

# Q2

## QUARTERLY OPERATIONAL UPDATE




### FY 2017 Q2 MARKET AND OPERATIONAL INFORMATION

*This disclosure includes market and operational information for Genesis Energy Limited for the quarter ending 31 December 2016 (Q2).*

**5%**


Total LPG customer connections up in Q2 versus Q1 FY2017

**92%**

Total coal fired generation was down compared with Q2 FY2016

**218t**

Retail LPG sales were up on Q2 FY2016

**31%**

Average price received for generation was \$21/GWh lower than Q2 FY2016

### REINVIGORATED STRATEGY UNDERWAY

During the quarter Genesis Energy announced a reinvigorated strategy focused on optimising its business to improve short term returns, innovation for medium term growth and investing for long term value creation. Despite continued challenges in the retail sector, there was growth in the target LPG market.

In a competitive retail environment, electricity customer connections remained under pressure finishing the quarter down 1.2% on Q1 FY2017 to 514,155 at 31 December 2016. The decline in customer connections combined with reduced national demand relative to the same period last year saw a reduction in both mass market and time of use (TOU) electricity volumes sold by 3.2% and 3.6% respectively. The move towards digitisation is evidenced by increased uptake in app downloads and the use of self service. Genesis Energy and Energy Online app downloads totalled 105,043 at the end of December 2016.

Retail gas sales during the quarter remained flat at 1.7 PJ on Q2 FY2016, whilst year to date volumes sold were up 1% on the prior year.

Q2 FY2017 provided further growth in the retail LPG segment for Genesis Energy. LPG customer connections of 17,513 at 31 December 2016 were up 5% on Q1 FY2017 and up 22% on Q2 FY2016. Retail LPG sales volumes of 1,101 tonnes were up 25% compared to the same period last year as a result of increased customer connections and Genesis Energy's strategy to pursue greater LPG market share.

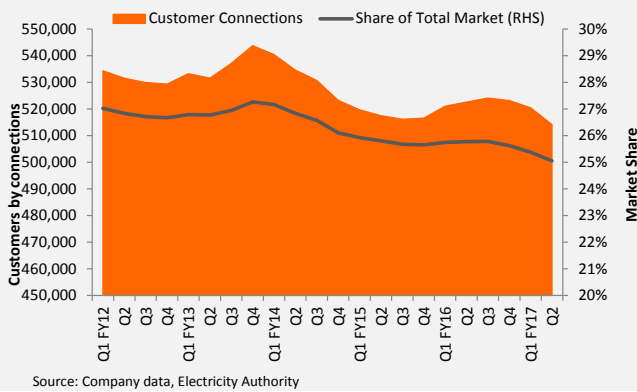
A continued trend from Q1 FY2017 of greater inflows into Genesis Energy catchments along with a planned Unit 5 outage at Huntly in November 2016 resulted in the Company being able to prioritise renewable generation over thermal generation. Hydro generation during Q2 FY2017 was 22% higher than the same period last year whilst total thermal generation was down 37%. The wet conditions and high national storage levels lead to a suppressed average price received for generation (GWAP) of \$47.07/GWh, which was 31% lower than the price received a year ago. Offsetting this is a 21% reduction in the cost of fuel from \$37.22/MWh to \$29.36/MWh over the same period which lessens the impact of lower prices on margins.

During Q2, Rankine units operated on gas for 77% of the time. Total coal fired generation was 92% lower than Q2 FY2016, with the coal stockpile at 360 kilotonnes at 31 December 2016. Genesis Energy is also reporting Equipment Availability and Forced Outage Factors this quarter which remain on target including the planned outage at Unit 5 in November 2016.

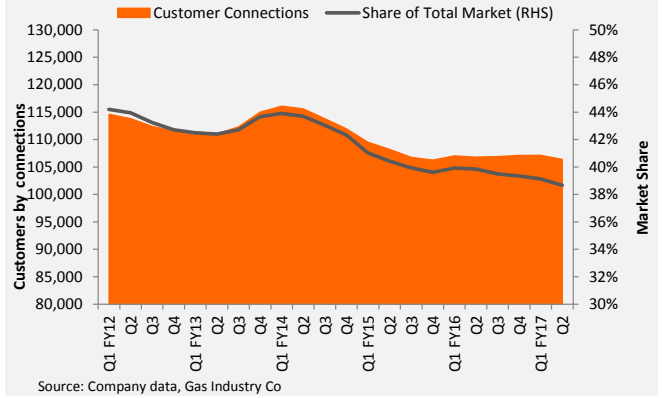
Kupe's Q2 FY2017 production was up on Q2 FY2016 due to the extended outage in Q2 FY2016 (despite a 12 day unplanned outage in November 2016). Genesis Energy's share of gas sales of 1.7PJ and oil production of 89kbbbl were above the same period last year by 26.4% and 9.7% respectively. Year to date LPG sales are 2.5kt behind that of a year ago due to an outage on one of the LPG production machines.

During Q2 FY2016, there was one lost time injury during the quarter. The Total Recordable Injury Frequency Rate (TRIFR) at 31 December 2016 was 0.26 against 0.88 at 31 December 2015. There were 808 full time equivalent employees at the end of Q2 compared to 860 a year ago as a result of recent cost saving initiatives.

