



825 Ann Street, Fortitude Valley QLD 4006  
PO Box 264, Fortitude Valley QLD 4006

[ergon.com.au](http://ergon.com.au)

23 November 2015

Mr Kim Wood  
Commissioner  
Queensland Productivity Commission  
PO Box 12112  
GEORGE STREET BRISBANE 4003

Dear Mr Wood

Ergon Energy Queensland Pty Ltd (EEQ) welcomes the opportunity to provide comment on the Queensland Productivity Commission's (QPC) Issues Paper on Solar Feed-in Pricing in Queensland (Issues Paper).

This submission is provided by EEQ, as a Queensland Government Owned Corporation and the largest electricity retailer in regional Queensland.

EEQ endorses this submission including the attachments to be made public.

If you have any additional questions on this submission, please do not hesitate to contact Mark Williamson, Ergon Energy Retail General Manager Wholesale Markets, on 07 3851 6388.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ian McLeod', written over a white background.

Ian McLeod

CHIEF EXECUTIVE

Attachment 1 – EEQ Response to Solar Feed-in Pricing in Queensland Issues Paper

**ERGON ENERGY QUEENSLAND RESPONSE TO QPC SOLAR PRICING ISSUES PAPER****Introduction**

EEQ supplies electricity to more than 720,000 customers across a vast operating area of more than one million square kilometers (around 97 per cent of the state of Queensland).

EEQ is by far the largest energy retailer in regional Queensland.

EEQ is predominantly a regionally based company which includes a team of about 350 people located at the Townsville Contact Solutions Centre and Head Office, Maryborough Billing office, Rockhampton Contact Solutions Centre and Brisbane office. Ergon Energy Queensland (EEQ) supports regional Queenslanders as their electricity retailer and provides a range of customer services including local call centres to respond to customer enquiries.

EEQ is supportive of customer choice in regional Queensland and is trialling a range of new products which may provide a greater range of options in products and services in the future. These are discussed further in this submission.

Ergon Energy is committed to being an active participant in initiatives including the roll out of solar and batteries to deliver a new energy future for Queensland.

**Regional Queenslanders as early adopters of technologies**

Regional Queenslanders have embraced solar, with approximately 29 per cent of customers having solar PV. This equates to over 110,000 small customers with solar PV in Ergon Energy's distribution and retail area.

EEQ internal projections show that Queensland is well-placed to continue to deploy significant additional residential and utility scale plant over the next decade. The growth in this market will further contribute to meeting the Queensland Government's solar targets. A number of solar and solar/battery trials are well underway.

**Valuing solar – what is a fair price for solar?**

Developing a 'fair price' for solar has been the subject of significant discussion over the past 10 years in Queensland, in particular since the introduction of the solar feed-in tariff in the form of the Queensland Solar Bonus Scheme.

As a retailer, EEQ models a wide range of scenarios which could impact its customer load volume, load profile and hedging positions. The following section of this submission discusses a range of possible scenarios and electricity market impacts.

EEQ's internal modelling of consumer electricity demand, generation profiles and pool prices through to 2025 reveals a range of factors including:

- A growing lack of alignment of solar generation output with high electricity pool prices in the early evening (refer Figure 1 below)
- From 2022, utility solar starts making a more significant contribution to Queensland's generation portfolio in the middle of the day and by 2025, utility solar approximates the output of domestic solar

**ERGON ENERGY QUEENSLAND RESPONSE TO QPC SOLAR PRICING ISSUES PAPER**

Analysis also showed that until 2020 around 100MW of utility scale solar was likely to be deployed in Queensland. Importantly after 2020 EEQ anticipates that between 2021 and 2025 an additional 1,650MW of utility solar could be deployed in Queensland. This is a consequence of forecast reductions in the price of solar systems.

EEQ is supportive of the continued independent review and determination of a fair value of a solar feed-in tariff for regional Queensland in the future. EEQ is also generally supportive of the Queensland Competition Authority's (QCA's) approach that it uses to determine a fair price for solar and that these reviews should continue to occur on a regular basis.

