## SEPTEMBER 2017.



MERIDIAN ENERGY LIMITED

MONTHLY OPERATING REPORT

Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM

## ·September highlights.

In the five weeks to 15 October 2017, national hydro storage increased from 87% to 113% of historical average

South Island storage sat at 109% of average and North Island storage at 126% of average on 15 October 2017

Meridian's September 2017 monthly total inflows were 153% of historical average Meridian's Waitaki catchment storage at the end of September 2017 was 121% of historical average

Storage in Meridian's Waiau catchment was also above average at the end of September 2017

National electricity demand in September 2017 was 0.1% higher than the same month last year

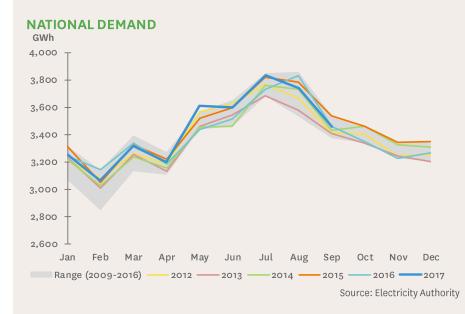
Much of New Zealand experienced average temperatures and above average rainfall during September 2017

Meridian's retail sales volumes in September 2017 increased by 7.7% compared to September 2016

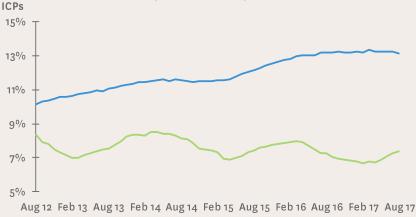
www.meridianenergy.co.nz/investors/

### Market data.

- National electricity demand in September 2017 was 0.1% higher than the same month last year
- Much of New Zealand experienced average temperatures and above average rainfall during September 2017
- Demand in the last 12 months was 0.3% lower than the preceding 12 months
- New Zealand Aluminium Smelter's average load during September 2017 was at the 572MW base quantity of the NZAS agreement
- 12-month average switching rate of customers changing retailers but not moving ("trader" switch) was 7.4% at the end of August 2017
- 12-month average switching rate of customers moving and changing retailers ("move in" switch) was 13.1% at the end of August 2017



MARKET ICP SWITCHING (ALL RETAILERS)



Industry Move-In Switch Industry Trader Switch

Source: Electricity Authority

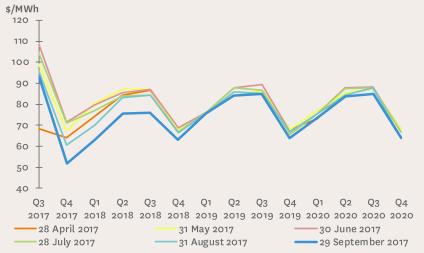
### Market data.

#### NATIONAL HYDRO STORAGE (15 October 2017)



Source: NZX

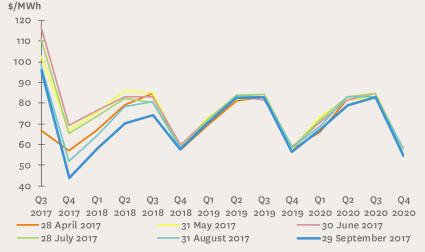
#### **OTAHUHU ASX FUTURES SETTLEMENT PRICE**



Source: ASX

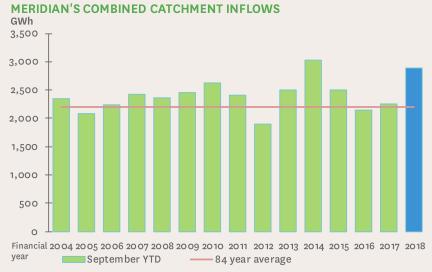
- September 2017 saw further decline in near-term ASX prices
- National storage increased from 87% of the 83 year average on 6 September 2017 to 113% of average on 15 October 2017
- South Island storage increased to 109% of historical average on 15 October 2017.
   North Island storage increased to 126% of average

#### BENMORE ASX FUTURES SETTLEMENT PRICE



Source: ASX

- September 2017 monthly inflows were 153% of historical average
- To date this financial year, inflows are 131% of historical average
- Meridian's Waitaki catchment storage moved from 934GWh to 1,189GWh during September 2017
- Waitaki storage at the end of September 2017 was 121% of historical average and 14% lower than the same time last year
- Storage in Meridian's Waiau catchment rose during the month and was above average at the end of September 2017