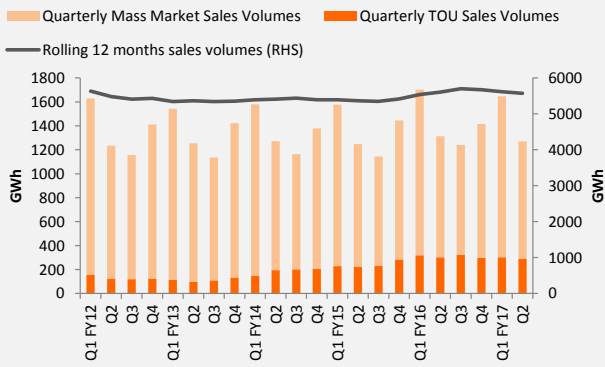
### Electricity Customer Connections and Market



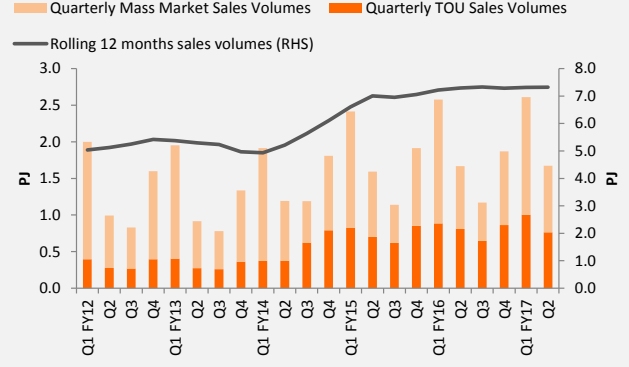
### Natural Gas Customer Connections and Market



### Electricity Sales Volumes (GWh)

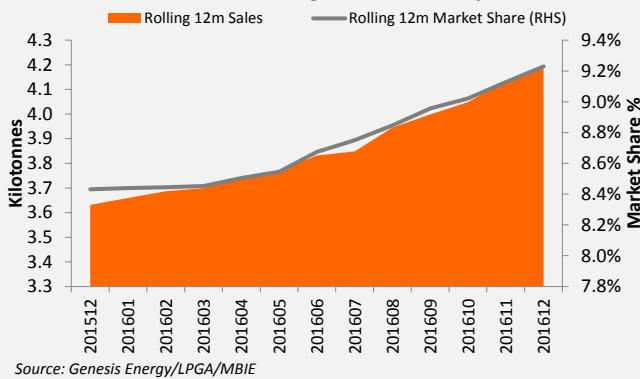


### Retail Gas Sales Volumes (PJ)

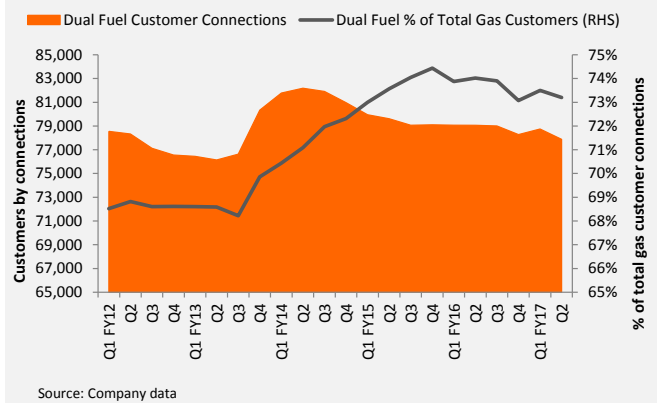


### NEW DISCLOSURE

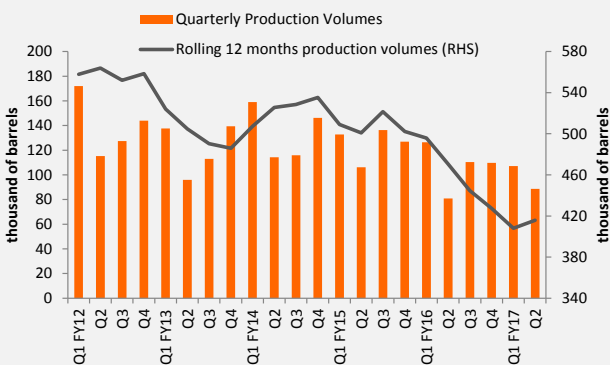
#### Est. Residential LPG 45kg Market Share by Volumes



