



meridian

# April 2019

## MERIDIAN ENERGY LIMITED MONTHLY OPERATING REPORT



FTSE4Good

MEMBER OF

**Dow Jones  
Sustainability Indices**

In Collaboration with RobecoSAM

# APRIL HIGHLIGHTS

In the month to 10 May 2019, national hydro storage increased from 105% to 107% of historical average

South Island storage sat at 113% of average and North Island storage at 61% of average on 10 May 2019

Meridian's April 2019 monthly total inflows were 115% of historical average

Meridian's Waitaki catchment storage at the end of April 2019 was 118% of historical average

Storage in Meridian's Waiau catchment was above average at the end of April 2019

National electricity demand in April 2019 was 0.3% higher than the same month last year

Meridian made calls on load under the Genesis Swaption in April and early May 2019

April 2019 saw wetter and cooler conditions than average through inland South Island and variable conditions elsewhere. Drier than normal soils were present across large parts of the country at the end of April

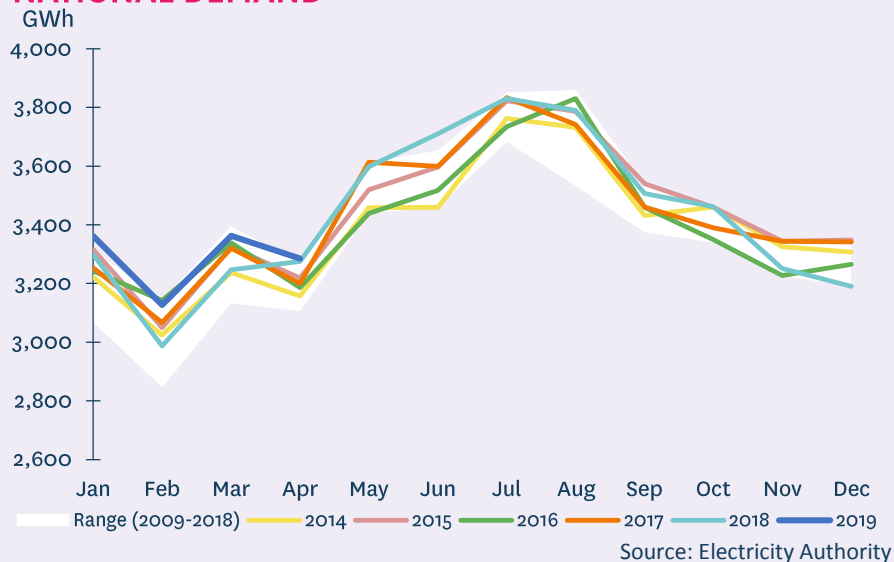
New Zealand Aluminium Smelter's load during April 2019 was below the contract level of 622MW

Meridian's retail sales volumes in April 2019 were 15.0% higher than April 2018

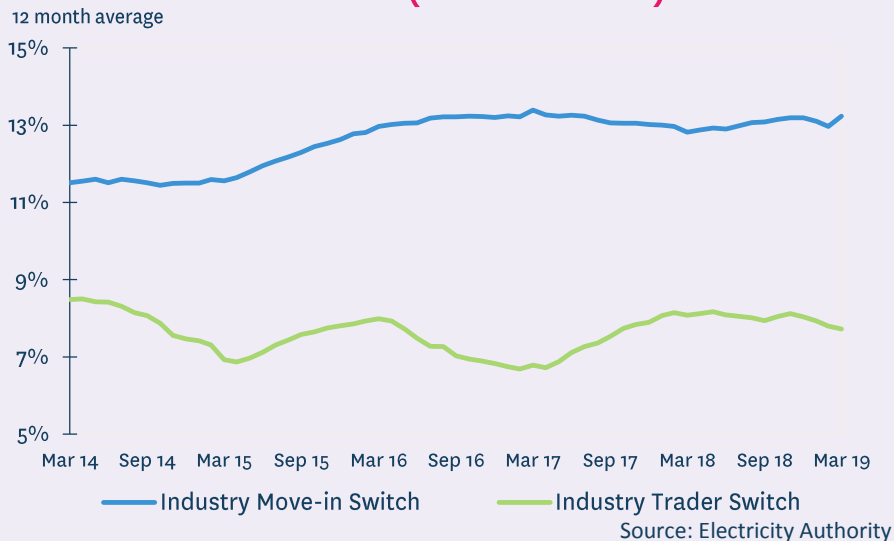
# MARKET DATA

- National electricity demand in April 2019 was 0.3% higher than the same month last year
- April 2019 saw wetter and cooler conditions than average through inland South Island and variable conditions elsewhere. Drier than normal soils were present across large parts of the country at the end of April
- Demand in the last 12 months was 0.8% higher than the preceding 12 months
- New Zealand Aluminium Smelter's load during April 2019 was below the contract level of 622MW
- 12-month average switching rate of customers changing retailers but not moving ("trader" switch) was 7.7% at the end of March 2019
- 12-month average switching rate of customers moving and changing retailers ("move-in" switch) was 13.2% at the end of March 2019

