

2A Monomeeth Dr Mitcham, VIC, 3132 23/1/18

Ms. Sarah McDowall Essential Services Commission Level 37 2 Lonsdale St, Melbourne, VIC, 3000

Re: GloBird's response to ESC's draft decision for varying Feed in Tariffs

Dear Ms. McDowall and ESC Energy staff,

I write on behalf of GloBird Energy to respond to the ESC's draft decision on Feed in Tariffs (FiT) for 2018-19.

It's important to note that GloBird loves solar power. GloBird offers Victoria's highest feed-in tariff. Where other retailers are required to pay 11.3c/kWh now, GloBird gives 17c/kWh.

GloBird is also selling power PPAs for a 500MW solar farm, building a 30MW solar and 10MW battery farm in northern Victoria, and rolling out solar Power Purchase Agreements to our big customers. And we've done it with the lowest profit margin of all of Victoria's energy retailers.

We support the ESC's move on the flat tariff, and the lower rate. We expect to continue to pay above it anyway.

However, we're surprised with the ESC's report on varying tariffs. The modelling, costing and application of it have significant issues.

If the Minister does what the ESC proposes with varying tariffs, retailer's costs will rise, and these will be passed onto customers who can't afford solar. It's a case of the poor subsidizing the rich.

Let me explain why.

1) The model's results are off, because the premise is off

ACIL Allen's model predictions can now be checked against actual performance.

ACIL Allen predicted a time weighted average spot price of \$40.14 in 2016¹. In 2016 AEMO reported a weighted average spot price of \$66.58. That's **66% off target.** We also note ACIL Allen's admission that for PowerMark's stochastic analysis of peak demands, 'we lack the necessary data points' (p. 5).

PowerMark's underlying assumption appears to be that the price of energy is set by the generators facing outages. The fundamental assumption is that the market is supply-constrained.

While this does happen for a few peak use days when total use approaches total available generation, it doesn't hold on average days. AER reports that the NEM's total generation capacity is 44,097MW, and peak demand is 32,469MW². The NEM has an **over-supply** of approximately 11,600

¹ ACIL Allen, Wholesale electricity spot price report 2017-18, p.13, available at https://www.esc.vic.gov.au/document/energy/52973-wholesale-electricity-spot-price-2017-18-projections-acil-allen-consulting/

² Australian Energy Regulator, Generation capacity and peak demand, available at https://www.aer.gov.au/wholesale-markets/wholesale-statistics/generation-capacity-and-peak-demand



MW. The market has also added another 833MW from returning gas fired generation³, and AEMO's new Reliability and Emergency Reserve Trader (RERT) capacity of 1,150MW⁴.

The price of energy is set by the generators willing to accept the lowest price in an over-supplied market. And it's the average days that make up the bulk of an average spot price.

Setting the price based on unusual circumstances like outages is a way to find the maximum price, not the average. ACIL Allen's model doesn't work, as its assumed supply constraints are not valid.

2) A peak of 29c/kWh means the poor will subsidize the rich

The 29c/kWh peak price suggested by ACIL Allen's modelling is very high. It's over 2.5 times what's available to retailers in the market. AEMO data shows that the Victorian peak pool price since Hazelwood closed in March 2017 is 11.9c/kWh.

I can understand paying around 29c during the few peak price days per year. But not every day. If GloBird pays 29c/kWh for peak power, it has already lost 17c/kWh.

If the Government forces retailers to pay the suggested 29c/kWh for peak power every day, retailers will have to pass the cost on to other consumers. The wealthy who can afford solar and batteries will be rewarded by those who cannot.

3) The estimate of solar in Victoria is low

ACIL Allen has noted approximately 190MW of solar projects in Victoria, including Gannawarra (50MW), Numurkah (38MW) and Bannerton (100MW).

This list is inadequate. While Numurkah has a contract with Yarra Trams for 38MW, it was approved for 100MW⁵. Globird is also aware of the following additional sites planned for Victoria:

Cocamba (500MW), Glenrowan/Winton (120MW), Yatpool (112MW), Iraak (112MW), Wemen (109MW), Robinvale (100MW), Stanhope (30MW), Wangaratta (20MW), and Swan Hill (19MW).