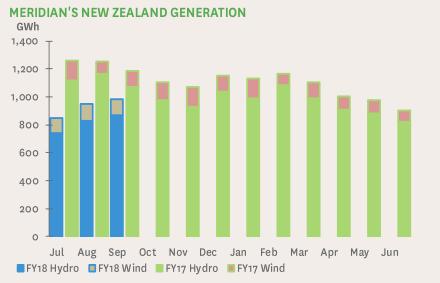


Source: Meridian

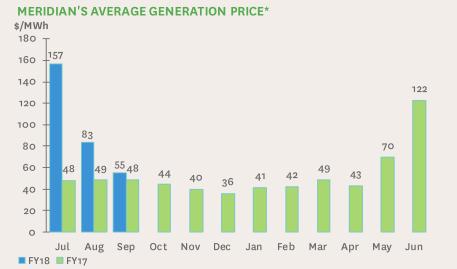
#### **MERIDIAN'S WAITAKI STORAGE**



Source: Meridian



Source: Meridian



\*price received for Meridian's physical generation

Source: Meridian

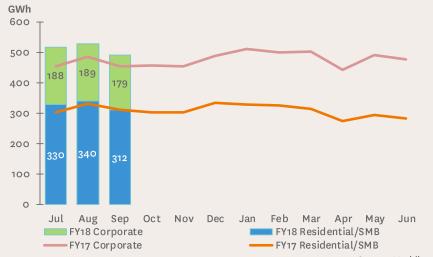
- Meridian's New Zealand generation in September 2017 was 16.9% lower than the same month last year, reflecting lower hydro generation and higher wind generation
- To date this financial year, Meridian's New Zealand generation is 24.9% lower than the same month last year, reflecting lower hydro generation and lower wind generation
- The average price Meridian received for its generation in September 2017 was 13.7% higher than the same month last year
- The average price Meridian paid to supply contracted sales in September 2017 was 15.8% higher than the same month last year
- To date this financial year, the average price Meridian received for its generation is 97.9% higher than the same period last year

- Meridian's New Zealand customer connection numbers rose 0.1% during September 2017 and have risen 1.9% since June 2017
- Retail sales volumes in September 2017 increased by 7.7% compared to September 2016
- Compared to September 2016, residential/SMB sales volumes increased by 0.1% (higher business and agri volumes, lower residential volumes) and corporate sales volumes increased by 24.3%
- To date this financial year, retail sales volumes are 10.2% higher than the same period last year
- This reflects a 3.7% increase in residential/SMB sales volumes and a 23.9% increase in corporate sales volumes

#### MERIDIAN'S NEW ZEALAND CUSTOMER CONNECTIONS

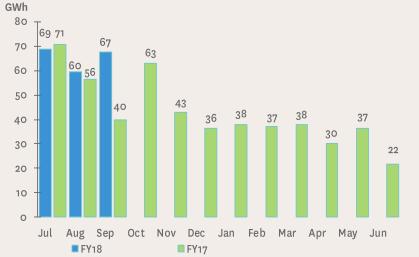


**MERIDIAN'S RETAIL SALES VOLUMES\*** 



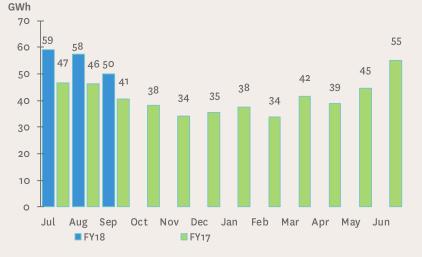
Source: Meridian





Source: Meridian

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



- Meridian's Australian generation in September 2017 was 69.9% higher than the same month last year
- To date this financial year, Australian generation is 17.3% higher than the same period last year
- Australian retail sales volumes in September 2017 increased by 23.7% compared to September 2016
- To date this financial year, Australian retail sales volumes are 24.9% higher than the same period last year
- Powershop Australia had 101,096 customer connections at the end of September 2017

