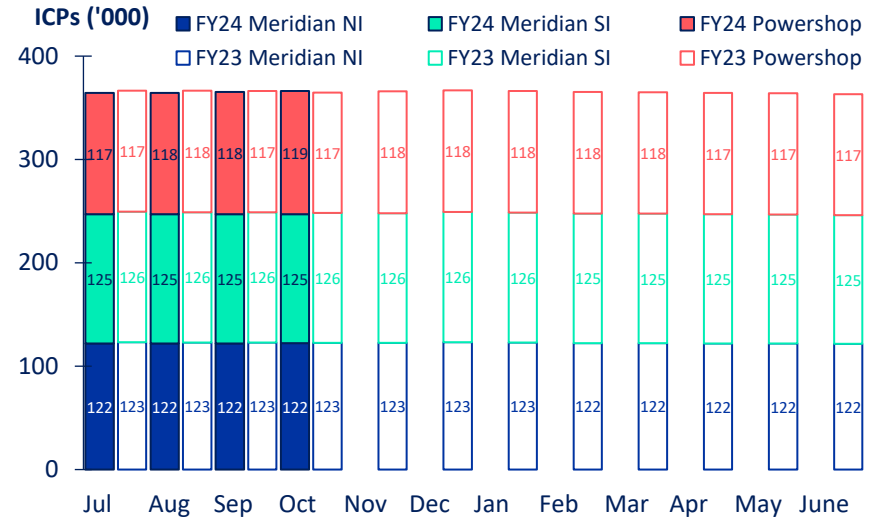


# Meridian retail

- Meridian’s customer connection numbers increased +0.2% during October 2023 and have increased +0.8% since June 2023
- Retail sales volumes in October 2023 were -1.7% lower than October 2022
- Compared to October 2022, segment sales increased in large business +27.7% and corporate +2.4%, with decreases in residential -5.0%, small medium business -7.8% and agricultural -10.0%
- To date this financial year, retail sales volumes are +1.1% higher than the same period last year
- This reflects increased segment sales in, large business +6.1%, agricultural +3.8% and corporate +2.1%, with a decrease in residential -2.3% and small medium business -0.4%

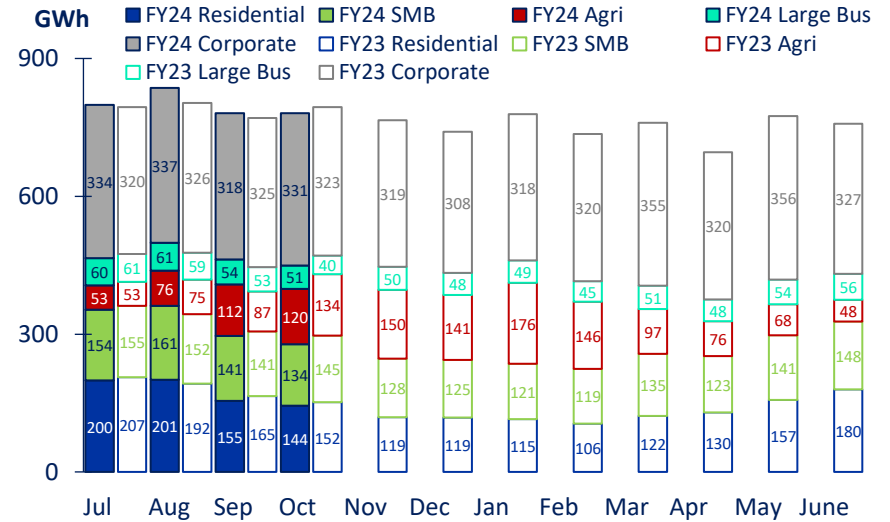
\*excludes volumes sold to New Zealand Aluminium Smelters and CFDs