## NATIONAL DEMAND



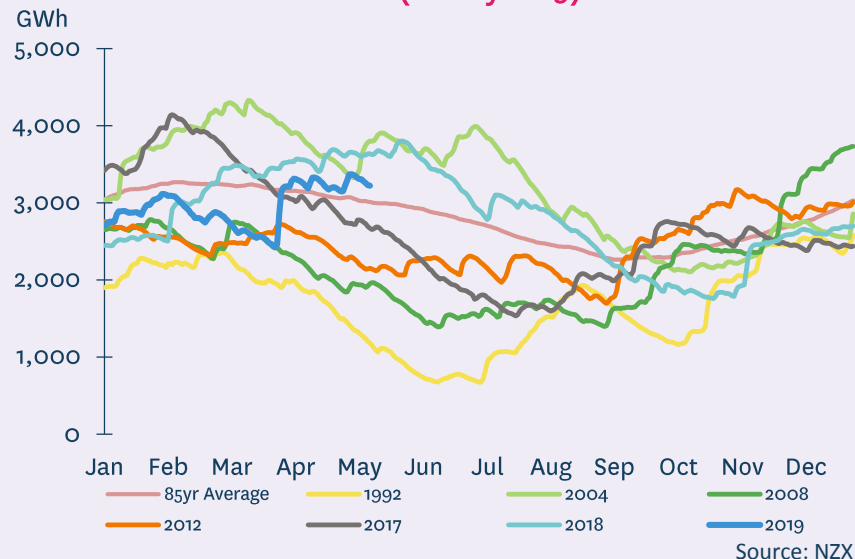
## MARKET ICP SWITCHING (ALL RETAILERS)



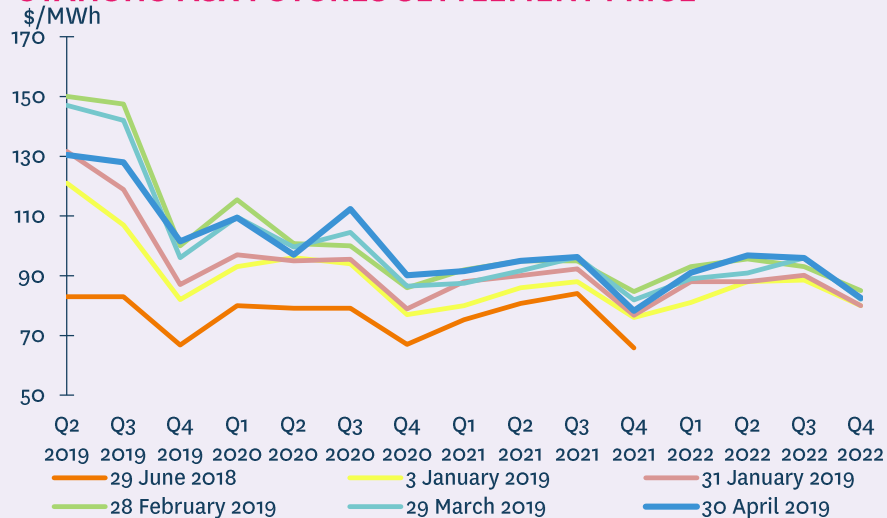
# MARKET DATA

- April 2019 saw near-term ASX prices fall as South Island hydro storage continued to increase
- National storage increased from 105% of average on 5 April 2019 to 107% of average on 10 May 2019
- South Island storage increased to 113% of historical average on 10 May 2019. North Island storage decreased to 61% of average

