

4th February 2014

Queensland Competition Authority
GPO Box 2257
Brisbane QLD 4001

Tel (07) 3222 0555
electricity@qca.org.au

Regarding: Draft Determination, Regulated Retail Electricity Prices 2014-15

To Whom It May Concern:

I write in the capacity of director of The Solar Guys. Our company was founded over thirty years ago by my father selling solar hot water systems. These days we offer a range of solar and energy efficiency technologies to residential and commercial customers to help them reduce their energy costs.

Over the past few years we've seen the cost of power rise rapidly in Queensland, which has been a major motivator for people to buy solar power systems. The value of solar power to Queensland residential customers has changed over the last few years from one of selling power under the 44c/kWh feed-in tariff scheme to now one of using as much power generated as possible. This is a more practical and stable situation in the long term and should lead to positive outcomes both for the customer and the electricity network.

Data recently released by AEMO¹ supports the claim that solar power installations across the states of Victoria and South Australia helped to reduce peak demand during recent very high temperatures. This resulted in far lower than expected peak generation costs and a great cost saving to their respective communities.

No doubt solar power systems installed across Queensland have recently had a similar dampening effect on peak demand during hot afternoons even if solar's impact on peak load reduction currently² doesn't extend to the evening.

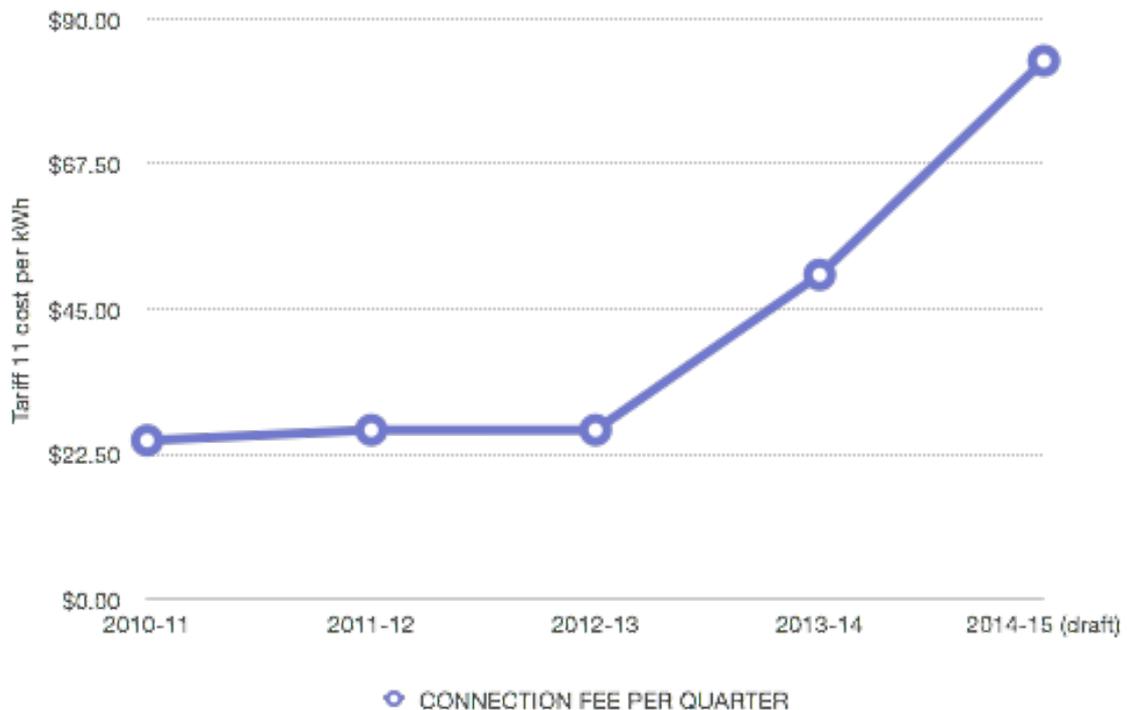
Being a generation technology, solar power produces kilowatt-hours during daylight hours allowing solar owners to reduce their consumption of power from the network.

¹ <http://reneweconomy.com.au/2014/graph-of-the-day-how-aemo-saw-rooftop-solar-in-heatwave-27763>

² The next generation of solar + battery systems will change this.