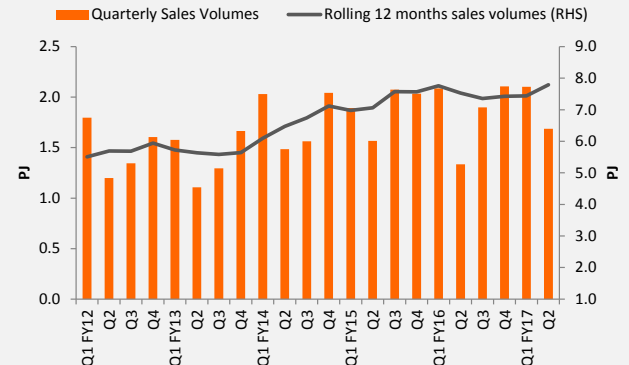
### Dual Fuel Customer Connection Base



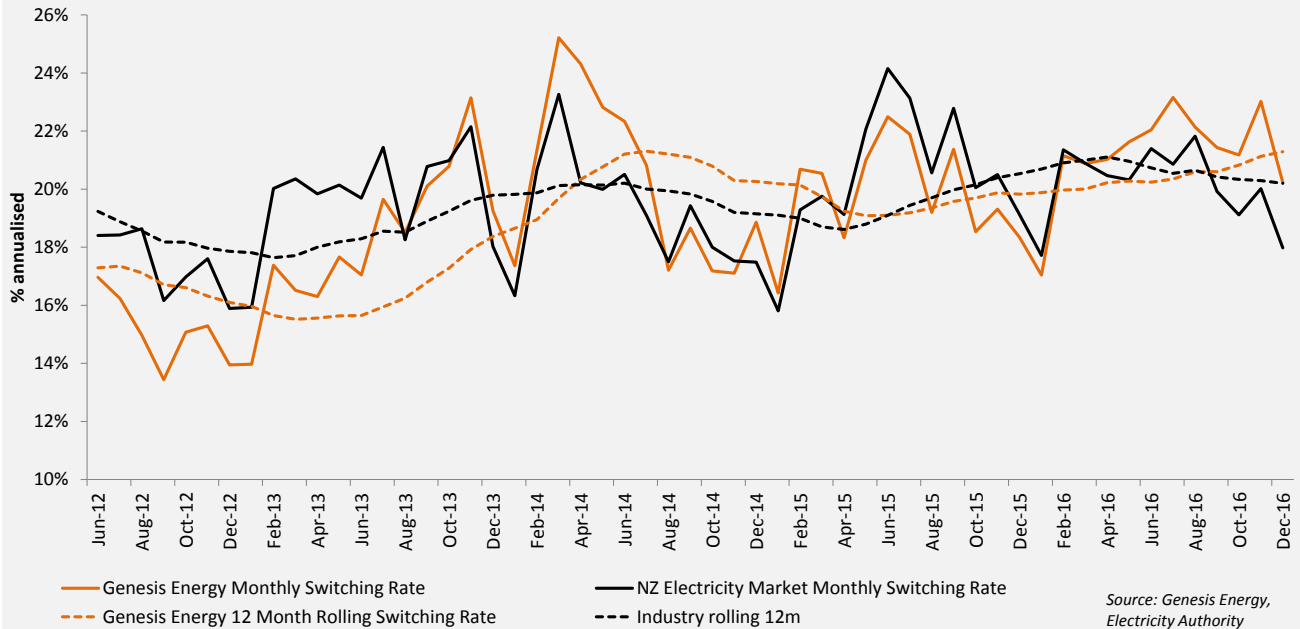
### Kupe Oil Production Volumes (kbbbl)



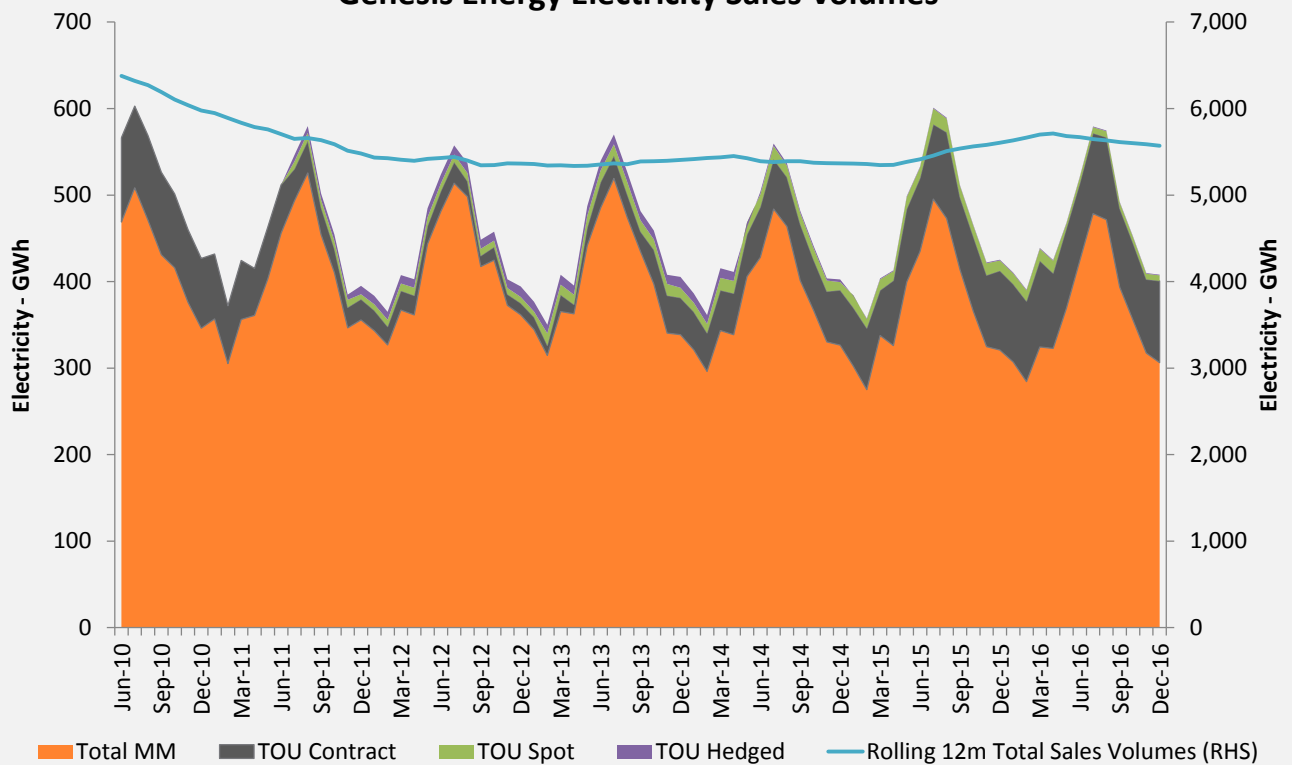
### Kupe Gas Sales Volumes (PJ)