## NATIONAL HYDRO STORAGE (10 May 2019)

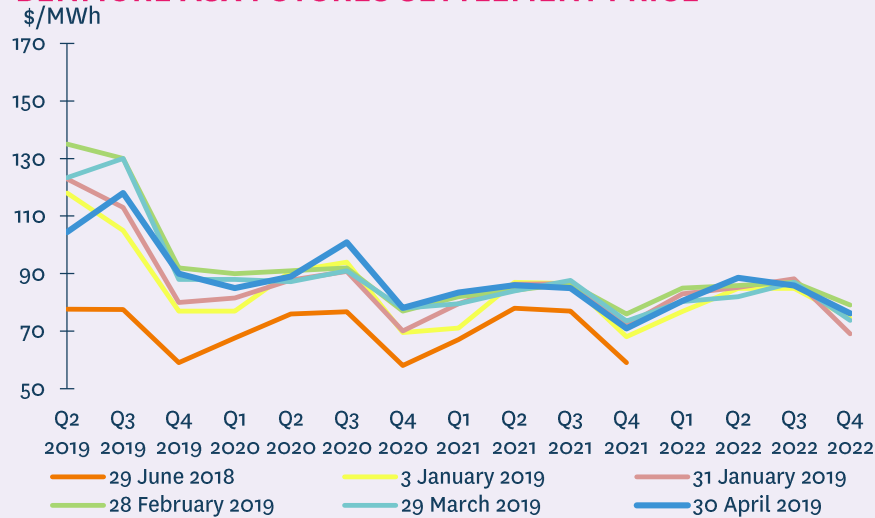


## OTAHUHU ASX FUTURES SETTLEMENT PRICE



Source: ASX

## BENMORE ASX FUTURES SETTLEMENT PRICE



Source: ASX



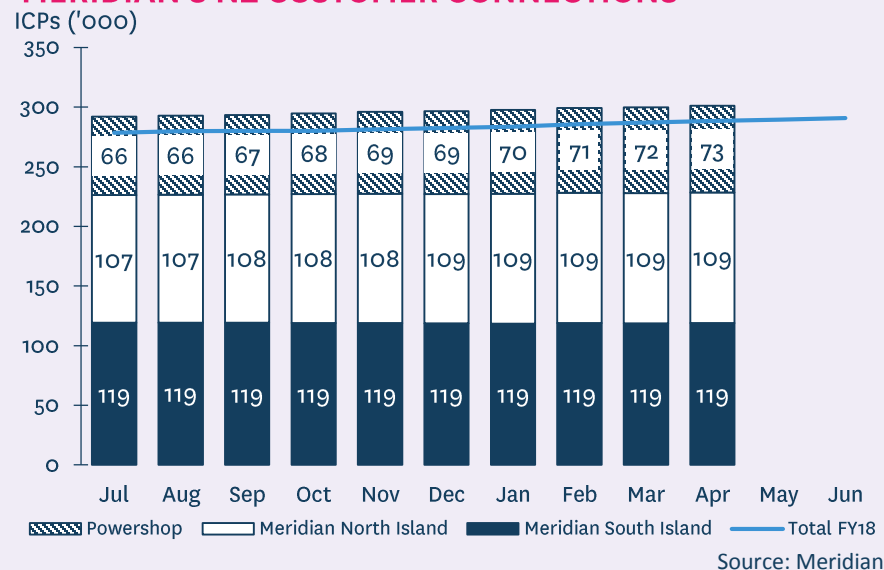
# OPERATING INFORMATION

- Meridian's New Zealand customer connection numbers rose 0.4% during April 2019 and have risen 3.6% since June 2018
- Retail sales volumes in April 2019 were 15.0% higher than April 2018
- Compared to April 2018, residential/SMB sales volumes increased by 6.5% (higher volumes in all segments) and corporate sales volumes increased by 28.6%
- To date this financial year, retail sales volumes are 3.4% higher than same period last year
- This reflects a 2.4% increase in residential/SMB sales volumes and a 5.2% increase in corporate sales volumes

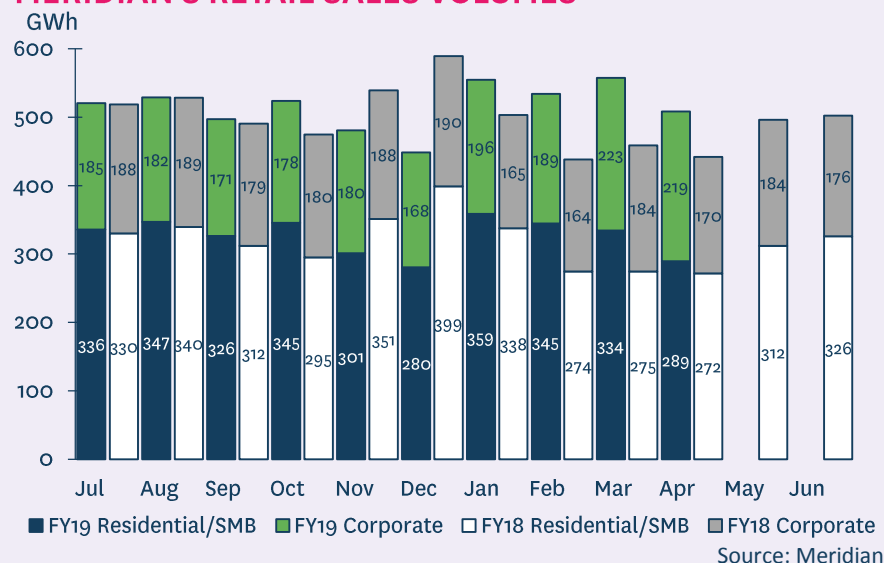
\*excludes volumes sold to New Zealand Aluminium Smelters and CFDs

