

# **Monthly Operational Data**

For the month ended 30 April 2016

# **Highlights for April 2016**



- Average Otahuhu wholesale price for April 2016: \$72/MWh (p3)
- Hydro storage as at 30 April: South Island 96% of mean, North Island 75% of mean (p4)
- Otahuhu futures settlement wholesale price for 2<sup>nd</sup> quarter 2016 (ASX) (p4):

As at 11 May: \$70/MWh

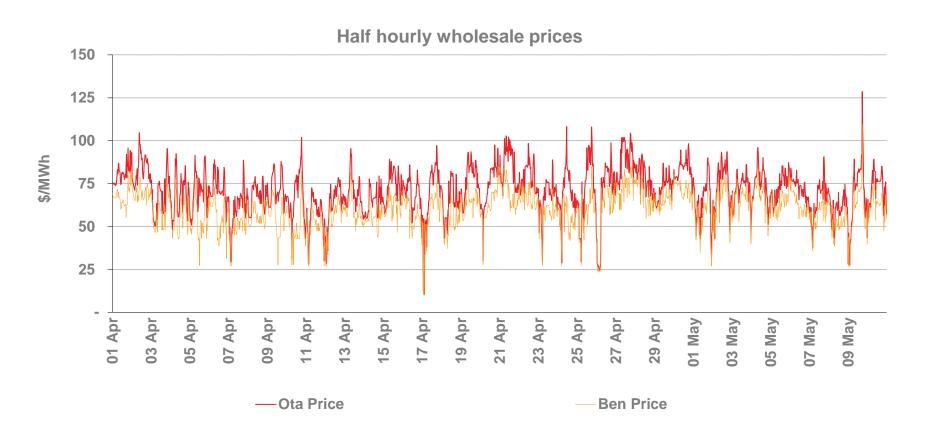
As at 30 April: \$72/MWh

- As at 31 March: \$66/MWh

# Wholesale electricity prices



 The average price at Otahuhu (North Island) for April 2016 was \$72/MWh while the average price at Benmore (South Island) was \$60/MWh.



# Storage levels and wholesale electricity prices



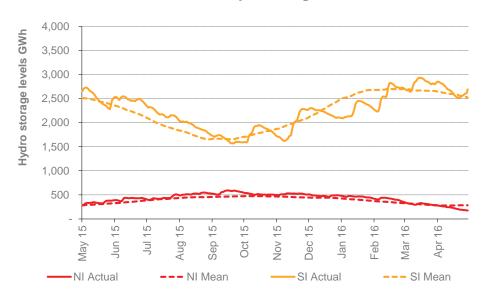
 At 30 April, South Island storage was 96% of mean (31 March: 108%) and North Island storage was 75% of mean (31 March: 99%)