## MERIDIAN'S CUSTOMER CONNECTIONS



Source: Meridian

## MERIDIAN'S RETAIL SALES VOLUME\*

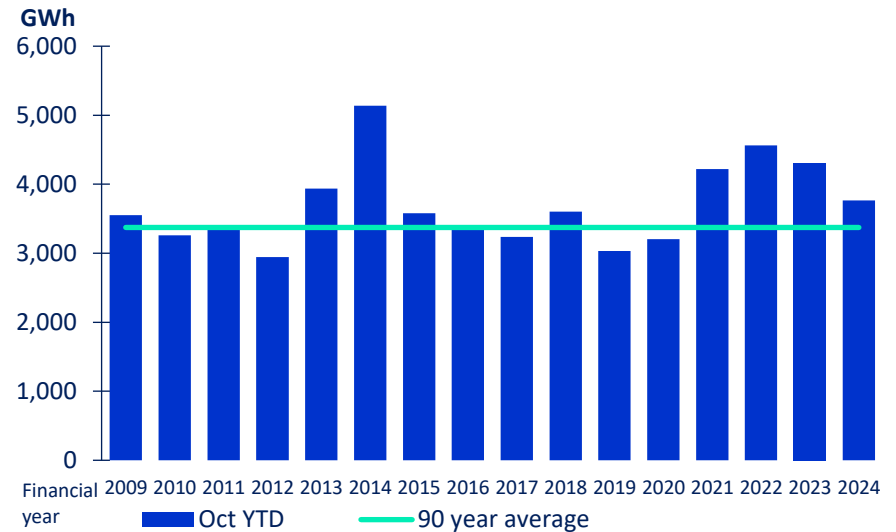


Source: Meridian

## Meridian inflows and storage

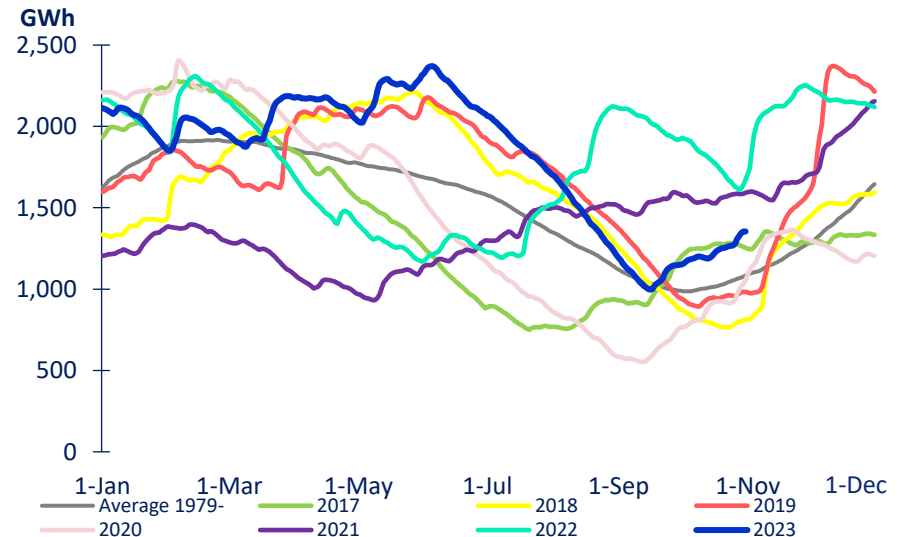
- October 2023 monthly inflows were 107% of historical average
- Waiau catchment inflows in October 2023 were 97% of historical average, higher than the same time last year
- To date this financial year, inflows are 112% of historical average
- Meridian’s Waitaki catchment water storage moved from 1,149GWh to 1,355GWh during October 2023
- Waitaki water storage at the end of October 2023 was 125% of historical average and 19% lower than the same time last year
- Snow storage in Meridian’s Waitaki catchment was 109% of average in early November
- Water storage in Meridian’s Waiau catchment was 107% of average at the end of October 2023