Meridian Energy Limited Monthly Operating Report for April 2019

## MERIDIAN'S NZ CUSTOMER CONNECTIONS



## MERIDIAN'S RETAIL SALES VOLUMES\*

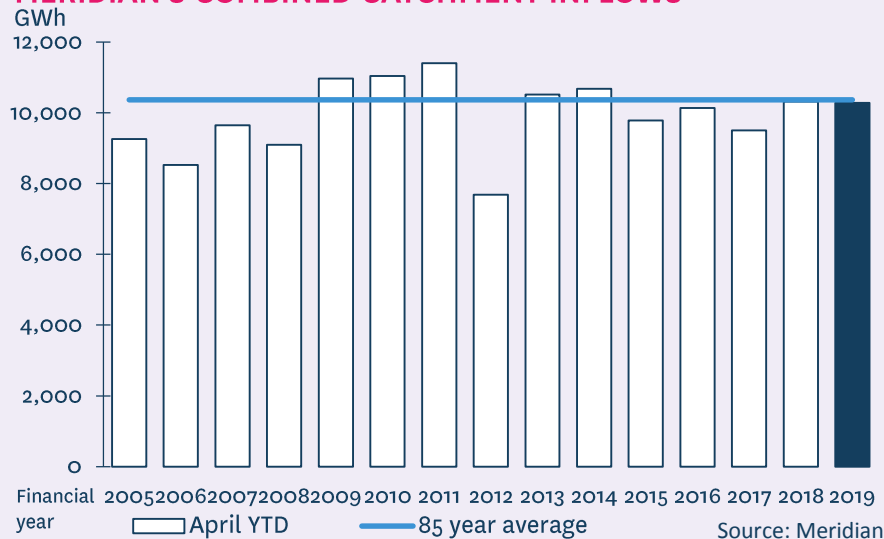


13 May 2019

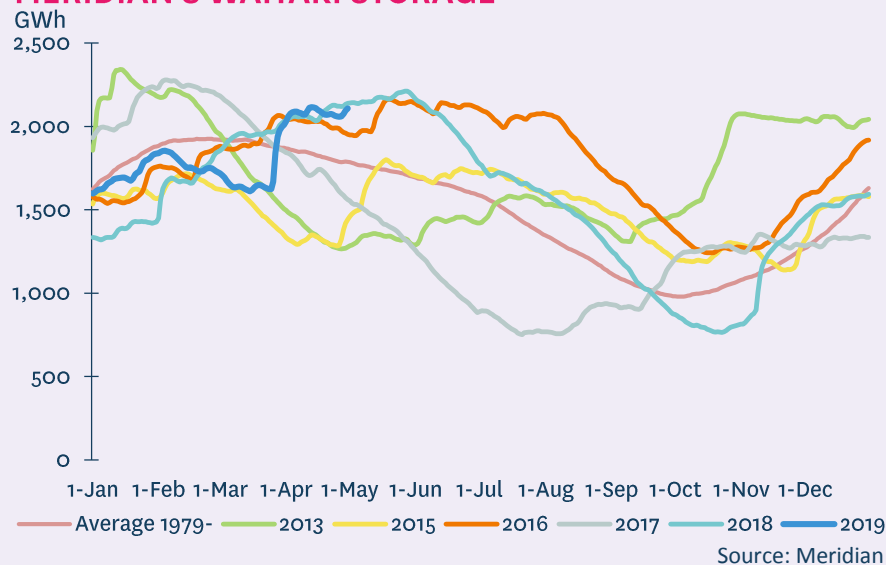
# OPERATING INFORMATION

- April 2019 monthly inflows were 115% of historical average
- To date this financial year, inflows are 99% of historical average
- Meridian's Waitaki catchment storage moved from 2,010GWh to 2,108GWh during April 2019
- Waitaki storage at the end of April 2019 was 118% of historical average and 1% lower than the same time last year
- Storage in Meridian's Waiau catchment was above average at the end of April 2019