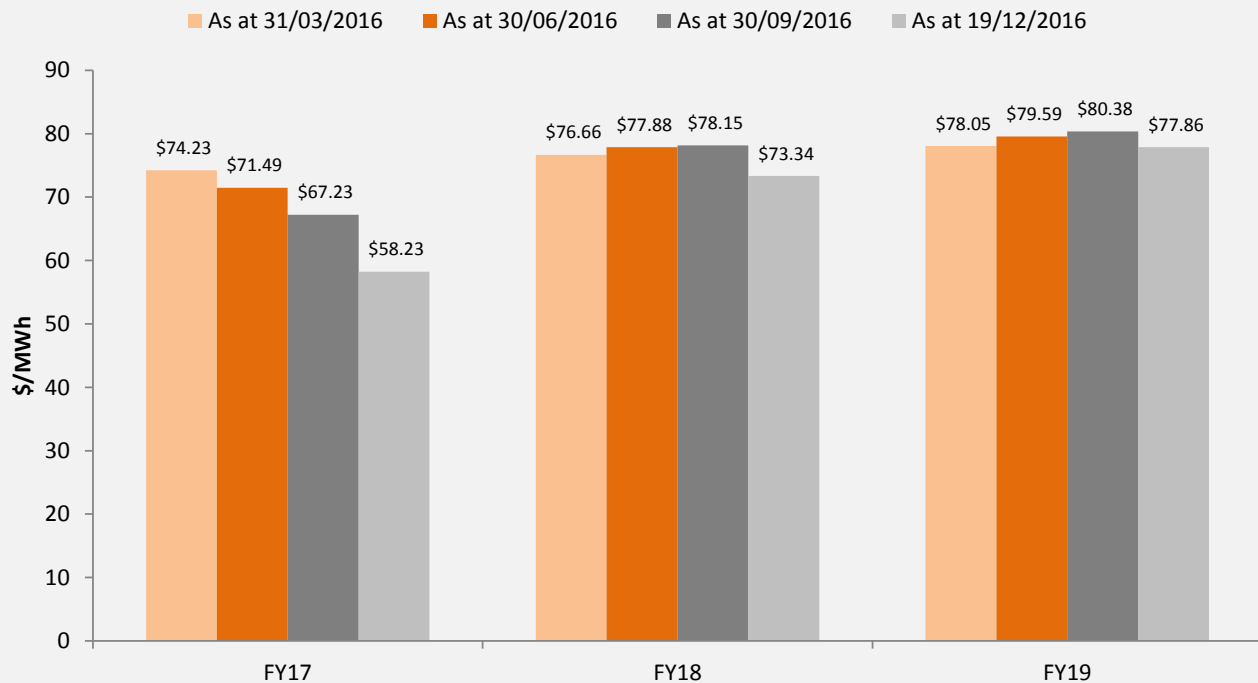
### Genesis Energy vs. Industry Electricity Customer Connection Switching



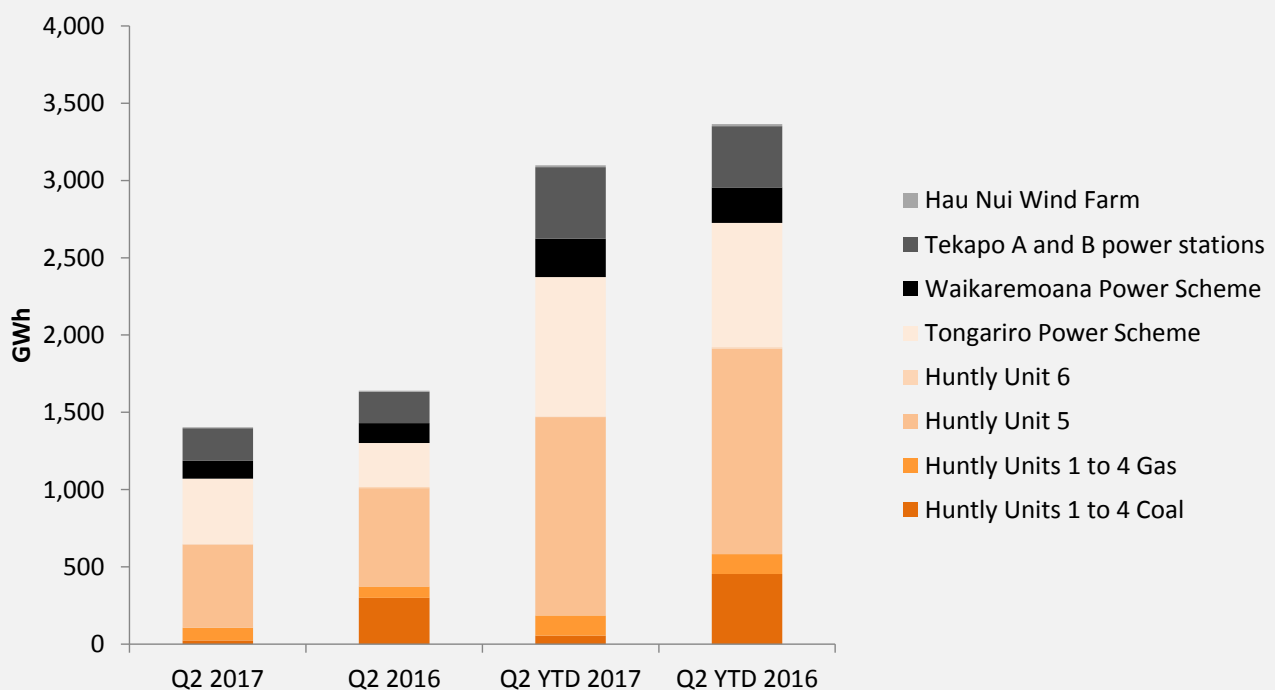
### Genesis Energy Electricity Sales Volumes



