

# DECEMBER 2018



MONTHLY OPERATING REPORT



### DECEMBER HIGHLIGHTS

In the month to 11
January 2019, national
hydro storage decreased
from 95% to 92% of
historical average

South Island storage sat at 92% of average and North Island storage at 89% of average on 11 January 2019

Meridian's December 2018 monthly total inflows were 68% of historical average Meridian's Waitaki catchment storage at the end of December 2018 was 98% of historical average

Storage in Meridian's Waiau catchment was below average at the end of December 2018

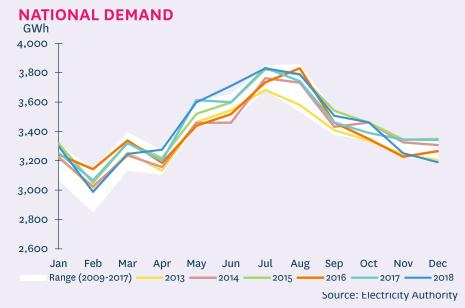
National electricity demand in December 2018 was 4.5% lower than the same month last year, with low irrigation load this month December 2018 saw above average temperatures and rainfall across much of New Zealand except for drier lower South Island conditions. Soil moisture levels are elevated across much of the country

New Zealand Aluminium Smelter's load averaged 611MW during December 2018 as new cells were cut in on potline 4

Meridian's retail sales volumes in December 2018 were 23.9% lower than December 2017

#### MARKET DATA

- National electricity demand in December 2018 was 4.5% lower than the same month last year, with low irrigation load this month
- December 2018 saw above average temperatures and rainfall across much of New Zealand except for drier lower South Island conditions. Soil moisture levels are elevated across much of the country
- Demand in the last 12 months was the same as the preceding 12 months
- New Zealand Aluminium Smelter's load during December 2018 averaged 611MW as new cells were cut in on potline 4. NZAS contracts with Meridian now total 622MW
- 12-month average switching rate of customers changing retailers but not moving ("trader" switch) was 8.1% at the end of November 2018
- 12-month average switching rate of customers moving and changing retailers ("move-in" switch) was 13.2% at the end of November 2018

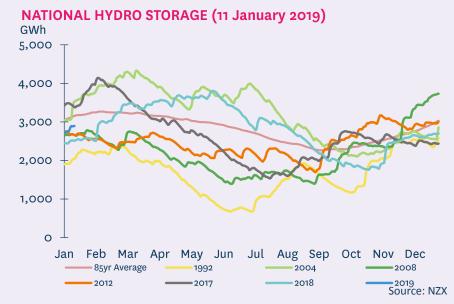


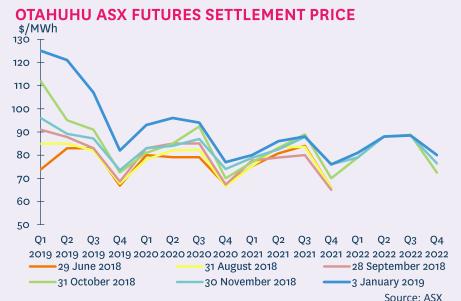
#### MARKET ICP SWITCHING (ALL RETAILERS)



#### MARKET DATA

- December 2018 saw increases in ASX prices
- National storage decreased from 95% of the 85 year average on 10 December 2018 to 92% of average on 11 January 2019
- South Island storage decreased to 92% of historical average on 11 January 2019. North Island storage increased to 89% of average