## MERIDIAN'S COMBINED CATCHMENT INFLOWS



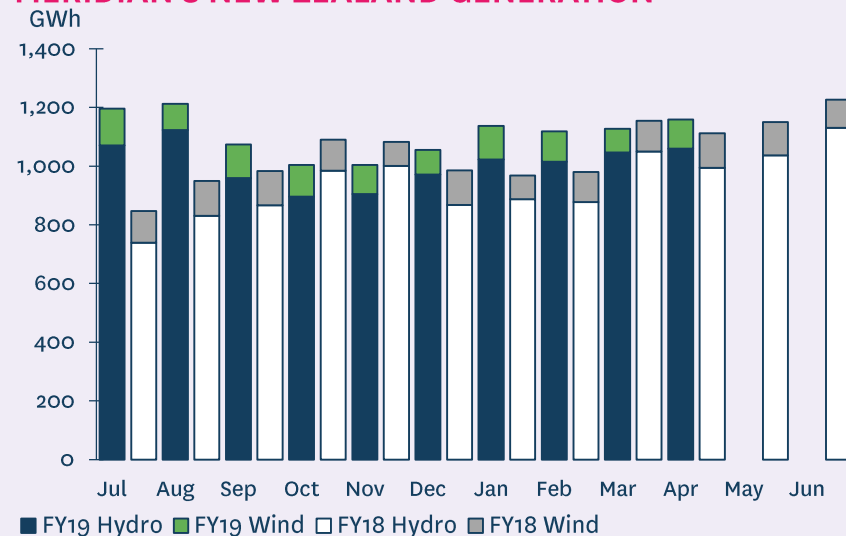
## MERIDIAN'S WAITAKI STORAGE



# OPERATING INFORMATION

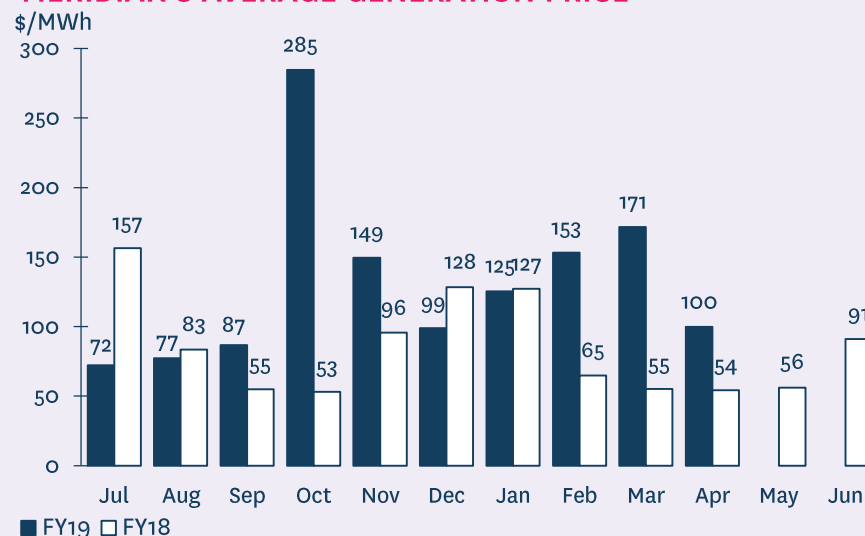
- Meridian's New Zealand generation in April 2019 was 4.3% higher than the same month last year, reflecting higher hydro generation and lower wind generation
- To date this financial year, Meridian's New Zealand generation is 9.2% higher than the same period last year, reflecting higher hydro generation and lower wind generation
- The average price Meridian received for its generation in April 2019 was 83.8% higher than the same month last year
- The average price Meridian paid to supply contracted sales in April 2019 was 84.1% higher than the same month last year
- To date this financial year, the average price Meridian received for its generation is 52.1% higher than the same period last year and the average price paid to supply contracted sales is 54.0% higher

