

# **Monthly Operating Report**

September 2023



Member of Dow Jones Sustainability Indices Powered by the S&P Global CSA

### September highlights

In the month to 5 October 2023, national hydro storage increased from **83%** to **116%** of historical average

South Island storage increased to **121%** of average and North Island storage increased to **98%** of average by 5 October 2023

Meridian's September 2023 monthly total inflows were **160%** of historical average

Waiau catchment inflows in September 2023 were **173%** of historical average

Meridian's Waitaki catchment water storage at the end of September 2023 was **116%** of historical average Snow storage in Meridian's Waitaki catchment was **105%** of average in early October

Water storage in Meridian's Waiau catchment was **170%** of average at the end of September 2023

National electricity demand in September 2023 was 1.7% lower than the same month last year

September 2023 was the warmest September on record with temperatures above average for most of the country. Rainfall was above normal in most of the South Island and eastern and northern parts of the North Island MOU was signed with Parkwind for exploration of offshore wind

New Zealand Aluminium Smelter's average load during September 2023 was **568MW** 

Meridian's retail sales volumes in September 2023 were 1.3% higher than September 2022

Compared to September 2022, segment sales increased in small medium business +0.2%, large business +1.7% and agricultural +29.3%, with decreases in residential -6.3% corporate -2.0%



# Q1 highlights

Meridian's Q1 total inflows were **114%** of historical average, **27%** lower than Q1 last year

Meridian's Waitaki catchment water storage at the end of Q1 was 40% lower than Q1 last year

Compared to Q1 last year, Meridian's generation was 1.7% lower at a 91.4% higher average price

2027 electricity futures prices commenced trading in early October, pricing lower than 2026

New Zealand Aluminium Smelter's sales volumes in Q1 were the same as Q1 last year National electricity demand in Q1 was 0.6% higher than Q1 last year

Winter 2023 was relatively warm and dry, although notable for markedly below average monthly temperatures in August 2023

Rainfall was contrasting; below normal across most of the country, with the lower South Island experiencing above normal rainfall

During the quarter, Meridian made calls on volume under the swaption agreement with Nova

Transformer outages at Manapouri and West Wind scheduled well into 2024 At the end of Q1, Meridian's customer numbers were 0.2% lower than the same time last year

Compared to Q1 last year, Meridian's retail sales volumes were 2.0% higher at an 11.5% higher average price

Sales increased in all segments except residential

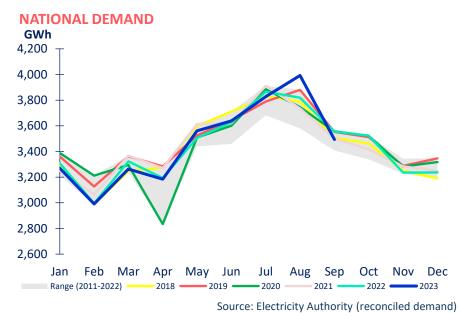
Compared to Q1 last year, total operating costs were **15.5%** higher

Compared to Q1 last year, total capital expenditure was **55.0%** higher with construction at the Harapaki Wind Farm and the Ruakākā Battery Energy Storage System



# Market data

- National electricity demand in September 2023 was 1.7% lower than the same month last year
- September 2023 was the warmest September on record with temperatures above average for most of the country. Rainfall was above normal in most of the South Island and eastern and northern parts of the North Island
- Demand in the last 12 months was 0.2% higher than the preceding 12 months
- New Zealand Aluminium Smelter's average load during September 2023 was 568MW
- 12-month average switching rate of customers changing retailers but not moving ("trader" switch) was 5.9% at the end of August 2023
- 12-month average switching rate of customers moving and changing retailers ("move-in" switch) was 12.5% at the end of August 2023



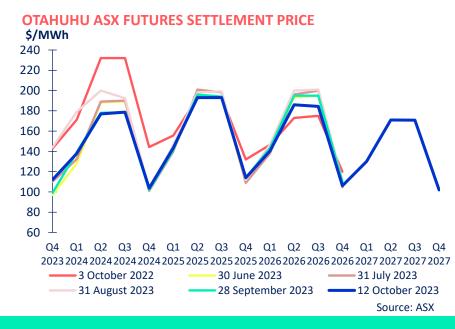
MARKET ICP SWITCHING (ALL RETAILERS)



