

# **OUARTERLY OPERATIONAL UPDATE**

Three months ended 31 December 2018

### >> QUARTERLY HIGHLIGHTS



RECORD QUARTERLY AVERAGE SPOT PRICE DUE TO HYDROLOGICAL CONDITIONS AND THERMAL FUEL CONSTRAINTS



LOWER SALES VOLUMES; COMMERCIAL DISCIPLINE LIFTS YIELD



FY2019 HYDRO GENERATION FORECAST DOWN 50GWh

### >> COMMENTARY

#### SPOT PRICES RISE DUE TO NATIONAL HYDRO CONDITIONS AND THERMAL FUEL CONSTRAINTS

Dry conditions, with national hydro inflows at 86% of average<sup>1</sup>, combined with limited thermal fuel availability resulted in record spot prices for the quarter. Average spot prices reached \$206/MWh at Otahuhu and \$175/MWh at Benmore; an increase of \$113/MWh and \$85/MWh respectively from Q2-FY2018.

#### GENERATION DOWN FROM RECORD LEVELS: GWAP LIFT

Mercury's hydro generation during the quarter was 1,002GWh, a 170GWh decrease from record levels in the prior comparable period, with Waikato catchment inflows at 84% of average<sup>1</sup>. Mercury's full year hydro generation forecast has been reduced by 50GWh to 4,150GWh.

The value of Mercury's generation improved as the LWAP/GWAP ratio moved favourably from 1.06 in Q2-FY2018 to 1.04 in this quarter due to the timely dispatch of available generation. This was largely driven by higher hydro generation in October, the highest-priced month in the quarter, and illustrated through the positive movement in the hydro GWAP/TWAP ratio from 1.04 in the same quarter last year to 1.11. Geothermal generation increased year-on-year as output in the previous year was reduced by two-yearly maintenance outages.

### WHOLESALE MARKET CONDITIONS LEAD FUTURES HIGHER; LONG-TERM PRICE EXPECTATIONS LIFTED

The elevated spot price environment led to a significant increase in short-term futures prices with the FY2019 Otahuhu futures price increasing from \$88/MWh to \$135/MWh. Longer-term futures prices also lifted with the Otahuhu FY2020 and FY2021 prices increasing to \$95/MWh and \$84/MWh respectively as market perspectives of the supply/demand balance were adjusted.

#### MERCURY MAINTAINS COMMERCIAL DISCIPLINE IN COMPETITIVE RETAIL MARKET

Despite high levels of retail market activity, Mercury has maintained a disciplined approach in pursuing value over volume. Mercury's focus on the customer rather than simply customer numbers contributed to the volume-weighted average price received for Mass Market sales increasing from \$120/MWh in the same period last year to \$127/MWh. During the quarter higher levels of Commercial & Industrial sales activity occurred on elevated futures prices, however any increase in volumes will be reflected only in future quarters.

Market churn remains high, rising from 21.1%<sup>2</sup> at the end of Q1-FY2019 to 21.3%<sup>2</sup> as at 31 December 2018. Mercury group churn increased to 20.4%<sup>2</sup> at the end of the quarter with churn for the Mercury brand also increasing to 17.6%<sup>2</sup> (from 16.8%<sup>2</sup> as at 30 September 2018). Group churn was impacted by the transfer of Tiny Mighty Power customers to the main Mercury brand which was completed during the quarter.

### IRRIGATION DEMAND DOWN; INDUSTRIAL DEMAND RISES ON TIWAI POTLINE STARTUP

National demand decreased by 2.9% on a temperature-adjusted basis versus the prior comparable period, primarily due to a significant decrease in irrigation load (-1.6%) as high precipitation in irrigation areas increased soil moisture levels. Industrial demand made a positive contribution (+0.4%) due to NZAS 4<sup>th</sup> potline being brought online, increasing average Tiwai load from 581MW in October to 611MW in December. Excluding Tiwai, industrial sector demand decreased by 1.6% partly in response to high wholesale prices, and decreases were also seen across the urban (-0.5%), rural (-0.3%) and dairy (-0.6%) sectors.