## MERIDIAN'S NEW ZEALAND GENERATION



Source: Meridian

## MERIDIAN'S AVERAGE GENERATION PRICE\*



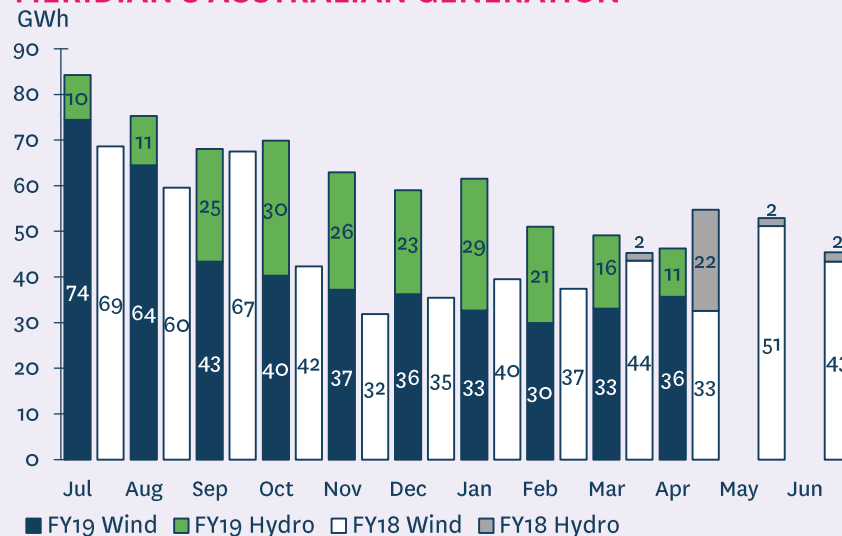
Source: Meridian

\*price received for Meridian's physical generation

# OPERATING INFORMATION

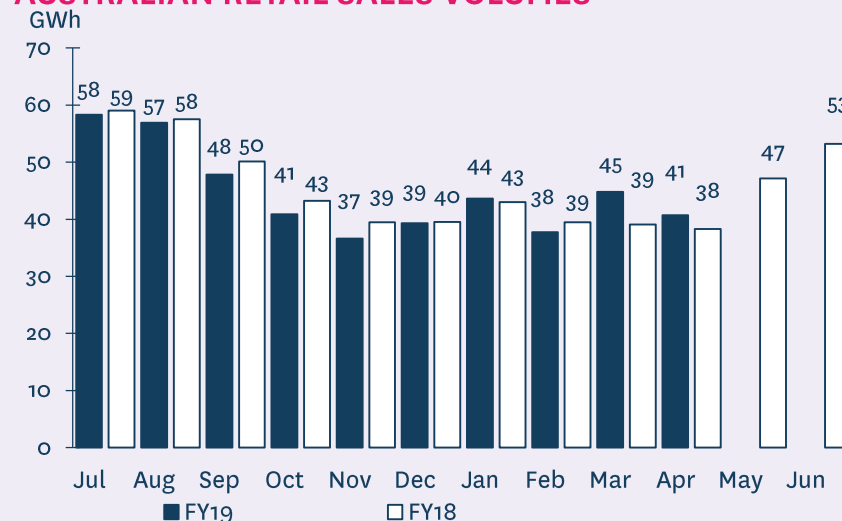
- Meridian's Australian generation in April 2019 was 15.4% lower than the same month last year, reflecting lower wind farm availability from ongoing upgrades and repairs and continued dry conditions
- To date this financial year, Australian generation is 36.8% higher than the same period last year
- Australian retail electricity sales volumes in April 2019 were 6.3% higher than the same month last year
- To date this financial year, Australian retail electricity sales volumes are 0.5% lower than the same period last year

## MERIDIAN'S AUSTRALIAN GENERATION



Source: Meridian

## AUSTRALIAN RETAIL SALES VOLUMES



Source: Meridian



# OPERATING INFORMATION

See following page for Australia  
operating information and all  
footnotes

	APRIL 2019 MONTH	APRIL 2018 MONTH	MARCH 2019 MONTH	FEBRUARY 2019 MONTH	10 MONTHS TO APRIL 2019	10 MONTHS TO APRIL 2018
New Zealand contracted sales <sup>1</sup>						
Retail contracted sales volume (GWh)	508	442	557	534	5,154	4,983
Average retail contracted sales price (\$/MWh)	\$105.4	\$107.0	\$101.3	\$102.0	\$103.0	\$103.3
NZAS sales volume (GWh)	448	412	463	418	4,400	4,173
Sell side derivative volumes <sup>2</sup> (GWh)	168	272	187	196	1,942	1,754
Wholesale contracted sales average price <sup>3</sup> (\$/MWh)	\$73.0	\$60.1	\$80.3	\$80.6	\$69.1	\$59.2
Total New Zealand customer connections <sup>4</sup>	301,230	288,538	299,905	299,351		
New Zealand generation						
Hydro generation volumes (GWh)	1,060	994	1,046	1,015	10,069	9,098
Wind generation volumes (GWh)	99	118	81	104	1,020	1,053
<b>Total generation volumes (GWh)</b>	<b>1,159</b>	<b>1,112</b>	<b>1,128</b>	<b>1,119</b>	<b>11,089</b>	<b>10,151</b>
Average generation price <sup>5</sup> (\$/MWh)	\$99.8	\$54.3	\$171.5	\$153.1	\$129.5	\$85.1
Acquired generation volume <sup>6</sup> (GWh)	144	163	186	142	1,678	1,892
Cost of acquired generation (\$/MWh)	\$65.0	\$63.9	\$71.2	\$66.6	\$68.1	\$68.4
Acquired generation revenue average price (\$/MWh)	\$103.1	\$57.7	\$168.4	\$157.7	\$142.1	\$89.9
Future contract close outs (\$M)	-\$1.1	\$0.0	-\$2.8	-\$0.7	-\$7.5	-\$3.3
Contracted sales supply volumes (GWh)	1,154	1,150	1,237	1,186	11,780	11,170
Cost to supply contracted sales (\$/MWh)	\$105.9	\$57.5	\$175.9	\$162.9	\$138.8	\$90.1