### As at 12 May 2016, storage was:

South Island: 107% of mean

North Island: 61% of mean







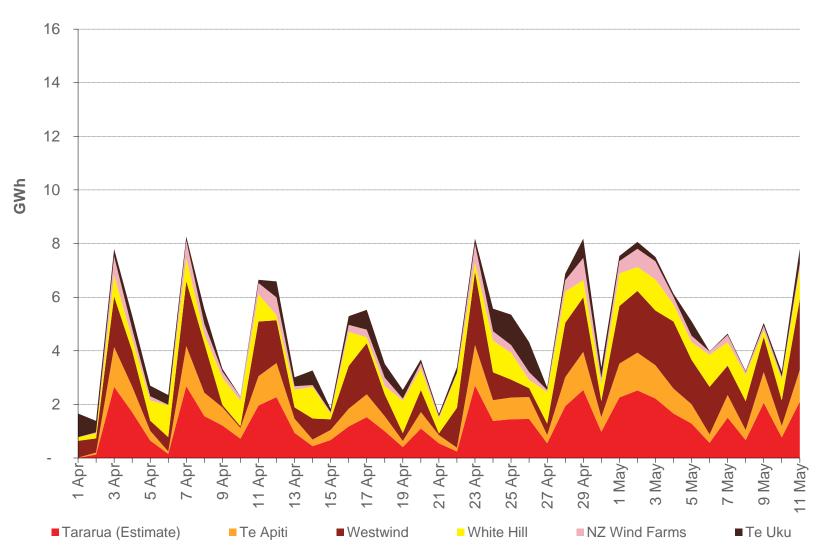




# Wind generation



### Daily wind generation (SCADA)



# Monthly demand comparison

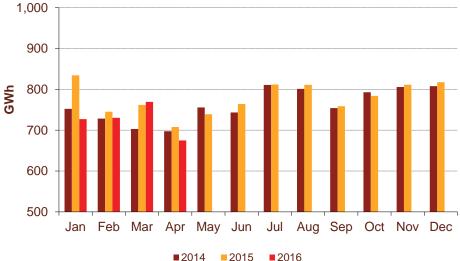


- NIWA's national climate summary for April 2016 reports:
  - The New Zealand national average temperature in April was 14.1°C (0.9°C above the 1981-2010 average)

Demand	April demand GWh			Growth rate % p.a.		12 months to date GWh			Growth rate % p.a.	
	2016	2015	2014	1 year	2 year	2016	2015	2014	1 year	2 year
North Island	1,838	1,849	1,821	(0.6%)	0.5%	23,696	23,466	23,152	1.0%	1.2%
South Island excluding Tiwai	675	708	697	(4.7%)	(1.6%)	9,199	9,321	8,921	(1.3%)	1.5%
Total	2,513	2,556	2,519	(1.7%)	(0.1%)	32,895	32,787	32,073	0.3%	1.3%

# 2,500 2,300 1,900 1,700 1,500 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

### South Island excluding Tiwai



# Contact Netback, Cost of Energy and LPG Data



Data		Measure	The month ended April 2016	The month ended April 2015	The month ended March 2016	•	Ten months ended April 2015
Netback	Mass market electricity sales	GWh	284	296	279	3,111	3,161
. 10124011	Commercial & industrial electricity sales	GWh	361	370	364	3,384	3,792
	Retail gas sales	GWh	40	40	32	500	493
	Steam sales	GWh	46	59	44	576	611
	Total retail sales	GWh	731	765	718	7,570	8,056
	Average electricity sales price	\$/MWh	177.27	182.75	174.74	178.30	177.44
	Electricity direct pass through costs	\$/MWh	(71.23)	(74.34)	(72.84)	(75.38)	(73.68)
	Electricity and gas cost to serve	\$/MWh	(13.15)	(14.84)	(14.44)	(13.78)	(13.18)
	Netback	\$/MWh	86.22	85.97	82.69	81.80	82.74
	Electricity line losses	%	3%	11%	3%	5%	6%
	Retail gas sales	PJ	0.1	0.1	0.1	1.7	1.7
	Electricity customer numbers <sup>1</sup>	#	423,500	433,000	422,000		
	Gas customer numbers <sup>1</sup>	#	61,500	61,500	61,000		
Cost of energy	Thermal generation	GWh	65	321	137	1,402	1,997
	Geothermal generation	GWh	274	273	269	2,729	2,529
	Hydro generation	GWh	351	235	358	3,269	3,291
	Spot market generation	GWh	691	829	764	7,400	7,817
	Spot electricity purchases	GWh	657	738	656	6,736	7,317
	CfD sales	GWh	(11)	82	52	86	110
	GWAP	\$/MWh	62.40	81.18	56.52	59.50	74.21
	LWAP	\$/MWh	(68.85)	(87.67)	(62.73)	(64.74)	(79.99)
	LWAP/GWAP	%	110%	108%	111%	109%	
	Gas used in internal generation	PJ	0.8	2.7	1.3	13.9	18.7
	Wholesale gas sales	PJ	-	0.1	-	0.1	1.9
	Gas storage net movement	PJ	0.6	(0.1)	0.2	(1.1)	(0.6)
	Unit generation cost	\$/MWh	(26.26)	(40.71)	(30.81)	(32.96)	(38.51)
	Cost of energy	\$/MWh	(27.90)	(43.26)	(28.21)	(32.10)	(36.69)
LPG	LPG sales	tonnes	5,472	5,251	4,984	56,636	60,096
	LPG customer numbers (includes franchises)	#	74,000	69,500	73,500		

<sup>&</sup>lt;sup>1</sup> Data has been rounded to the nearest 500 and reflects numbers as at month end.