The value of solar power does not however extend to reducing any form of standing connection charges and with this in mind I'm very concerned by the rising connection charges proposed in Table 1³ of your draft determination.

FINANCIAL YEAR	CONNECTION FEE PER QUARTER	RELATIVE COST
2010-11	\$24.58	100%
2011-12	\$26.20	107%
2012-13	\$26.20	107%
2013-14	\$50.27	204%
2014-15 (draft)	\$83.44	339%



In just two years from FY2012-13 to FY2014-15 (draft) the standing connection charge for Tariff 11 is set to rise 319%. This is a truly extraordinary situation – how

³ As an aside how is Tariff 11 consumption of 11.2kWh per day possibly the median? I'd love to see the data behind this assertion because it looks too low by at least 5kWh per day.

can such price rises possibly be justified? And what a massive impost on smaller power consumers!

I can only guess that the Queensland government is hoping that the media focuses on the kWh price increase once the final determination is brought down and not the connection charge because headlines like, "Price Shock! Electricity connection fees jump 319% in two years!" will be a public relations nightmare.

Comparing power costs and connection fees for a small⁴ (10kWh / day) and large (40kWh / day) residential customer the extent of this connection fee rise and its impact on smaller power costumers becomes clear.

FINANCIAL YEAR	SMALL CONSUMER	LARGE CONSUMER
Power used per day (kWh)	10	40
2012-13 - Energy Costs ⁵	\$ 926.30	\$ 3,705.20
2012-13 - Connection Costs	\$ 104.78	\$ 104.78
2012-13 - Connection / Energy	11.3%	2.8%
2012-13 - Total Costs	\$ 1,031.09	\$ 3,809.99
2014-15 - Energy Costs	\$ 1,125.32	\$ 4,501.30
2014-15 - Connection Costs	\$ 333.75	\$ 333.75
2014-15 - Connection / Energy	29.7%	7.4%
2014-15 - Total Costs	\$ 1,459.07	\$ 4,835.05
Difference - 2012-13 to 2014-15	142%	127%

In just two years the power bills of the small consumer has risen 42% while that of the large consumer has risen *just* 27%. For small consumers the connection cost to energy cost ratio from July this year will be almost 30%!

Having spoken to thousands of residential power costumers over the last seven years I can say with confidence that large consumers own large draw appliances and small consumers own small power draw appliances. In other words there is a clear

⁴ I have only seen a couple of power consumers using less than 10kWh per day in the last seven years.

⁵ All costs include GST, a tax that residential customers clearly cannot avoid.

correlation between a homes’ total kWh consumption and its peak kW requirements. Simply put people with big power bills are big users of air-conditioning.

In your report the use of “cost reflective” pricing is often mentioned as we’re in the middle of a three-year transitional path for rebalancing Tariff 11 costs by July 2015. Given the inequality I’ve clearly illustrated above why are residential connection charges not being rebalanced to be cost reflective with respect to the demand placed on the network? It’s about time that small consumers paid a lower connection fee than large consumers.

The simplest way of implementing such a scheme is to allow each customer to select the size of their network connection based on cost and their requirements. The following table presents a possible pricing structure⁶.

RESIDENTIAL CONNECTION	SINGLE PHASE COST PER QUARTER	THREE PHASE COST PER QUARTER
10 Amps	\$ 25	\$ 50
20 Amps	\$ 50	\$ 85
40 Amps	\$ 75	\$ 120
60 Amps	\$ 100	\$ 155

Such an approach offers a range of benefits both to consumers and the network providers including:

- Greatly improved equality via a user pays pricing structure.
- Utility operators can easily track the maximum demand for a region by simply “summing” up the size of the individual network connections.
- Peak demand for each region would be “capped”.
- Consumers offered a clear opportunity to reduce their standing connection costs by becoming more efficient and reducing their peak demand.
- The emerging area of solar power systems incorporating batteries for “self use” would offer a clear benefit to customers allowing them to manage their peak power consumption.

⁶ Dollar values shown here are for illustration purposes only.



*Solar + Batteries is coming.
Make it part of the solution!*

The QCA has already investigated what constitutes a “fair and reasonable” solar feed-in tariff for Queensland. I think an investigation into a “fair and reasonable” residential network connection charge is now well overdue.

Kind regards,

Dane Muldoon
Commercial Sales