<sup>&</sup>lt;sup>1</sup> For quarters ended 31 December since 1927

<sup>&</sup>lt;sup>2</sup> 12-monthly rolling average



## >> OPERATING STATISTICS

OPERATING INFORMATION		Three months ended 31 December 2018		Three months ended 31 December 2017		Six months ended 31 December 2018		Six months ended 31 December 2017	
ELECTRICITY SALES		VWAP <sup>1</sup> (\$/MWh)	Volume (GWh)	VWAP <sup>1</sup> (\$/MWh)	Volume (GWh)	VWAP <sup>1</sup> (\$/MWh)	Volume (GWh)	VWAP 1 (\$/MWh)	Volume (GWh)
Mass Market	2	126.54	748	120.35	759	126.82	1,703	122.14	1,734
Commercial & Industrial		74.25		72.79		78.41		78.43	
FPVV	3		319		299		616		601
End User CfD			295		325		586		642
FPVV purchases from market			1,122		1,118		2,438		2,468
Spot customer purchases			187		227		412		471
Total NZEM Purchases		211.49	1,309	94.93	1,345	146.65	2,850	97.14	2,939
ELECTRICITY CUSTOMERS ('000)			381		393				
North Island Customers			338		350				
South Island Customers			43		43				
Dual Fuel Customers			43		43 47				
			Volume		Volume		Volume		Volume
CONTRACTS FOR DIFFERENCE			(GWh)		(GWh)		(GWh)		(GWh)
Net Sell CfD	4		433		496		1,097		1,193
ELECTRICITY GENERATION		VWAP (\$/MWh)	Volume (GWh)	VWAP (\$/MWh)	Volume (GWh)	VWAP (\$/MWh)	Volume (GWh)	VWAP (\$/MWh)	Volume (GWh)
Hydro		215.27	1,002	91.34	1,172	140.73	2,448	92.50	2,694
Geothermal (consolidated)	5	190.67	680	87.09	627	135.20	1,357	86.43	1,317
Geothermal (equity accounted)	6	157.96	41	89.30	49	114.05	96	90.89	96
Total		204.21	1,723	89.84	1,848	138.15	3,901	90.52	4,107
LWAP/GWAP			1.04		1.06		1.06		1.07
CARBON EMISSIONS ('000 TONNES CO2)	7		84		86		177		188
METRIX AMI METERS ('000)			416		408				

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  VWAP is volume weighted average energy-only price sold to customers after lines, metering and fees

<sup>&</sup>lt;sup>2</sup> Mass market includes residential segments and non time-of-use commercial customers

<sup>&</sup>lt;sup>3</sup> Fixed-price, variable-volume (FPVV) sales to time-of-use commercial customers

<sup>&</sup>lt;sup>4</sup> Includes Virtual Asset Swap volumes of 151 GWh for the 3 months ended 31 December 2018 and 176 GWh for the 3 months ended 31 December 2017 and of 302 GWh for the 6 months ended 31 December 2018 and 352 GWh for the 6 months ended 31 December 2017

<sup>&</sup>lt;sup>5</sup> Includes Mercury's 65% share of Nga Awa Purua generation

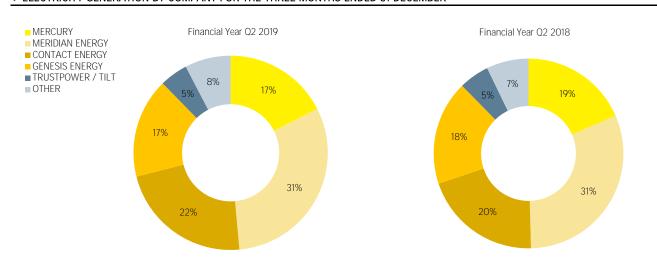
<sup>&</sup>lt;sup>6</sup> Tuaropaki Power Company (Mokai) equity share

<sup>&</sup>lt;sup>7</sup> Includes carbon emissions from Mercury gas sales, wholly owned geothermals and proportionate emissions from the Mokai and Nga Awa Purua stations



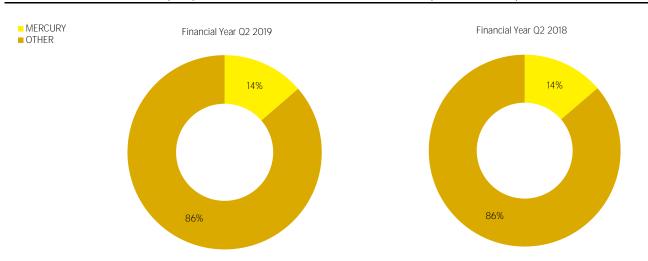
# >> MARKET DATA

## > ELECTRICITY GENERATION BY COMPANY FOR THE THREE MONTHS ENDED 31 DECEMBER



Source: Electricity Authority

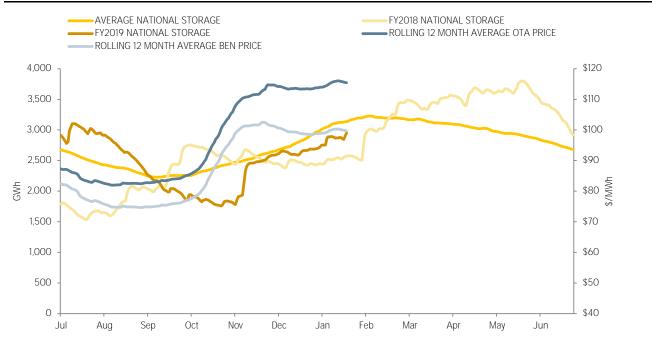
#### > SHARE OF ELECTRICITY SALES (GWh) FOR THE THREE MONTHS ENDED 31 DECEMBER (EXCLUDING CFDs)