### MERIDIAN'S COMBINED CATCHMENT INFLOWS



Source: Meridian

### MERIDIAN'S WAITAKI STORAGE

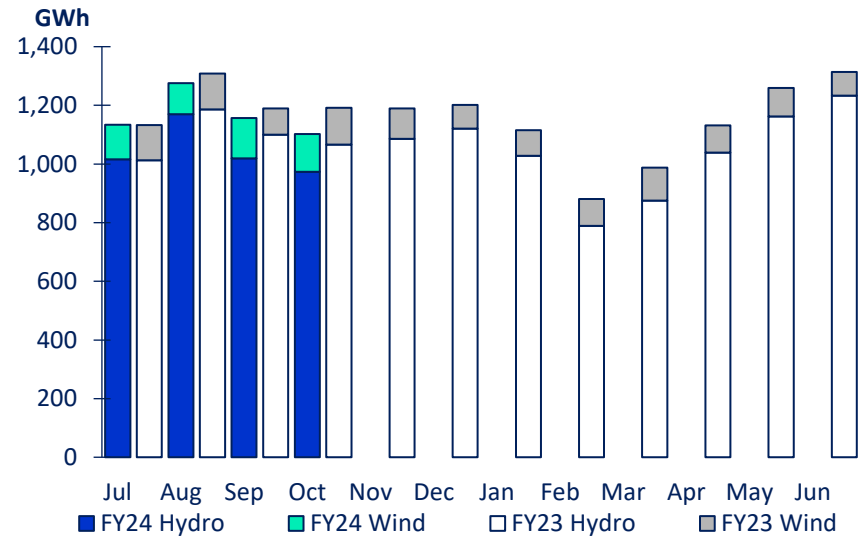


Source: Meridian

# Meridian generation

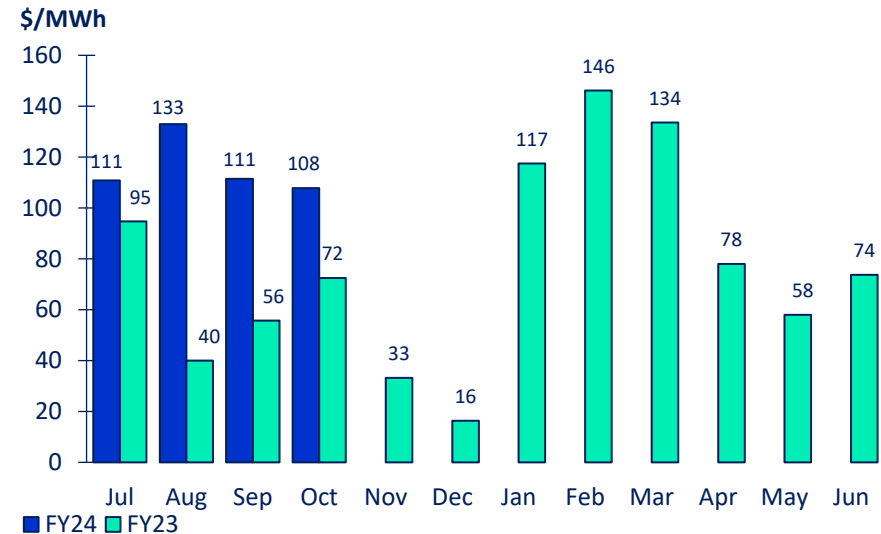
- Meridian’s generation in October 2023 was -7.5% lower than the same month last year, reflecting lower hydro generation and higher wind generation
- To date this financial year, Meridian’s generation is -3.2% lower than the same period last year, reflecting lower hydro generation and higher wind generation
- The average price Meridian received for its generation in October 2023 was +48.8% higher than the same month last year
- The average price Meridian paid to supply customers in October 2023 was +48.9% higher than the same month last year
- To date this financial year, the average price Meridian received for its generation is +79.7% higher than the same period last year and the average price paid to supply customers is +68.5% higher