### Otahuhu ASX Futures Settlement Price

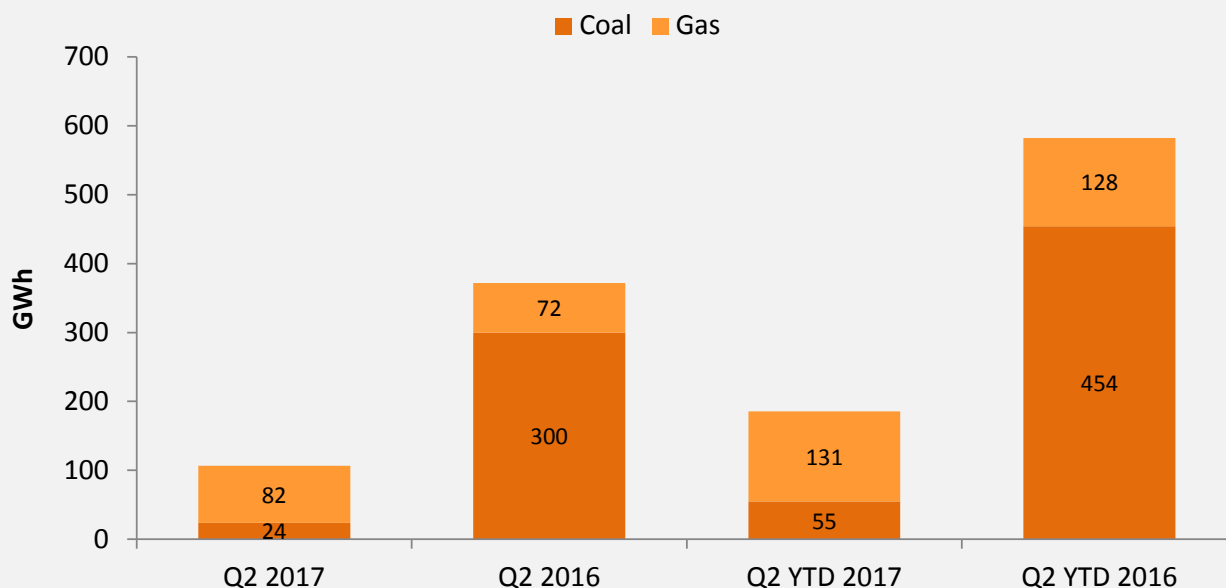


### Genesis Energy Generation Volumes Q2 2017



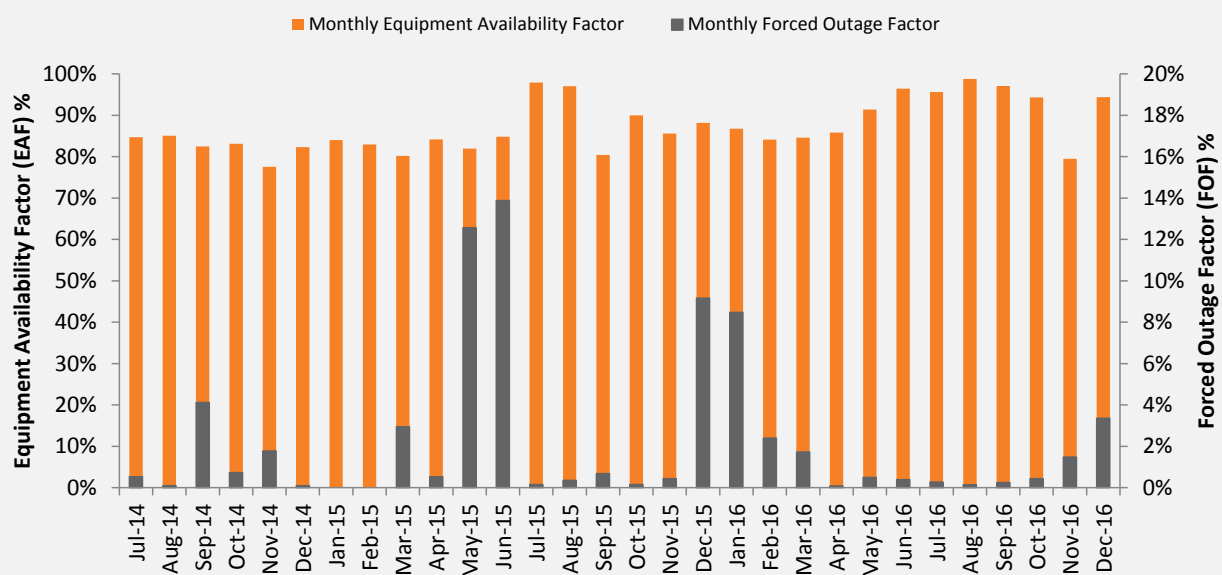
## NEW DISCLOSURE

## Rankine Unit Generation Output



## NEW DISCLOSURE

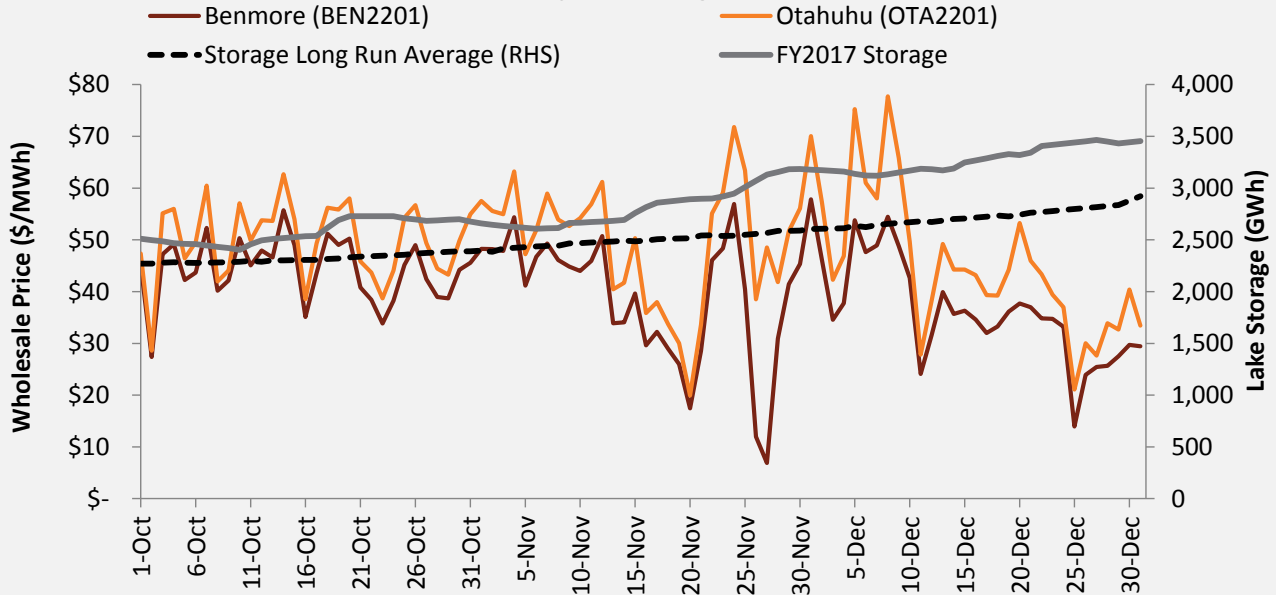