3 MONTHS TO

**SEPTEMBER** 

2016

1,396

\$118.3

1,262

278

\$50.3

3,354

348

3,702

\$48.3

\$52.4

\$52.8

-\$0.4

2,974

\$52.7

167

134

285

**AUGUST** 

**MONTH** 

2017

529

\$115.5

426

100

\$59.0

831

118

949

\$83.4

206

\$70.1

\$84.1

-\$0.6

1,077

\$88.2

60

58

not disclosed

279,967

\$50.3

1,069

114

1,183

\$48.3

\$52.1

\$51.5

-\$0.1

1,003

\$51.1

40

41

83,098

72

275,840

\$58.1

867

116

983

158

\$62.5

\$55.6

-\$0.7

1,053

\$59.2

67

50

101,096

\$55.0

280,209

**JULY** 

2017

519

\$113.9

\$60.9

739

108

847

282

\$77.4

\$138.8

-\$0.7

1,067

\$155.0

69

59

not disclosed

\$156.5

278,595

426

95

**MONTH** 

3 MONTHS TO

**SEPTEMBER** 

2017

1,538

\$112.9

1,262

306

\$59.3

2,436

343

2,779

\$95.6

646

\$71.5

\$101.0

-\$2.0

3,197

\$100.9

196

167

Operating infor	matio	n.
	SEPTEMBER	SEPTEMBER
	2017	2016
	MONTH	MONTH
New Zealand contracted sales <sup>1</sup>		
Retail contracted sales volume (GWH)	491	456
Average retail contracted sales price (\$/MWH)	\$109.0	\$112.2
NZAS sales volume (GWH)	411	411
Sell side derivative volumes² (GWH)	111	128

Wholesale contracted sales average price<sup>3</sup> (\$/MWH)

Acquired generation revenue average price (\$/MWH)

Total New Zealand customer connections4

**New Zealand generation** 

Hydro generation volumes (GWH)

Wind generation volumes (GWH)

Total generation volumes (GWH)

Average generation price<sup>5</sup> (\$/MWH)

Acquired generation volume<sup>6</sup> (GWH)

Cost of acquired generation (\$/MWH)

Contracted sales supply volumes (GWH)

Cost to supply contracted sales (\$/MWH)

Future contract close outs (\$M)

Wind generation volumes (GWH)

Powershop customer connections<sup>7</sup>

Retail contracted sales volume (GWH)

Australia

#### 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

## 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									
Average retail contracted sales price (\$/MWh)	\$113.9	\$115.5	\$109.0									
NZAS sales volume (GWh)	426	426	411									
Sell side derivative volumes (GWh)	95	100	111									
Wholesale contracted sales average price (\$/MWh)	\$60.9	\$59.0	\$58.1									
Total New Zealand customer connections	278,595	279,967	280,209									
New Zealand Generation												
Hydro generation volume (GWh)	739	831	867									
Wind generation volume (GWh)	108	118	116									
Total generation volume (GWh)	847	949	983									
Average generation price (\$/MWh)	\$156.5	\$83.4	\$55.0									
Acquired generation volume (GWh)	282	206	158									
Cost of acquired generation (\$/MWh)	\$77.4	\$70.1	\$62.5									
Acquired generation revenue average price (\$/MWh)	\$138.8	\$84.1	\$55.6									
Future contract close outs (\$m)	\$0.7	\$0.6	(\$0.7)									
Contracted sales supply volume (GWh)	1,067	1,077	1,053									
Cost to supply contracted sales (\$/MWh)	\$155.0	\$88.2	\$59.2									
Australia												
Wind generation volume (GWh)	69	60	67									
Retail contracted sales volume (GWh)	59	58	50									
Powershop Australia customer connections	not disclosed	not disclosed	101,096									

## FY17 operating information.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	2016	2016	2016	2016	2016	2016	2017	2017	2017	2017	2017	2017
New Zealand Contracted Sales												
Retail contracted sales volume (GWh)	454	487	456	458	455	489	512	502	502	445	492	477
Average retail contracted sales price (\$/MWh)	\$122.9	\$119.7	\$112.2	\$100.1	\$98.7	\$99.6	\$96.9	\$98.6	\$101.5	\$108.4	\$115.7	\$109.5
NZAS sales volume (GWh)	426	426	411	426	412	426	426	384	426	412	426	412
Sell side derivative volumes (GWh)	64	87	128	102	110	87	137	182	144	240	149	168
Wholesale contracted sales average price (\$/MWh)	\$49.7	\$50.8	\$50.3	\$50.2	\$50.4	\$50.0	\$55.5	\$53.5	\$56.0	\$56.8	\$56.7	\$59.5
Total New Zealand customer connections	275,344	275,861	275,840	275,339	275,785	275,714	275,598	276,429	277,096	278,518	276,147	276,767
New Zealand Generation												
Hydro generation volume (GWh)	1,119	1,166	1,069	980	926	1,036	991	1,083	992	912	882	818
Wind generation volume (GWh)	143	91	114	125	144	116	138	84	110	93	96	87
Total generation volume (GWh)	1,262	1,257	1,183	1,105	1,070	1,152	1,129	1,167	1,102	1,005	978	905
Average generation price (\$/MWh)	\$48.1	\$48.5	\$48.3	\$44.4	\$40.0	\$35.9	\$41.4	\$42.3	\$48.9	\$43.3	\$69.5	\$122.5
Acquired generation volume (GWh)	102	112	72	49	64	56	172	136	158	175	210	259
Cost of acquired generation (\$/MWh)	\$46.2	\$58.2	\$52.1	\$70.0	\$66.8	\$65.6	\$59.6	\$61.0	\$61.0	\$58.4	\$59.8	\$75.8
Acquired generation revenue average price (\$/MWh)	\$48.3	\$57.8	\$51.5	\$49.1	\$47.2	\$43.9	\$45.4	\$45.7	\$51.1	\$45.2	\$64.6	\$112.4
Future contract close outs (\$m)	(\$0.2)	(\$0.1)	(\$0.1)	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	(\$0.1)	\$0.1	(\$1.1)	(\$1.6)
Contracted sales supply volume (GWh)	950	1,021	1,003	1,032	1,007	1,022	1,091	1,088	1,106	1,124	1,097	1,070
Cost to supply contracted sales (\$/MWh)	\$54.4	\$52.7	\$51.1	\$47.0	\$42.3	\$38.6	\$44.6	\$45.7	\$52.2	\$45.4	\$71.1	\$125.8
Australia												
Wind generation volume (GWh)	71	56	40	63	43	36	38	37	38	30	37	22
Retail contracted sales volume (GWh)	47	46	41	38	34	35	38	34	42	39	45	55
Powershop Australia customer connections	not disclosed	not disclosed	83,908	not disclosed	not disclosed	90,638	not disclosed	not disclosed	95,963	not disclosed	not disclosed	100,524