## MERIDIAN'S GENERATION



Source: Meridian

## MERIDIAN'S AVERAGE GENERATION PRICE\*



\*price received for Meridian’s physical generation

Source: Meridian

# Monthly operating information

	OCTOBER 2023 MONTH	OCTOBER 2022 MONTH	SEPTEMBER 2023 MONTH	AUGUST 2023 MONTH	4 MONTHS TO OCTOBER 2023	4 MONTHS TO OCTOBER 2022
<b>New Zealand contracted sales</b>						
Residential sales volume (GWh)	144	152	155	201	700	716
Small medium business sales volume (GWh)	134	145	141	161	591	593
Agricultural sales volume (GWh)	120	134	112	76	361	348
Large business sales volume (GWh)	51	40	54	61	226	213
Corporate and industrial sales volume (GWh)	331	323	318	337	1,320	1,293
<b>Retail contracted sales volume (GWh)</b>	<b>781</b>	<b>795</b>	<b>781</b>	<b>836</b>	<b>3,198</b>	<b>3,164</b>
Average retail contracted sales price <sup>1</sup> (\$NZ/MWh)	\$131.5	\$124.0	\$148.2	\$151.2	\$145.2	\$131.6
NZAS sales volume (GWh)	426	426	411	426	1,688	1,687
Financial contract sales volumes <sup>2</sup> (GWh)	221	257	371	371	1,301	904
Average wholesale & financial contracts sales price <sup>3</sup> (\$NZ/MWh)	\$56.2	\$56.5	\$76.4	\$78.4	\$73.1	\$58.3
Retail customer supply volumes (GWh)	829	847	825	892	3,391	3,347
Cost to supply retail customers (\$NZ/MWh)	\$124.3	\$82.8	\$123.3	\$144.9	\$130.6	\$76.8
Cost to supply wholesale customers (\$NZ/MWh)	\$105.1	\$70.7	\$110.7	\$132.9	\$114.5	\$64.7
Cost of financial contracts (\$NZ/MWh)	\$105.8	\$73.7	\$115.5	\$132.6	\$117.2	\$76.8
Total New Zealand customer connections <sup>4</sup>	366,320	364,700	365,453	364,631		

See page 10 for footnotes



# Monthly operating information

	OCTOBER 2023 MONTH	OCTOBER 2022 MONTH	SEPTEMBER 2023 MONTH	AUGUST 2023 MONTH	4 MONTHS TO OCTOBER 2023	4 MONTHS TO OCTOBER 2022
<b>New Zealand generation</b>						
Hydro generation volume (GWh)	974	1,066	1,020	1,170	4,179	4,366
Wind generation volume (GWh)	128	126	138	107	490	456
<b>Total generation volume (GWh)</b>	<b>1,102</b>	<b>1,192</b>	<b>1,157</b>	<b>1,276</b>	<b>4,669</b>	<b>4,822</b>
Average generation price <sup>5</sup> (\$NZ/MWh)	\$107.8	\$72.4	\$111.4	\$133.0	\$116.3	\$64.7
<b>New Zealand hedging</b>						
Hedging volume <sup>6</sup> (GWh)	496	350	458	539	1,998	1,555
Hedging cost average price (\$NZ/MWh)	\$110.9	\$103.3	\$139.1	\$132.3	\$131.1	\$119.2
Hedging spot revenue average price (\$NZ/MWh)	\$123.7	\$77.2	\$121.2	\$134.3	\$124.0	\$73.9
Future contract close outs (\$NZm)	-\$0.7	\$5.4	\$1.4	\$3.2	\$17.9	\$37.8

See page 10 for footnotes

# Monthly operating information

	OCTOBER 2023 MONTH	OCTOBER 2022 MONTH	SEPTEMBER 2023 MONTH	AUGUST 2023 MONTH	4 MONTHS TO OCTOBER 2023	4 MONTHS TO OCTOBER 2022
<b>New Zealand costs</b>						
Employee and Operating Costs (\$m)	22	21	22	24	91	80
Stay in Business Capital Expenditure (\$m)	4	3	4	6	18	14
Investment Capital Expenditure (\$m)	16	11	15	20	66	41
<b>Total Capital Expenditure (\$m)</b>	<b>20</b>	<b>14</b>	<b>19</b>	<b>26</b>	<b>84</b>	<b>55</b>

## Footnotes

- Contracted sales volumes and volume weighted average price received from contracted customers less distribution costs
- Derivatives sold excluding the sell-side of virtual asset swaps
- Average price of both NZAS sales volume and derivative sales volumes
- Meridian Retail and Powershop New Zealand installation control points (ICPs), excluding vacants
- Volume weighted average price received for Meridian's physical generation
- Over the counter and ASX contract volumes excluding the buy-side of virtual asset swaps

