



MEMO

To:	Gippsland Water	Attn:	Lynley Keene
CC:		Attn:	
From:	Mark Searle	Date:	7 May 2018

RE: Electricity Price Projections.

Dear Lynley

This memo aims to provide some additional detail on electricity price projections out to the end of the Regulatory Period 4 (RP4) and contrasts our projections with projections provided by Deloitte to the ESC.

It should be noted that the Australian Electricity market is widely recognised to be one of the most volatile commodity markets in the world. Over the past ten years there has been a four-fold increase in black electricity prices, driven almost entirely by a change in the supply/demand balance, notably the sudden closure of Hazelwood Power Station. There is very little liquidity in the ASX futures market for electricity beyond 2021 (i.e. very few trades) and the effect of the proposed closure of AGL's Liddell Power station is still unclear.

These problems are compounded by considerable uncertainty with the proposed design of the NEG. Thus, it is impossible to provide a robust medium-term forecast of electricity prices that can be presented with a strong degree of confidence.

Against this background we provided Gippsland Water with our estimate of future price movements in delivered year-on-year electricity cost¹ out from 18/19 to 22/23. We are of the opinion that these forecasts, which we understand have been included in the Corporation's response to the ESC Draft Decision reflect the best information we have to hand and represent a prudent and efficient electricity price forecast. Moreover, out until 30 June 2021 the forecasts are based on firm retail rates and environmental certificate rates that are contained in the newly negotiated retail electricity contract.

¹ These projections made no allowance for possible uptake of PV or changes in energy use pattern.

Delivered Electricity Cost Projections
Year-on-year

% Change	18/19	19/20	20/21	21/22	22/23
ESC	0%	0%	-0.9%	-0.9%	1.0%
Deloitte			-0.94%	-0.94%	-3.05%
KE&R	40.7%	-5.4%	-0.8%	0.6%	0.6%

A building block approach was used to provide a forward model of electricity prices for your Large Market sites. This represents 85% of your electricity costs and it can be expected that any price increase/decrease for this cohort will apply equally to the Small Market sites.

The cost of electricity for your Large Market sites is loosely broken down into

- Black / retail energy cost of \$2.2M or 52%;
- Network Use of System (NUoS) fees at \$1.4M or 33%;
- Environment Levies at \$530K or 13%; and
- Market and Metering Fees at \$85K or 2%

NUoS Fees: These are heavily regulated and in real terms we do not expect any increase.

Environmental Levies. Electricity costs include three environmental levies, the VEET (Victorian Energy Efficiency Target), SRET (Small Scale Renewable Energy Target) and LRET (Large Scale Renewable Energy Target). Levies are calculated by multiplying the cost of a compliance certificate by the Retail Power percentage (RPP). Current cost and proposed costs are shown below. These assumptions make no allowance for the possible loss of additionality as proposed by the NEG and other, as yet, unclear proposals to change the MRET.

FY 18/19	Cert.	VEET	LREC	SREC	Tot
	RPP	15.52%	16.79%	14.61%	
	\$	26.80	83.98	39.95	\$24.09
FY 19/20	Cert.	VEET	LREC	SREC	Tot
	RPP	16.17%	19.70%	11.84%	
	\$	27.46	62.09	39.95	\$21.40
FY 20/21	Cert.	VEET	LREC	SREC	Tot
	RPP	16.42%	22.38%	11.55%	
	\$	28.15	44.90	39.95	\$19.28
FY 21/22	Cert.	VEET	LREC	SREC	Tot
	RPP	16.42%	22.88%	11.55%	
	\$	28.15	44.90	39.95	\$19.28

Black Energy Prices: This is by far the hardest input variable to predict; there are virtually no ASX trades past Q2, 2020. Fortunately, the current contract extends to 30 June 2021, beyond this we have assumed no price change.

Market and Metering Fees: These represent a very small proportion of total cost and we are not expecting any meaningful changes.

We emphasise that Gippsland Water has a firm price retail contract out until 30 June 2021. Thus, notwithstanding a change-in law event, possibly initiated by the NEG, the major weakness of the cost projections out to that date are changes in the cost of environmental levies. Beyond this date the budget is subject to market changes in the cost of black energy prices.

I trust this addresses your concern and invite you to contact me if you would like any further information.

Kind regards



Mark Searle
Principle Consultant