## Plant Performance



Equipment Availability Factor (EAF) - the percentage of time a power station is available to generate electricity.

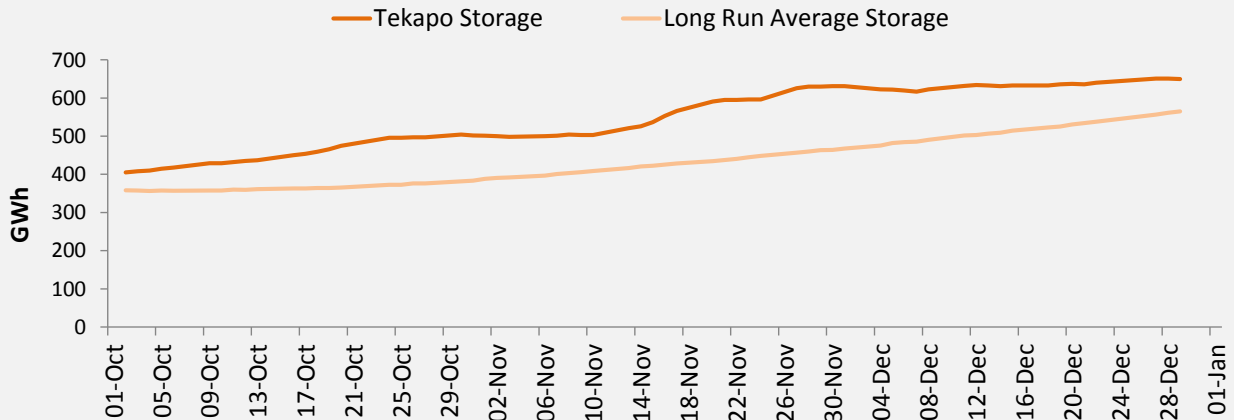
Forced Outage Factor (FOF) - the percentage of time a power station is unavailable to generate electricity due to unplanned failure or defect.