# FY24 operating information

	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Q1 FY24	YoY change	Q2 FY24	YoY change	Q3 FY24	YoY change	Q4 FY24	YoY change
<b>New Zealand contracted sales</b>																				
Residential sales volume (GWh)	200	201	155	144									555	-9						
Small medium business sales volume (GWh)	154	161	141	134									457	+9						
Agricultural sales volume (GWh)	53	76	112	120									241	+27						
Large business sales volume (GWh)	60	61	54	51									175	+2						
Corporate and industrial sales volume (GWh)	334	337	318	331									989	+19						
<b>Retail contracted sales volume (GWh)</b>	<b>800</b>	<b>836</b>	<b>781</b>	<b>781</b>									<b>2,417</b>	<b>+48</b>						
Average retail contracted sales price (\$NZ/MWh)	\$149.2	\$151.2	\$148.2	\$131.5									\$149.6	+\$15.5						
NZAS sales volume (GWh)	426	426	411	426									1,262	+1						
Financial contract sales volumes (GWh)	338	371	371	221									1,080	+433						
Average wholesale & financial contracts sales price (\$NZ/MWh)	\$78.6	\$78.4	\$76.4	\$56.2									\$77.8	+\$18.9						
Retail customer supply volumes (GWh)	845	892	825	829									2,561	+61						
Cost to supply retail customers (\$NZ/MWh)	\$128.6	\$144.9	\$123.3	\$124.3									\$132.6	+\$57.9						
Cost to supply wholesale customers (\$NZ/MWh)	\$109.2	\$132.9	\$110.7	\$105.1									\$117.7	+\$55.0						
Cost of financial contracts (\$NZ/MWh)	\$109.5	\$132.6	\$115.5	\$105.8									\$119.5	+\$41.4						
<b>Total New Zealand customer connections</b>	<b>364,389</b>	<b>364,631</b>	<b>365,453</b>	<b>366,320</b>									<b>365,453</b>	<b>-3,294</b>						
<b>New Zealand generation</b>																				
Hydro generation volume (GWh)	1,016	1,170	1,020	974									3,206	-94						
Wind generation volume (GWh)	118	107	138	128									362	+31						
<b>Total generation volume (GWh)</b>	<b>1,134</b>	<b>1,276</b>	<b>1,157</b>	<b>1,102</b>									<b>3,567</b>	<b>-63</b>						
Average generation price (\$NZ/MWh)	\$110.8	\$133.0	\$111.4	\$107.8									\$119.0	+\$56.8						
<b>New Zealand hedging</b>																				
Hedging volume (GWh)	505	539	458	496									1,502	+297						
Hedging cost average price (\$NZ/MWh)	\$142.4	\$132.3	\$139.1	\$110.9									\$137.8	+\$14.0						
Hedging spot revenue average price (\$NZ/MWh)	\$115.7	\$134.3	\$121.2	\$123.7									\$124.1	+\$51.1						
Future contract close outs (\$NZm)	\$14.0	\$3.2	\$1.4	-\$0.7									\$18.6	-13.7						
<b>Meridian Group</b>																				
Employee and Operating Costs (\$NZ m)	23	24	22	22									\$69	+9						
Stay in Business Capital Expenditure (\$NZ m)	3	6	4	4									\$13	+3						
Investment Capital Expenditure (\$NZ m)	16	20	15	16									\$51	+20						
<b>Total Capital Expenditure (\$NZ m)</b>	<b>19</b>	<b>26</b>	<b>19</b>	<b>20</b>									<b>\$64</b>	<b>+23</b>						