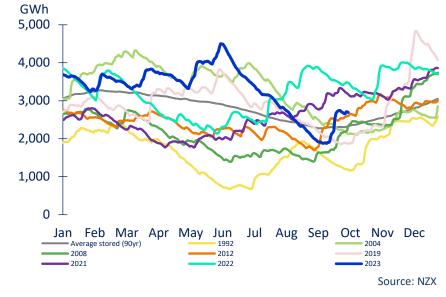


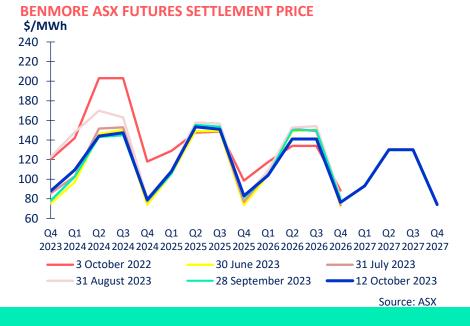
## Market data

- 2027 electricity futures prices commenced trading in early October
- National storage increased from 83% of average on 11 September 2023 to 116% of average on 5 October 2023
- South Island storage increased to 121% of historical average by 5 October 2023. North Island storage increased to 98% of average



NATIONAL HYDRO STORAGE (5 October 2023)



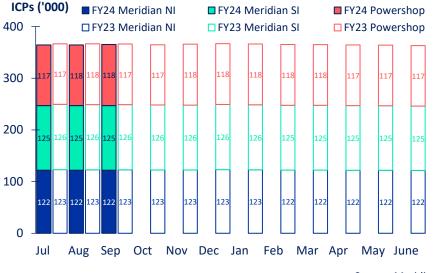




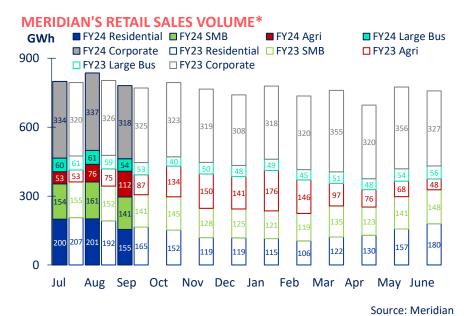
# **Meridian retail**

- Meridian's customer connection numbers increased +0.2% during September 2023 and have increased 0.6% since June 2023
- Retail sales volumes in September 2023 were 1.3% higher than September 2022
- Compared to September 2022, segment sales increased in small medium business +0.2%, large business +1.7% and agricultural +29.3%, with decreases in residential -6.3% and corporate -2.0%
- To date this financial year, retail sales volumes are 2.0% higher than the same period last year
- This reflects increased segment sales in small medium business +2.0, large business +1.1%, agricultural +12.4% and corporate +2.0%, with a decrease in residential -1.6%





Source: Meridian

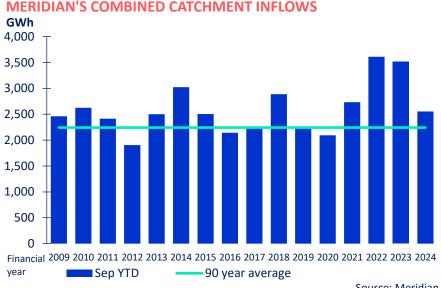


\*excludes volumes sold to New Zealand Aluminium Smelters and CFDs

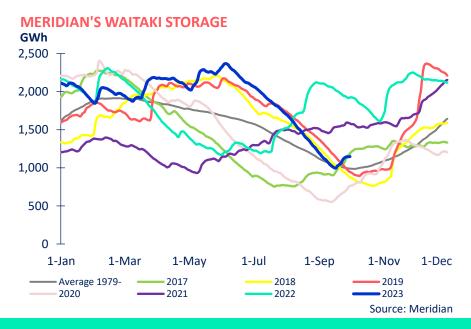


# **Meridian inflows and storage**

- September 2023 monthly inflows were 160% of historical average
- Waiau catchment inflows in September 2023 were 173% of historical average, higher than the same time last year
- To date this financial year, inflows are 114% of historical average
- Meridian's Waitaki catchment water storage moved from 1,210GWh to 1,149GWh during September 2023
- Waitaki water storage at the end of September 2023 was 116% of historical average and 40% lower than the same time last year
- Snow storage in Meridian's Waitaki catchment was 105% of average in early October
- Water storage in Meridian's Waiau catchment was 170% of average at the end of September 2023