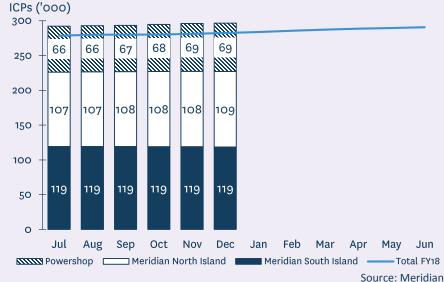






- Meridian's New Zealand customer connection numbers rose 0.2% during December 2018 and have risen 2.0% since June 2018
- Retail sales volumes in December 2018
   were 23.9% lower than December 2017
- Compared to December 2017, residential/SMB sales volumes decreased by 29.7% (similar or higher volumes in all segments, except notably lower irrigation volumes) and corporate sales volumes decreased by 11.7% (large, short-term customer signing last year)
- To date this financial year, retail sales volumes are 4.5% lower than the same period last year
- This reflects a 4.5% decrease in residential/SMB sales volumes and a 4.6% decrease in corporate sales volumes

#### **MERIDIAN'S NZ CUSTOMER CONNECTIONS**



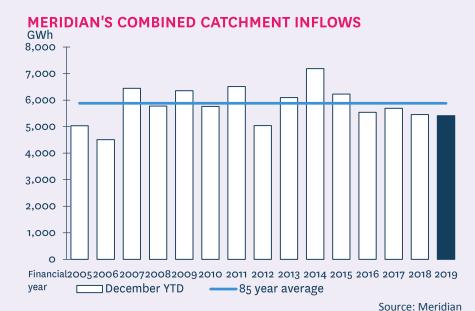
#### MERIDIAN'S RETAIL SALES VOLUMES\*

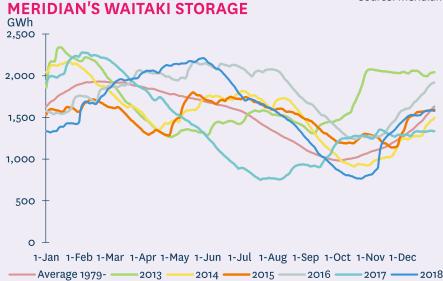


Source: Meridian

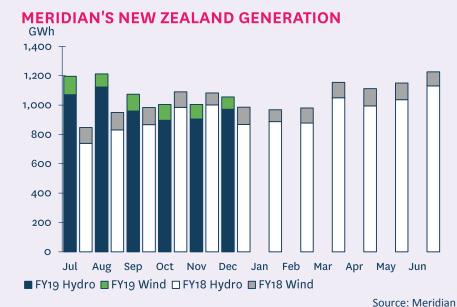
<sup>\*</sup>excludes volumes sold to New Zealand Aluminium Smelters and CFDs

- December 2018 monthly inflows were 68% of historical average
- To date this financial year, inflows are 92% of historical average
- Meridian's Waitaki catchment storage moved from 1,440GWh to 1,593GWh during December 2018
- Waitaki storage at the end of December 2018 was 98% of historical average and 19% higher than the same time last year
- Storage in Meridian's Waiau catchment was below average at the end of December 2018





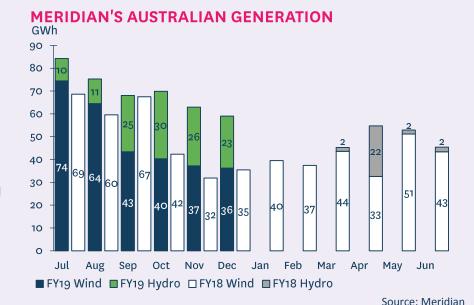
- Meridian's New Zealand generation in December 2018 was 7.1% higher than the same month last year, reflecting higher hydro generation and lower wind generation
- To date this financial year, Meridian's New Zealand generation is 10.2% higher than the same period last year, reflecting higher hydro generation and lower wind generation
- The average price Meridian received for its generation in December 2018 was 23.0% lower than the same month last year
- The average price Meridian paid to supply contracted sales in December 2018 was 14.3% lower than the same month last year
- To date this financial year, the average price Meridian received for its generation is 33.2% higher than the same period last year and the average price paid to supply contracted sales is 37.4% higher