Source: Mercury Purchases and Transpower SCADA

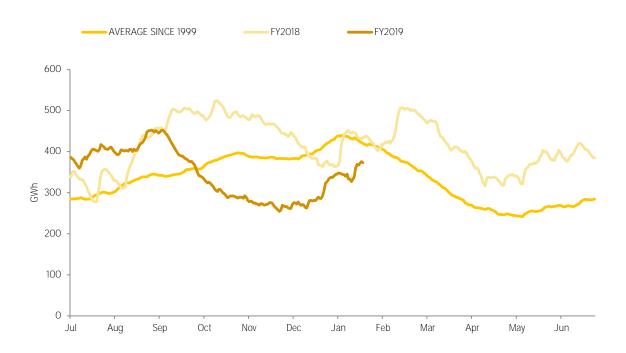


### > OTAHUHU WHOLESALE PRICE AND NATIONAL HYDRO STORAGE LEVELS



Source: NZX Hydro and NZEM Pricing Manager (NZX)

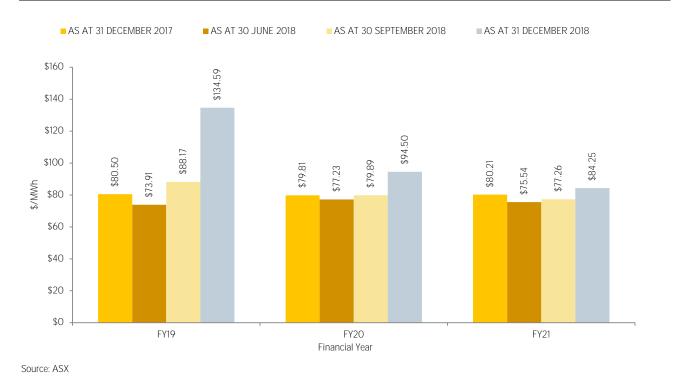
#### > TAUPO STORAGE



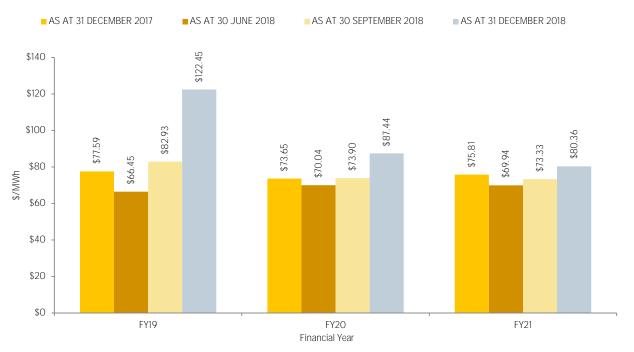
Source: NZX Hydro



## > OTAHUHU ASX FUTURES SETTLEMENT PRICE



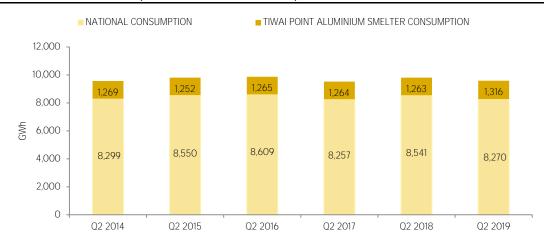
# > BENMORE ASX FUTURES SETTLEMENT PRICE



Source: ASX



## > NATIONAL CONSUMPTION (NON-TEMPERATURE ADJUSTED)



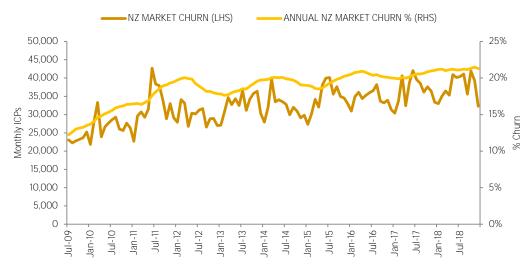
Source: Transpower Information Exchange

#### > AUCKLAND CLIMATE SUMMARY ( °C)

FINANCIAL YEAR	Q1	Q2	Q3	Q4
2019	12.1	16.3	-	-
2018	12.3	17.2	20.7	14.3
2017	12.1	16.1	19.3	14.3
2016	11.4	16.0	20.6	15.3
2015	11.9	15.9	19.9	14.3
Historical Average (since 1999)	11.9	16.2	19.3	14.2

Source: Met Service

### > MONTHLY TOTAL CONSUMER RETAIL SWITCHING (ICPs)



Source: Electricity Authority