## FY16 operating information.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
	2015	2015	2015	2015	2015	2015	2016	2016	2016	2016	2016	2016
New Zealand Contracted Sales												
Retail contracted sales volume (GWh)	509	510	495	513	563	574	489	480	509	410	476	443
Average retail contracted sales price (\$/MWh)	\$120.9	\$119.3	\$111.5	\$96.1	\$94.9	\$88.2	\$96.1	\$100.0	\$99.9	\$107.7	\$118.0	\$122.6
NZAS sales volume (GWh)	426	426	411	426	412	426	426	398	426	412	426	412
Sell side derivative volumes (GWh)	140	158	113	114	102	49	94	90	81	112	177	51
Wholesale contracted sales average price (\$/MWh)	\$50.7	\$51.4	\$51.6	\$50.2	\$51.7	\$50.4	\$53.5	\$52.6	\$50.6	\$48.8	\$45.1	\$51.0
Total New Zealand customer connections	276,366	275,479	275,875	275,048	274,146	274,101	274,433	275,006	275,869	275,771	274,947	274,920
New Zealand Generation												
Hydro generation volume (GWh)	1,060	1,021	954	1,006	1,033	1,013	980	1,015	1,076	1,016	1,063	1,014
Wind generation volume (GWh)	123	124	124	157	135	108	114	103	101	102	144	121
Total generation volume (GWh)	1,183	1,145	1,078	1,163	1,168	1,121	1,094	1,118	1,177	1,118	1,207	1,135
Average generation price (\$/MWh)	\$49.7	\$52.2	\$58.0	\$54.5	\$62.1	\$66.3	\$67.9	\$61.8	\$50.7	\$59.2	\$51.7	\$50.6
Acquired generation volume (GWh)	144	97	95	133	94	105	71	44	69	111	87	80
Cost of acquired generation (\$/MWh)	\$82.2	\$84.7	\$83.6	\$62.0	\$70.5	\$70.8	\$74.5	\$75.2	\$75.1	\$78.7	\$75.1	\$78.9
Acquired generation revenue average price (\$/MWh)	\$50.4	\$52.4	\$56.6	\$56.6	\$66.6	\$72.3	\$72.2	\$74.6	\$62.9	\$66.3	\$57.6	\$58.1
Future contract close outs (\$m)	(\$0.1)	(\$0.9)	(\$0.1)	(\$0.1)	(\$0.2)	(\$0.2)	(\$0.1)	(\$0.8)	(\$1.0)	(\$1.1)	(\$2.0)	(\$0.3)
Contracted sales supply volume (GWh)	1,093	1,120	1,050	1,090	1,096	1,086	1,009	991	1,036	930	1,114	940
Cost to supply contracted sales (\$/MWh)	\$52.6	\$55.5	\$60.4	\$57.9	\$69.0	\$70.7	\$72.3	\$66.6	\$54.4	\$64.3	\$54.5	\$54.5
Australia												
Wind generation volume (GWh)	60	47	43	38	33	38	36	29	29	39	71	53
Retail contracted sales volume (GWh)	31	32	27	24	22	27	26	25	29	28	33	41
Powershop Australia customer connections	not disclosed	not disclosed	55,993	not disclosed	not disclosed	63,763	not disclosed	not disclosed	71,111	not disclosed	not disclosed	77,970

## · 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

**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 83 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

nitiated

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

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

# Thank you.