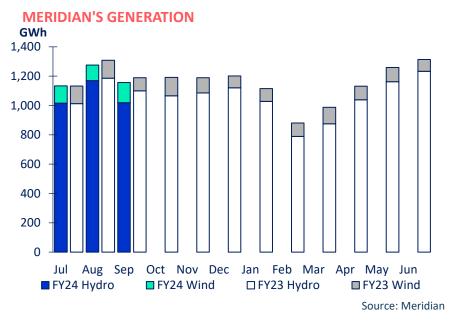
Source: Meridian



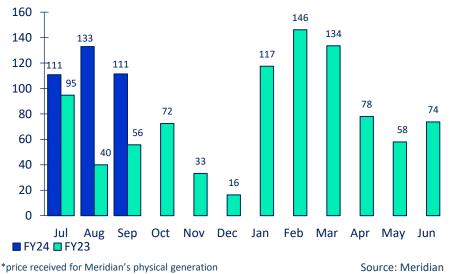


# **Meridian generation**

- Meridian's generation in September 2023 was 2.7% lower than the same month last year, reflecting lower hydro generation and higher wind generation
- To date this financial year, Meridian's generation is 1.7% lower than the same period last year, reflecting lower hydro generation and higher wind generation
- The average price Meridian received for its generation in September 2023 was 100.1% higher than the same month last year
- The average price Meridian paid to supply customers in September 2023 was 97.1% higher than the same month last year
- To date this financial year, the average price Meridian received for its generation is 91.3% higher than the same period last year and the average price paid to supply customers is 75.4% higher



#### MERIDIAN'S AVERAGE GENERATION PRICE\* \$/MWh





# Monthly operating information

	SEPTEMBER	SEPTEMBER	AUGUST	JULY	3 MONTHS TO	3 MONTHS TO
	2023	2022	2023	2023	SEPTEMBER	SEPTEMBER
	MONTH	MONTH	MONTH	MONTH	2023	2022
New Zealand contracted sales			Į′	<mark>ا</mark> ــــــــــــــــــــــــــــــــــــ	ļ'	Į′
Residential sales volume (GWh)	155	165	201	200	555	564
Small medium business sales volume (GWh)	141	141	161	154	457	448
Agricultural sales volume (GWh)	112	87	76	53	241	214
Large business sales volume (GWh)	54	53	61	60	175	173
Corporate and industrial sales volume (GWh)	318	325	337	334	989	970
Retail contracted sales volume (GWh)	781	771	836	800	2,417	2,369
Average retail contracted sales price <sup>1</sup> (\$NZ/MWh)	\$148.2	\$134.9	\$151.2	\$149.2	\$149.6	\$134.1
NZAS sales volume (GWh)	411	411	426	426	1,262	1,262
Financial contract sales volumes <sup>2</sup> (GWh)	371	176	371	338	1,080	647
Average wholesale & financial contracts sales price <sup>3</sup> (\$NZ/MWh)	\$76.4	\$50.5	\$78.4	\$78.6	\$77.8	\$58.9
Retail customer supply volumes (GWh)	825	823	892	845	2,561	2,501
Cost to supply retail customers (\$NZ/MWh)	\$123.3	\$64.5	\$144.9	\$128.6	\$132.6	\$74.7
Cost to supply wholesale customers (\$NZ/MWh)	\$110.7	\$49.7	\$132.9	\$109.2	\$117.7	\$62.7
Cost of financial contracts (\$NZ/MWh)	\$115.5	\$63.1	\$132.6	\$109.5	\$119.5	\$78.1
Total New Zealand customer connections <sup>4</sup>	365,453	368,747	364,631	364,389		

See page 10 for footnotes



## Monthly operating information

	SEPTEMBER	SEPTEMBER	AUGUST	JULY	3 MONTHS TO	<b>3 MONTHS TO</b>
	2023	2022	2023	2023	SEPTEMBER	SEPTEMBER
	MONTH	MONTH	MONTH	MONTH	2023	2022
New Zealand generation						
Hydro generation volume (GWh)	1,020	1,101	1,170	1,016	3,206	3,300
Wind generation volume (GWh)	138	89	107	118	362	331
Total generation volume (GWh)	1,157	1,190	1,276	1,134	3,567	3,631
Average generation price <sup>5</sup> (\$NZ/MWh)	\$111.4	\$55.7	\$133.0	\$110.8	\$119.0	\$62.2
New Zealand hedging						
Hedging volume <sup>6</sup> (GWh)	458	352	539	505	1,502	1,205
Hedging cost average price (\$NZ/MWh)	\$139.1	\$116.7	\$132.3	\$142.4	\$137.8	\$123.8
Hedging spot revenue average price (\$NZ/MWh)	\$121.2	\$64.7	\$134.3	\$115.7	\$124.1	\$73.0
Future contract close outs (\$NZm)	\$1.4	\$20.7	\$3.2	\$14.0	\$18.6	\$32.4