That's 1,154MW, or over 5 times more solar than ACIL identified. And it doesn't include the 204MW Bulgana wind farm. The Clean Energy Regulator is aware of 1,600MW of solar farms planned for Victoria⁶. That's eight times more than ACIL Allen modelled.

The analysis needs to be repeated with the more accurate figure.

4) The 'social cost of carbon' is over-estimated

Under instructions from the Victorian government, the ESC has factored a 2.5c/kWh 'social cost of carbon' into the state's solar feed in tariffs.

³ Australian Energy Market Operator, Summer readiness report, available at

https://www.aemo.com.au/Media-Centre/AEMO-releases-summer-readiness-report-for-2017-18

⁴ Australian Energy Market Operator, RERT, available at https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Emergency-Management/RERT-panel-expressions-of-interest

⁵ Numurkah Solar Farm go ahead, Shepparton News, available at

https://www.sheppnews.com.au/2017/08/29/107009/numurkah-solar-farm-a-go-ahead

⁶ Cole Latimer, 'Who needs Snowy 2.0? Sydney Morning Herald, 23/1/2018, available at

http://www.smh.com.au/business/the-economy/who-needs-snowy-20-australia-to-hit-ret-early-after-record-investment-20180122-p4yyq8.html



In Appendix C of its report, the ESC claims that a kilowatt-hour of power releases 1.27 kg CO_2 , and CO_2 is worth \$19.63 per tonne. Both these figures are incorrect.

A kilowatt-hour of power in Victoria reportedly releases 1.08 kg CO_2^7 , and CO_2 is worth \$11.82 per tonne⁸. The 'social cost of carbon' using these figures is 1.3c/kWh, or 48% less.

5) The 'social cost of carbon' is fixed. It should float

Since Hazelwood's closure in March 2017, Victoria's indirect emission factors for grid electricity have not been updated. Victoria is over-estimating its grid electricity emissions.

Victoria's indirect (scope 2) emission factors for consumption of purchased electricity or loss of electricity from the grid is currently reported as 1.08 tonnes of CO_2/MWh . It was based on Hazelwood producing 1.58 tonnes of CO_2/MWh and supplying up to 25% of the state's power. Removing Hazelwood and replacing it with renewables gives an emissions factor around 0.93 tonnes of CO_2/MWh , and a 'social cost of carbon' of 1.1c/kWh.

The point is that the 'social cost of carbon' should reduce after Hazelwood's closure, and it hasn't. The cost of carbon should also decrease, especially if international carbon credits are allowed. The Victorian Government's 'order in council' has fixed both figures, when both should float.

Conclusion

Globird loves solar. We pay Victoria's highest feed-in tariff and are rolling out our own solar generation capacity while maintaining Victoria's cheapest domestic power prices. GloBird is already doing what the ESC wants all retailers to do.

We support the ESC's move on the flat tariff. We expect to continue to pay more than the ESC sets.

There are problems with varying tariffs, and ACIL Allen's model. The NEM's available generation, new RERT capacity and new solar and wind capacity are significantly more than was modelled, and the analysis needs to be re-done.

While 29c/kWh may be reasonable for peak demand days, GloBird cannot support it every day. If put in place, GloBird will have to dramatically increase its prices, and poorer households will subsidize the solar and battery investments of the rich.

If called on, we are happy to use our market experience to help the ESC to set fairer rates for all.

Regards

Hal Zo

CEO, GloBird Energy

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⁷ National Greenhouse Gas Accounts, Table 5, p. 20, federal Department of the Environment, available at https://www.environment.gov.au/system/files/resources/5a169bfb-f417-4b00-9b70-6ba328ea8671/files/national-greenhouse-accounts-factors-july-2017.pdf

⁸ Emissions Reduction Fund results, Clean Energy Regulator, available at http://www.cleanenergyregulator.gov.au/ERF/Auctions-results/april-2017