### Daily Average Wholesale Reference Point Prices and National Hydro Storage - Q2 FY2017



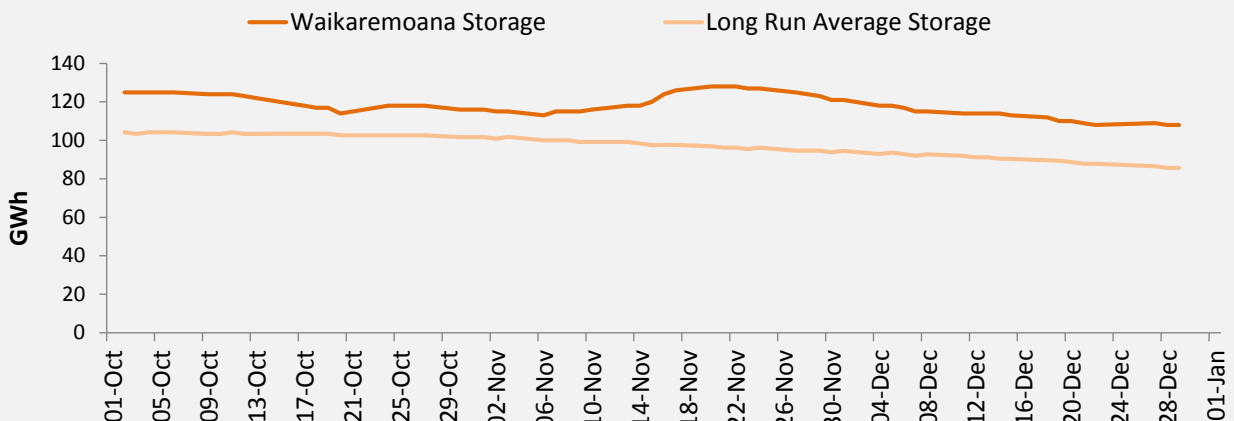
Source: COMIT/Genesis Energy

### Tekapo Storage vs Long Run Average Q2 FY2017



Source: COMIT

### Waikaremoana Storage vs Long Run Average Q2 FY2017



Source: COMIT

## APPENDIX

### OPERATIONAL INFORMATION

Operational Information*	Second Quarter (October to December)				Year to Date			
	FY2017	FY2016	% Change	Change	FY2017	FY2016	% Change	Change
<b>Market Information</b>								
<b>Customer-focus</b>								
Electricity Market Share (%) <sup>1</sup>	25.1%	25.8%	-2.8%	-0.7%				
Gas Market Share (%) <sup>1</sup>	38.7%	39.8%	-2.9%	-1.2%				
<b>Customer Experience</b>								
<b>Customer-focus</b>								
Customer Satisfaction (%) <sup>2</sup>	96%	95%	1.1%	1%				
Total Advanced Meters Installed To Date (#)	393,857	368,500	6.9%	25,357				
<b>Customer Numbers</b>								
Total Customer Connections (#) <sup>3</sup>	645,365	654,334	-1.4%	-8,969				
<i>Total Customers by Product:</i>								
Electricity Customer Connections (#) <sup>4</sup>	535,438	543,997	-1.6%	-8,559				
Electricity Customer Connections Excluding Vacants (#) <sup>4</sup>	514,155	522,586	-1.6%	-8,431				
Gas Customer Connections (#) <sup>4</sup>	109,927	110,337	-0.4%	-410				
Gas Customer Connections Excluding Vacants (#) <sup>4</sup>	106,388	106,809	-0.4%	-421				
LPG Customer Connections (#) <sup>5</sup>	17,513	14,326	22.2%	3,187				
<i>Total Electricity Customers by Location:</i>								
North Island Electricity Customer Connections (#) <sup>4</sup>	428,010	434,485	-1.5%	-6,475				
South Island Electricity Customer Connections (#) <sup>4</sup>	86,145	88,101	-2.2%	-1,956				
<b>Customer Volumes and Price</b>								
Volume Weighted Average Electricity Selling Price Mass Market (\$/MWh)	\$243.66	\$239.44	1.8%	\$4.22	\$239.13	\$234.95	1.8%	\$4.18
Volume Weighted Average Electricity Selling Price TOU (\$/MWh) <sup>7</sup>	\$104.67	\$99.86	4.8%	\$4.81	\$117.12	\$111.38	5.1%	\$5.73
Mass Market Electricity Sales (GWh)	979	1,011	-3.2%	-32	2,323	2,394	-3.0%	-71
TOU Electricity Sales (GWh)	291	302	-3.6%	-11	593	621	-4.5%	-28
Total Electricity Sales - Retail (GWh)	1,270	1,313	-3.3%	-43	2,916	3,015	-3.3%	-99
Electricity Sales - Wholesale (GWh)	400	395	1.3%	5	958	857	11.8%	101
Volume Weighted Average Gas Selling Price (\$/GJ) <sup>6</sup>	\$29.54	\$28.85	2.4%	\$0.69	\$25.43	\$24.94	2.0%	\$0.50
Mass Market Gas Sales (PJ)	0.9	0.9	6.2%	0.1	2.5	2.6	-1.3%	0
TOU Gas Sales (PJ)	0.8	0.8	-5.7%	0.0	1.8	1.7	4.3%	0
Total Retail Gas Sales (PJ)	1.7	1.7	0.4%	0.0	4.3	4.2	0.9%	0.0
Retail LPG Sales (tonnes)	1,101	883	24.6%	218	2,570	2,202	16.7%	368
Electricity Purchases - Retail (GWh)	1,301	1,408	-7.6%	-107	3,064	3,186	-3.8%	-122
Electricity Purchases - Wholesale (GWh)	297	250	19.1%	48	732	618	18.5%	114
Retail Gas Purchases (PJ)	1.7	1.7	0.5%	0.0	4.4	4.3	1.5%	0.1
Average Retail Electricity Purchase Price - LWAP (\$/MWh) <sup>8</sup>	\$47.01	\$66.72	-29.5%	(\$19.72)	\$53.43	\$61.90	-13.7%	(\$8.47)
LWAP/GWAP Ratio (%)	100%	98%	2.3%	2.3%	100%	100%	-0.1%	-0.1%
<b>Energy Management</b>								
<b>Generation</b>								
Gas (GWh)	627	724	-13.4%	-97	1,432	1,476	-3.0%	-44