- Meridian's Australian generation in December 2018 was 66.4% higher than the same month last year
- To date this financial year, Australian generation is 37.3% higher than the same period last year
- Australian retail electricity sales volumes in December 2018 were 0.5% lower than the same month last year
- To date this financial year, Australian retail electricity sales volumes are 3.2% lower than the same period last year



#### **AUSTRALIAN RETAIL SALES VOLUMES**



Source: Meridian

100									
DECEMBER 2018 MONTH	DECEMBER 2017 MONTH	NOVEMBER 2018 MONTH	OCTOBER 2018 MONTH	6 MONTHS TO DECEMBER 2018	6 MONTHS TO DECEMBER 2017				
448	589	481	524	2,999	3,141				
\$95.5	\$93.3	\$98.5	\$98.3	\$104.1	\$104.5				
463	426	444	439	2,608	2,525				
217	125	146	149	1,234	767				
\$68.9	\$58.5	\$72.7	\$65.9	\$64.7	\$58.1				
296,532	282,396	296,064	294,695						
972	867	905	897	5,925	5,289				
83	118	99	107	621	648				
1,055	985	1,004	1,004	6,546	5,937				
\$98.8	\$128.4	\$149.5	\$284.6	\$124.2	\$93.2				
177	200	190	200	1,051	1,188				
\$61.7	\$69.9	\$74.7	\$77.7	\$68.1	\$68.7				
\$104.6	\$114.2	\$180.8	\$290.6	\$142.8	\$96.6				
-\$0.5	-\$0.4	-\$0.5	-\$0.5	-\$2.6	-\$2.5				
1,148	1,163	1,098	1,142	7,002	6,587				
\$108.7	\$126.8	\$160.4	\$294.4	\$134.5	\$97.9				
	2018 MONTH  448  \$95.5  463  217  \$68.9  296,532  972  83  1,055  \$98.8  177  \$61.7  \$104.6  -\$0.5	2018 MONTH       2017 MONTH         448       589         \$95.5       \$93.3         463       426         217       125         \$68.9       \$58.5         296,532       282,396         972       867         83       118         1,055       985         \$98.8       \$128.4         177       200         \$61.7       \$69.9         \$104.6       \$114.2         -\$0.5       -\$0.4         1,148       1,163	2018 MONTH         2017 MONTH         2018 MONTH           448         589         481           \$95.5         \$93.3         \$98.5           463         426         444           217         125         146           \$68.9         \$58.5         \$72.7           296,532         282,396         296,064           972         867         905           83         118         99           1,055         985         1,004           \$98.8         \$128.4         \$149.5           177         200         190           \$61.7         \$69.9         \$74.7           \$104.6         \$114.2         \$180.8           -\$0.5         -\$0.4         -\$0.5	2018 MONTH         2017 MONTH         2018 MONTH         2018 MONTH           448         589         481         524           \$95.5         \$93.3         \$98.5         \$98.3           463         426         444         439           217         125         146         149           \$68.9         \$58.5         \$72.7         \$65.9           296,532         282,396         296,064         294,695           972         867         905         897           83         118         99         107           1,055         985         1,004         1,004           \$98.8         \$128.4         \$149.5         \$284.6           177         200         190         200           \$61.7         \$69.9         \$74.7         \$77.7           \$104.6         \$114.2         \$180.8         \$290.6           -\$0.5         -\$0.4         -\$0.5         -\$0.5           1,148         1,163         1,098         1,142	2018 MONTH         2017 MONTH         2018 MONTH         DECEMBER MONTH           448         589         481         524         2,999           \$95.5         \$93.3         \$98.5         \$98.3         \$104.1           463         426         444         439         2,608           217         125         146         149         1,234           \$68.9         \$58.5         \$72.7         \$65.9         \$64.7           296.532         282,396         296,064         294,695           972         867         905         897         5,925           83         118         99         107         621           1,055         985         1,004         1,004         6,546           \$98.8         \$128.4         \$149.5         \$284.6         \$124.2           177         200         190         200         1,051           \$61.7         \$69.9         \$74.7         \$77.7         \$68.1           \$104.6         \$114.2         \$180.8         \$290.6         \$142.8           -\$0.5         -\$0.5         -\$0.5         -\$0.5         -\$2.6				