# FY23 operating information

	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Q1 FY23	YoY change	Q2 FY23	YoY change	Q3 FY23	YoY change	Q4 FY23	YoY change
<b>New Zealand contracted sales</b>																				
Residential sales volume (GWh)	207	192	165	152	119	119	115	106	122	130	157	180	564	-8	390	-0	343	+2	467	-3
Small medium business sales volume (GWh)	155	152	141	145	128	125	121	119	135	123	141	148	448	+52	398	+44	375	+14	411	+12
Agricultural sales volume (GWh)	53	75	87	134	150	141	176	146	97	76	68	48	214	+12	425	+38	419	+31	191	-25
Large business sales volume (GWh)	61	59	53	40	50	48	49	45	51	48	54	56	173	+33	137	+11	144	+16	157	+17
Corporate and industrial sales volume (GWh)	320	326	325	323	319	308	318	320	355	320	356	327	970	+30	950	+7	993	-33	1,003	-15
<b>Retail contracted sales volume (GWh)</b>	<b>795</b>	<b>804</b>	<b>771</b>	<b>795</b>	<b>766</b>	<b>741</b>	<b>779</b>	<b>736</b>	<b>761</b>	<b>696</b>	<b>775</b>	<b>759</b>	<b>2,369</b>	<b>+119</b>	<b>2,301</b>	<b>+100</b>	<b>2,275</b>	<b>+30</b>	<b>2,230</b>	<b>-14</b>
Average retail contracted sales price (\$NZ/MWh)	\$133.3	\$134.2	\$134.9	\$124.0	\$121.5	\$122.5	\$126.3	\$127.5	\$134.3	\$144.5	\$151.5	\$123.6	\$134.1	+\$10.9	\$122.7	+\$14.4	\$129.3	+\$15.0	\$139.8	+\$13.7
NZAS sales volume (GWh)	426	425	411	426	411	425	426	384	426	412	426	412	1,262	-1	1,262	-1	1,236	+0	1,250	+18
Financial contract sales volumes (GWh)	190	281	176	257	251	277	308	179	190	310	338	342	647	-81	785	-78	677	-96	989	+389
Average wholesale & financial contracts sales price (\$NZ/MWh)	\$65.4	\$60.4	\$50.5	\$56.5	\$55.8	\$54.2	\$72.4	\$66.8	\$66.1	\$77.5	\$78.5	\$75.3	\$58.9	-\$13.5	\$55.5	-\$4.3	\$68.7	+\$5.0	\$77.1	+\$7.1
Retail customer supply volumes (GWh)	835	843	823	847	825	793	804	775	818	704	839	769	2,501	+138	2,465	+127	2,396	+39	2,312	-63
Cost to supply retail customers (\$NZ/MWh)	\$110.6	\$49.1	\$64.5	\$82.8	\$44.2	\$23.6	\$124.7	\$159.5	\$151.5	\$97.5	\$67.2	\$95.2	\$74.7	-\$75.6	\$50.8	-\$24.1	\$145.1	-\$25.3	\$85.7	-\$114.0
Cost to supply wholesale customers (\$NZ/MWh)	\$97.6	\$40.2	\$49.7	\$70.7	\$29.7	\$12.7	\$123.4	\$154.7	\$143.3	\$78.1	\$55.5	\$71.3	\$62.7	-\$51.7	\$37.8	-\$19.7	\$140.0	-\$25.9	\$68.1	-\$129.1
Cost of financial contracts (\$NZ/MWh)	\$120.6	\$58.7	\$63.1	\$73.7	\$33.7	\$22.2	\$125.8	\$135.8	\$125.3	\$84.4	\$72.4	\$74.5	\$78.1	-\$54.9	\$42.7	-\$28.0	\$128.3	-\$24.9	\$76.9	-\$115.7
<b>Total New Zealand customer connections</b>	<b>366,518</b>	<b>366,599</b>	<b>366,285</b>	<b>364,700</b>	<b>365,946</b>	<b>366,936</b>	<b>366,362</b>	<b>365,444</b>	<b>365,260</b>	<b>364,537</b>	<b>364,148</b>	<b>363,335</b>	<b>366,285</b>	<b>+11,475</b>	<b>366,936</b>	<b>+8,586</b>	<b>365,260</b>	<b>+1,830</b>	<b>363,335</b>	<b>-2,011</b>
<b>New Zealand generation</b>																				
Hydro generation volume (GWh)	1,013	1,187	1,101	1,066	1,086	1,121	1,028	789	876	1,039	1,162	1,233	3,300	+170	3,274	+1	2,693	-321	3,434	+579
Wind generation volume (GWh)	120	122	89	126	103	81	87	92	113	92	97	81	331	-39	310	-30	291	+27	270	-42
<b>Total generation volume (GWh)</b>	<b>1,133</b>	<b>1,308</b>	<b>1,190</b>	<b>1,192</b>	<b>1,190</b>	<b>1,202</b>	<b>1,115</b>	<b>881</b>	<b>988</b>	<b>1,131</b>	<b>1,259</b>	<b>1,314</b>	<b>3,631</b>	<b>+131</b>	<b>3,583</b>	<b>-29</b>	<b>2,984</b>	<b>-293</b>	<b>3,705</b>	<b>+537</b>
Average generation price (\$NZ/MWh)	\$94.7	\$39.9	\$55.7	\$72.4	\$33.1	\$16.3	\$117.4	\$146.1	\$133.5	\$77.9	\$58.0	\$73.7	\$62.2	-\$62.0	\$40.6	-\$22.4	\$131.2	-\$21.5	\$69.6	-\$118.4
<b>New Zealand hedging</b>																				
Hedging volume (GWh)	428	425	352	350	347	358	396	429	450	378	413	440	1,205	+231	1,054	+51	1,276	-7	1,232	+117
Hedging cost average price (\$NZ/MWh)	\$131.4	\$122.0	\$116.7	\$103.3	\$100.2	\$99.1	\$117.0	\$142.1	\$125.4	\$136.6	\$135.2	\$134.7	\$123.8	-\$0.0	\$100.8	+\$1.5	\$128.4	+\$14.4	\$135.4	+\$2.9
Hedging spot revenue average price (\$NZ/MWh)	\$113.0	\$39.6	\$64.7	\$77.2	\$35.8	\$25.5	\$142.0	\$146.1	\$136.1	\$93.9	\$66.6	\$89.9	\$73.0	-\$70.6	\$46.0	-\$31.2	\$82.0	-\$90.1	\$83.3	-\$109.8
Future contract close outs (\$NZm)	-1.1	12.7	20.7	\$5.4	13.7	-0.2	-2.5	-2.8	-0.9	-1.0	0.4	1.6	32.4	+32.9	18.9	+19.7	-6.2	-9.5	1.0	-5.8
<b>Meridian Group</b>																				
Employee and Operating Costs (\$NZ m)	19	20	20	21	21	21	18	19	23	20	24	24	60	+8	62	+15	60	+6	68	+3
Stay in Business Capital Expenditure (\$NZ m)	3	4	4	3	4	4	2	4	4	3	6	6	11	+1	11	-1	10	+4	15	+3
Investment Capital Expenditure (\$NZ m)	9	9	12	11	50	59	20	44	25	31	18	12	30	-6	119	+85	90	+67	61	+20
<b>Total Capital Expenditure (\$NZ m)</b>	<b>12</b>	<b>13</b>	<b>16</b>	<b>14</b>	<b>54</b>	<b>62</b>	<b>22</b>	<b>48</b>	<b>29</b>	<b>34</b>	<b>24</b>	<b>17</b>	<b>41</b>	<b>-5</b>	<b>130</b>	<b>+84</b>	<b>99</b>	<b>+70</b>	<b>76</b>	<b>+23</b>