Coal (GWh) <sup>9</sup>	23	301	-92.4%	-278	53	458	-88.4%	-404
Total Thermal (GWh)	650	1,025	-36.6%	-375	1,485	1,933	-23.2%	-448
Hydro (GWh)	749	615	21.7%	134	1,613	1,431	12.8%	182
Wind (GWh)	7	7	-2.8%	-0.2	12	13	-12.4%	-1.6
Total Renewable (GWh)	756	622	21.4%	133	1,625	1,444	12.5%	181
Total Generation (GWh)	1,406	1,648	-14.7%	-241.9	3,110	3,377	-7.9%	-267.3
Average Price Received for Generation - GWAP (\$/MWh) <sup>8</sup>	\$47.07	\$68.35	-31.1%	(\$21.28)	\$53.36	\$61.78	-13.6%	(\$8.41)
Generation Emissions (ktCO <sub>2</sub> )	291	602	-51.8%	-311.8	660	1,071	-38.3%	-410.3
Generation Carbon Intensity (tCO <sub>2</sub> /GWh)	207	366	-43.5%	-158.9	212	317	-33.0%	-104.7
Total Recordable Injury Frequency Rate <sub>11</sub>	0.26	0.88	-70.5%	-0.6				
<b>Fuel</b>								
Gas Purchases (PJ)	10.5	10.5	-0.3%	0.0	23.5	24.3	-3.3%	-0.8
Coal Purchases (PJ)	0.0	0.7	-100.0%	-0.7	-0.4	3.0	-112.0%	-3.3
Wholesale Gas Sales (PJ)	3.8	3.2	17.7%	0.6	8.0	8.7	-8.6%	-0.7
Wholesale Coal Sales (PJ)	0.2	0.2	-22.5%	-0.1	0.4	0.5	-25.9%	-0.1
Gas Used In Internal Generation (PJ)	5.0	5.6	-10.9%	-0.61	11.2	11.3	-1.2%	-0.1
Coal Used In Internal Generation (PJ) <sup>10</sup>	0.3	3.3	-91.2%	-3.0	0.7	5.1	-85.6%	-4.4
Weighted Average Fuel Cost (\$/MWh) <sup>12</sup>	\$29.36	\$37.22	-21.1%	(\$7.86)	\$30.04	\$34.40	-12.7%	(\$4.36)
Coal Stockpile - closing balance (kilotonnes)	360.6	600.4	-39.9%	-240				
<b>Kupe Oil and Gas</b>								
<b>Genesis Energy Share</b>								
Gas Sales (PJ)	1.7	1.3	26.4%	0.4	3.8	3.4	10.8%	0.4
Oil Production (kbbl)	88.7	80.9	9.7%	7.8	195.8	207.3	-5.6%	-12
Oil Sales (kbbl)	72.4	56.6	27.8%	15.7	146.8	158.6	-7.4%	-12
Average Brent Crude Oil (USD/bbl)	49.5	43.7	13.2%	5.8	47.7	47.0	1.4%	0.7
LPG Sales (kilotonnes)	5.9	5.7	4.3%	0.2	11.5	14.1	-18.0%	-2.5

#### Notes:

<sup>1</sup> December 2015 and 2016 market shares based on published customer records from the Electricity Authority and Gas Industry Company

<sup>2</sup> Based on the survey question: "Overall, how satisfied are you with the customer service you have received from Genesis Energy where 1 is very dissatisfied and 10 is very satisfied?". Survey started in October 2013

<sup>3</sup> Based on Genesis Energy customer records. Includes vacant accounts. Excludes LPG customers. Electricity and gas customers are defined by number of connections.

<sup>4</sup> Electricity and gas customers are defined by number of connections (ICP).

<sup>5</sup> LPG connections are defined by number of customers

<sup>6</sup> Average selling price for mass market customers including lines/transmission and distribution and after prompt payment discount

<sup>7</sup> Average selling price for TOU customers including lines/transmission and distribution

<sup>8</sup> Excludes settlements from electricity derivatives.

<sup>9</sup> Coal generation is calculated by applying coal burn to monthly average heat rates

<sup>10</sup> Results have been revised to reflect changes in coal kilotonnes to PJ conversion rate and volume methodology

<sup>11</sup> Rolling 12 month TRIFR per 200,000 hours worked

<sup>12</sup> **NEW DISCLOSURE** - Total fuel burnt divided by total generation