	DECEMBER 2018 MONTH	DECEMBER 2017 MONTH	NOVEMBER 2018 MONTH	OCTOBER 2018 MONTH	6 MONTHS TO DECEMBER 2018	6 MONTHS TO DECEMBER 2017
Australia						
Wind generation volumes (GWh)	36	35	37	40	296	305
Hydro generation volumes (GWh)	23	-	26	30	123	-
Retail contracted electricity sales volume (GWh)	39	40	37	41	280	289
Retail contracted gas sales volume (TJ)	17	-	20	41	142	-
Powershop electricity customer connections <sup>7</sup>	99,368	97,361	98,618	97,514		
Powershop gas customer connections <sup>8</sup>	12,508	-	11,333	9,577		

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	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	2018	2018	2018	2018	2018	2018	2019	2019	2019	2019	2019	2019
New Zealand Contracted Sales												
Retail contracted sales volume (GWh)	521	529	497	524	481	448						
Average retail contracted sales price (\$/MWh)	\$113.1	\$110.7	\$106.7	\$98.3	\$98.5	\$95.5						
NZAS sales volume (GWh)	426	426	411	439	444	463						
Sell side derivative volumes (GWh)	386	196	140	149	146	217						
Wholesale contracted sales average price (\$/MWh)	\$63.9	\$58.5	\$58.0	\$65.9	\$72.7	\$68.9						
Total New Zealand customer connections	292,091	292,906	293,386	294,695	296,064	296,532						
New Zealand Generation												
Hydro generation volume (GWh)	1,070	1,123	959	897	905	972						
Wind generation volume (GWh)	126	90	115	107	99	83						
Total generation volume (GWh)	1,196	1,213	1,074	1,004	1,004	1,055						
Average generation price (\$/MWh)	\$72.1	\$77.2	\$86.8	\$284.6	\$149.5	\$98.8						
Acquired generation volume (GWh)	170	167	147	200	190	177						
Cost of acquired generation (\$/MWh)	\$65.7	\$63.1	\$62.5	\$77.7	\$74.7	\$61.7						
Acquired generation revenue average price (\$/MWh)	\$74.5	\$80.8	\$87.9	\$290.6	\$180.8	\$104.6						
Future contract close outs (\$m)	-0.1	-0.3	-0.6	-0.5	-0.5	-0.5						
Contracted sales supply volume (GWh)	1,353	1,181	1,079	1,142	1,098	1,148						
Cost to supply contracted sales (\$/MWh)	\$77.0	\$84.9	\$92.5	\$294.4	\$160.4	\$108.7						
Australia												
Wind generation volume (GWh)	74	64	43	40	37	36						
Hydro generation volume (GWh)	10	11	25	30	26	23						
Retail contracted electricity sales volume (GWh)	58	57	48	41	37	39						
Retail contracted gas sales volume (TJ)	4	20	40	41	20	17						
Powershop electricity customer connections	96,743	96,801	96,657	97,514	98,618	99,368						
Powershop gas customer connections	1,179	4,776	7,558	9,577	11,333	12,508						

Note: Powershop Australia electricity customer connection numbers now exclude vacants

## **FY18 OPERATING INFORMATION**

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	2017	2017	2017	2017	2017	2017	2018	2018	2018	2018	2018	2018
New Zealand Contracted Sales												
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
New Zealand Generation												
Hydro generation volume (GWh)	<b>7</b> 39	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
Total generation volume (GWh)	847	949	983	1,091	1,082	985	968	980	1,154	1,112	1,150	1,227
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
Australia	_				·			·			·	
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 <u>www.emi.ea.govt.nz</u>

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