# Monthly operating information

SEPTEMBER	SEPTEMBER	AUGUST	JULY	3 MONTHS TO	3 MONTHS TO
2023	2022	2023	2023	SEPTEMBER	SEPTEMBER
MONTH	MONTH	MONTH	MONTH	2023	2022
,I					
22	20	24	23	69	60
4	4	6	3	14	11
15	12	20	16	50	30
19	16	26	19	64	41
· · · ·	2023 MONTH 22 4 15	2023 2022   MONTH MONTH   22 20   22 20   4 4   15 12	2023 2022 2023   MONTH MONTH MONTH   22 20 24   22 20 24   4 4 6   15 12 20	2023 2022 2023 2023   MONTH MONTH MONTH MONTH   22 20 24 23   22 20 24 23   4 4 6 3   15 12 20 16	2023202220232023SEPTEMBERMONTHMONTHMONTHMONTH20232024236922202423694463141512201650

#### **Footnotes**

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



## **FY24** operating information

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	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Q1	YoY	Q2	YoY	Q3	YoY	Q4	. YoY
Now Zealand contracted calls	2023	2023	2023	2023	2023	2023	2024	2024	2024	2024	2024	2024	FY24	change	FY24	change	FY24	change	FY24	change
New Zealand contracted sales	200	201	455																	
Residential sales volume (GWh)	200	201	155										555	-9						
Small medium business sales volume (GWh)	154	161	141										457	+9						
Agricultural sales volume (GWh)	53	76	112										241	+27						
Large business sales volume (GWh)	60	61	54										175	+2						
Corporate and industrial sales volume (GWh)	334	337	318										989	+19						
Retail contracted sales volume (GWh)	800	836	781										2,417	+48						
Average retail contracted sales price (\$NZ/MWh)	\$149.2	\$151.2	\$148.2										\$149.6	+\$15.5						
NZAS sales volume (GWh)	426	426	411										1,262	+1						
Financial contract sales volumes (GWh)	338	371	371										1,080	+433						
Average wholesale & financial contracts sales price (\$NZ/MWh)	\$78.6	\$78.4	\$76.4										\$77.8	+\$18.9						
Retail customer supply volumes (GWh)	845	892	825										2,561	+61						
Cost to supply retail customers (\$NZ/MWh)	\$128.6	\$144.9	\$123.3										\$132.6	+\$57.9						
Cost to supply wholesale customers (\$NZ/MWh)	\$109.2	\$132.9	\$110.7										\$117.7	+\$55.0						
Cost of financial contracts (\$NZ/MWh)	\$109.5	\$132.6	\$115.5										\$119.5	+\$41.4						
Total New Zealand customer connections	364,389	364,631	365,453										365,453	-3,294						
New Zealand generation																				
Hydro generation volume (GWh)	1,016	1,170	1,020										3,206	-94						
Wind generation volume (GWh)	118	107	138										362	+31						
Total generation volume (GWh)	1,134	1,276	1,157										3,567	-63						
Average generation price (\$NZ/MWh)	\$110.8	\$133.0	\$111.4										\$119.0	+\$56.8						
New Zealand hedging																				
Hedging volume (GWh)	505	539	458										1,502	+297						
Hedging cost average price (\$NZ/MWh)	\$142.4	\$132.3	\$139.1										\$137.8	+\$14.0						
Hedging spot revenue average price (\$NZ/MWh)	\$115.7	\$134.3	\$121.2										\$124.1	+\$51.1						
Future contract close outs (\$NZm)	\$14.0	\$3.2	\$1.4										\$18.6	-13.7						
Meridian Group																				
Employee and Operating Costs (\$NZ m)	23	24	22										\$69	+9						
Stay in Business Capital Expenditure (\$NZ m)	25	24 6	4										\$13	+3						
Investment Capital Expenditure (\$NZ m)	5 16	20	4 15										\$15	+3						
Total Capital Expenditure (\$NZ m)	16 19	20 26	15 19										\$51 \$64	+20						
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## **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
New Zealand contracted sales	2022	2022	LVLL	2022	2022	2022	2023	2023	2023	2023	2023	2023	1.23	enunge	1123	enunge	1123	enunge	1123	chunge
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
Retail contracted sales volume (GWh)	795	804	771	795	766	741	779	736	761	696	775	759	2,369	+119	2,301	+100	2,275	+30	2,230	-14
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
Total New Zealand customer connections	366,518	366,599	366,285	364,700	365,946	366,936	366,362	365,444	365,260	364,537	364,148	363,335	366,285	+11,475	366,936	+8,586	365,260	+1,830	363,335	-2,011
New Zealand generation																				
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
Total generation volume (GWh)	1,133	1,308	1,190	1,192	1,190	1,202	1,115	881	988	1,131	1,259	1,314	3,631	+131	3,583	-29	2,984	-293	3,705	+537
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
New Zealand hedging																				
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
Meridian Group																				
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
Total Capital Expenditure (\$NZ m)	12	13	16	14	54	62	22	48	29	34	24	17	41	-5	130	+84	99	+70	76	+23
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# 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 www.emi.ea.govt.nz
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