# Glossary

Hedging volumes	buy-side electricity derivatives excluding the buy-side of virtual asset swaps
Average generation price	the volume weighted average price received for Meridian’s physical generation
Average retail contracted sales price	volume weighted average electricity price received from retail customers, less distribution costs
Average wholesale contracted sales price	volume weighted average electricity price received from wholesale customers (including NZAS) and financial contracts
Combined catchment inflows	combined water inflows into Meridian’s Waitaki and Waiau hydro storage lakes
Cost of hedges	volume weighted average price Meridian pays for derivatives acquired
Cost to supply contracted sales	volume weighted average price Meridian pays to supply contracted customer sales and financial contracts
Contracts for Difference (CFDs)	an agreement between parties to pay the difference between the wholesale electricity price and an agreed fixed price for a specified volume of electricity. CFDs do not result in the physical supply of electricity
Customer connections (NZ)	number of installation control points, excluding vacants
GWh	gigawatt hour. Enough electricity for 125 average New Zealand households for one year
Historic average inflows	the historic average combined water inflows into Meridian’s Waitaki and Waiau hydro storage lakes over the last 85 years
Historic average storage	the historic average level of storage in Meridian’s Waitaki catchment since 1979
HVDC	high voltage direct current link between the North and South Islands of New Zealand
ICP	New Zealand installation control points, excluding vacants
ICP switching	the number of installation control points changing retailer supplier in New Zealand, recorded in the month the switch was initiated
MWh	megawatt hour. Enough electricity for one average New Zealand household for 46 days
National demand	Electricity Authority’s reconciled grid demand <a href="http://www.emi.ea.govt.nz">www.emi.ea.govt.nz</a>
NZAS	New Zealand Aluminium Smelters Limited
Retail sales volumes	contract sales volumes to retail customers, including both non half hourly and half hourly metered customers
Financial contract sales	sell-side electricity derivatives excluding the sell-side of virtual asset swaps
Virtual Asset Swaps (VAS)	CFDs Meridian has with Genesis Energy and Mercury New Zealand. They do not result in the physical supply of electricity