# OPERATING INFORMATION

	APRIL 2019 MONTH	APRIL 2018 MONTH	MARCH 2019 MONTH	FEBRUARY 2019 MONTH	10 MONTHS TO APRIL 2019	10 MONTHS TO APRIL 2018
<b>Australia</b>						
Wind generation volumes (GWh)	36	33	33	30	427	458
Hydro generation volumes (GWh)	11	22	16	21	200	24
Retail contracted electricity sales volume (GWh)	41	38	45	38	447	449
Retail contracted gas sales volume (TJ)	25	-	13	9	199	-
Powershop electricity customer connections <sup>7</sup>	106,240	97,950	104,450	102,730		
Powershop gas customer connections <sup>8</sup>	19,990	-	18,225	16,751		

Note: Powershop Australia electricity customer connection numbers now exclude vacants

## 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 sell side derivative 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 contracts excluding the buy-side of virtual asset swaps
7. Financially responsible market participants, excluding vacants
8. Meter installation registration numbers

# FY19 OPERATING INFORMATION

	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019
<b>New Zealand Contracted Sales</b>												
Retail contracted sales volume (GWh)	521	529	497	524	481	448	555	534	557	508		
Average retail contracted sales price (\$/MWh)	\$113.1	\$110.7	\$106.7	\$98.3	\$98.5	\$95.5	\$98.2	\$102.0	\$101.3	\$105.4		
NZAS sales volume (GWh)	426	426	411	439	444	463	463	418	463	448		
Sell side derivative volumes (GWh)	386	196	140	149	146	217	157	196	187	168		
Wholesale contracted sales average price (\$/MWh)	\$63.9	\$58.5	\$58.0	\$65.9	\$72.7	\$68.9	\$69.4	\$80.6	\$80.3	\$73.0		
Total New Zealand customer connections	292,091	292,906	293,386	294,695	296,064	296,532	297,621	299,351	299,905	301,230		
<b>New Zealand Generation</b>												
Hydro generation volume (GWh)	1,070	1,123	959	897	905	972	1,022	1,015	1,046	1,060		
Wind generation volume (GWh)	126	90	115	107	99	83	116	104	81	99		
<b>Total generation volume (GWh)</b>	<b>1,196</b>	<b>1,213</b>	<b>1,074</b>	<b>1,004</b>	<b>1,004</b>	<b>1,055</b>	<b>1,138</b>	<b>1,119</b>	<b>1,128</b>	<b>1,159</b>		
Average generation price (\$/MWh)	\$72.1	\$77.2	\$86.8	\$284.6	\$149.5	\$98.8	\$125.3	\$153.1	\$171.5	\$99.8		
Acquired generation volume (GWh)	170	167	147	200	190	177	155	142	186	144		
Cost of acquired generation (\$/MWh)	\$65.7	\$63.1	\$62.5	\$77.7	\$74.7	\$61.7	\$69.3	\$66.6	\$71.2	\$65.0		
Acquired generation revenue average price (\$/MWh)	\$74.5	\$80.8	\$87.9	\$290.6	\$180.8	\$104.6	\$127.7	\$157.7	\$168.4	\$103.1		
Future contract close outs (\$m)	-0.1	-0.3	-0.6	-0.5	-0.5	-0.5	-0.4	-0.7	-2.8	-1.1		
Contracted sales supply volume (GWh)	1,353	1,181	1,079	1,142	1,098	1,148	1,201	1,186	1,237	1,154		
Cost to supply contracted sales (\$/MWh)	\$77.0	\$84.9	\$92.5	\$294.4	\$160.4	\$108.7	\$133.3	\$162.9	\$175.9	\$105.9		
<b>Australia</b>												
Wind generation volume (GWh)	74	64	43	40	37	36	33	30	33	36		
Hydro generation volume (GWh)	10	11	25	30	26	23	29	21	16	11		
Retail contracted electricity sales volume (GWh)	58	57	48	41	37	39	44	38	45	41		
Retail contracted gas sales volume (TJ)	4	20	40	41	20	17	9	9	13	25		
Powershop electricity customer connections	96,743	96,801	96,657	97,514	98,618	99,368	101,020	102,730	104,450	106,240		
Powershop gas customer connections	1,179	4,776	7,558	9,577	11,333	12,508	14,309	16,751	18,225	19,990		

Note: Powershop Australia electricity customer connection numbers now exclude vacants

# FY18 OPERATING INFORMATION

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
<b>New Zealand Contracted Sales</b>												
Retail contracted sales volume (GWh)	519	529	491	475	539	589	503	438	459	442	496	502
Average retail contracted sales price (\$/MWh)	\$114.6	\$115.9	\$109.4	\$99.0	\$96.0	\$93.3	\$96.8	\$101.6	\$100.2	\$107.0	\$112.5	\$115.9
NZAS sales volume (GWh)	426	426	411	426	412	426	426	384	426	412	426	412
Sell side derivative volumes (GWh)	95	100	111	142	194	125	182	239	294	272	244	280
Wholesale contracted sales average price (\$/MWh)	\$60.9	\$59.0	\$58.1	\$54.9	\$57.6	\$58.5	\$63.0	\$61.3	\$58.7	\$60.1	\$62.5	\$60.5
Total New Zealand customer connections	278,595	279,967	280,209	280,211	281,314	282,396	283,724	285,611	287,167	288,538	289,431	290,756
<b>New Zealand Generation</b>												
Hydro generation volume (GWh)	739	831	867	985	1,000	867	888	878	1,049	994	1,037	1,131
Wind generation volume (GWh)	108	118	116	106	82	118	80	102	105	118	113	96
<b>Total generation volume (GWh)</b>	<b>847</b>	<b>949</b>	<b>983</b>	<b>1,091</b>	<b>1,082</b>	<b>985</b>	<b>968</b>	<b>980</b>	<b>1,154</b>	<b>1,112</b>	<b>1,150</b>	<b>1,227</b>
Average generation price (\$/MWh)	\$156.5	\$83.4	\$55.0	\$53.1	\$95.5	\$128.4	\$127.2	\$64.8	\$55.2	\$54.3	\$56.1	\$91.1
Acquired generation volume (GWh)	282	206	158	164	178	200	234	156	152	163	169	160
Cost of acquired generation (\$/MWh)	\$77.4	\$70.1	\$62.5	\$60.6	\$64.9	\$69.9	\$75.4	\$65.0	\$63.6	\$63.9	\$63.2	\$63.4
Acquired generation revenue average price (\$/MWh)	\$138.8	\$84.1	\$55.6	\$54.4	\$99.7	\$114.2	\$114.2	\$65.5	\$59.8	\$57.7	\$56.5	\$93.2
Future contract close outs (\$m)	-0.7	-0.6	-0.7	-0.3	0.1	-0.4	-0.3	-0.4	0.0	0.0	-0.2	0.0
Contracted sales supply volume (GWh)	1,067	1,077	1,053	1,054	1,174	1,163	1,140	1,086	1,205	1,150	1,191	1,225
Cost to supply contracted sales (\$/MWh)	\$155.0	\$88.2	\$59.2	\$54.4	\$100.1	\$126.8	\$130.2	\$69.1	\$59.8	\$57.5	\$58.4	\$95.3
<b>Australia</b>												
Wind generation volume (GWh)	69	60	67	42	32	35	40	37	44	33	51	43
Hydro generation volume (GWh)									2	22	2	2
Retail contracted electricity sales volume (GWh)	59	58	50	43	39	40	43	39	39	38	47	53
Retail contracted gas sales volume (TJ)												
Powershop electricity customer connections	97,547	97,465	97,456	97,760	97,828	97,361	97,826	97,499	97,522	97,950	97,704	97,241
Powershop gas customer connections											29	281

Note: Powershop Australia electricity customer connection numbers now exclude vacants

# GLOSSARY

Acquired generation 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
Combined catchment inflows	combined water inflows into Meridian’s Waitaki and Waiau hydro storage lakes
Cost of acquired generation	volume weighted average price Meridian pays for derivatives acquired to supplement generation
Cost to supply contracted sales	volume weighted average price Meridian pays to supply contracted customer sales
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
FRMP	financially responsible market participant, 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 84 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
MIRN	meter identification reference number
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
Sell side derivatives	sell-side electricity derivatives excluding the sell-side of virtual asset swaps
Virtual Asset Swaps (VAS)	CFDs Meridian has with Genesis Energy and Mercury. They do not result in the physical supply of electricity