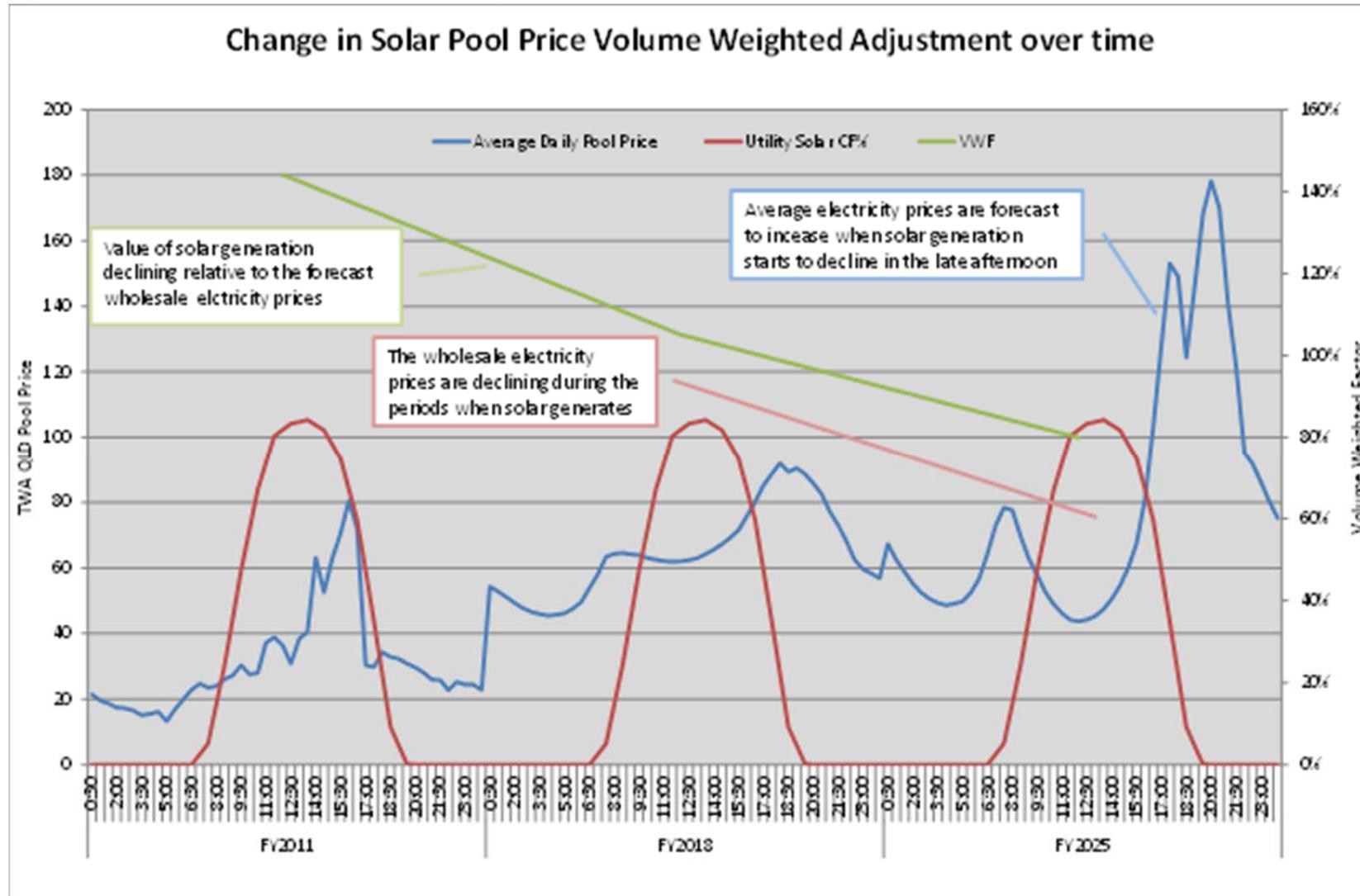
Figure 1 shows EEQ's projections of the solar pool price volume weighted adjustment over the period 2011-2025. It clearly shows that whilst the value of solar generation in 2011 was higher, with increasing volumes of solar being installed in Queensland, the value of solar export will continue to decline.

Figure 1 clearly shows the shift in the electricity pool prices during the afternoon / evening over the 15 years that were modelled. It shows that the value of solar exports will continue to decline relative to forecast wholesale electricity pool price projections. The reason for this continued decline includes:

- The unscheduled nature of solar (i.e. it isn't able to be stored);
- Growing volumes of solar exporting into the NEM, reducing the pool price for electricity at that time, and
- Relative cost of other competing forms of generation at the time.

ERGON ENERGY QUEENSLAND RESPONSE TO QPC SOLAR PRICING ISSUES PAPER

Figure 1 – Queensland change in value of solar generation – 2011-2025



**ERGON ENERGY QUEENSLAND RESPONSE TO QPC SOLAR PRICING ISSUES PAPER****Solar policy and pricing – principles and objectives**

In July 2008, the Queensland Government introduced the Solar Bonus Scheme to encourage investment in renewable electricity generation. Participation in the Scheme has exceeded all expectations, and the number of small-scale solar photovoltaic (PV) installations in Queensland has increased from less than 6000 in 2008-09 to over 260,000 at December 2012<sup>1</sup>. At this time, the Queensland Government asked the QCA to determine a fair and reasonable price for a solar feed-in tariff for Queensland. Its report and recommendations were published in March 2013.

The initial Solar Bonus Scheme was generous<sup>3</sup>, offering customers with PV installations 44 cents per kWh for their net exports of power to the network. This scheme was closed to new applications from 9 July 2012. While the original scheme has closed, eligible customers will continue to receive the higher 44 cent rate until 2028.

The impact of this scheme on the electricity costs of all Queensland consumers is well documented in the QCA's final report into the initial Solar Bonus Scheme

Although the QCA proposed a range of options for controlling the on-going costs of the Solar Bonus Scheme to reduce the impact that it will have on electricity bills for Queensland customers, it also indicated that there was “*no single solution which will satisfy all stakeholders*”.

This original Solar Bonus Scheme was replaced on 1 July 2014, by a mandatory minimum feed-in tariff in regional Queensland determined by the QCA each year on Direction from the Minister.

Queensland customers who now install a solar PV system which exports to the grid are paid a range of feed-in tariffs based on different retailer or product offerings purchased. In regional Queensland, the Queensland Competition Authority determines a fair price for solar for regional Queenslanders because of a lack of competition generally available in the small customer market. In 2014-15 this price was determined to be 6.5 c/kWh.

**Determining a fair price for solar**

The QCA has applied a consistent methodology over the past three years to determine a fair price for solar in regional Queensland. Its methodology includes a number of inputs and assumptions and its core premise is that the value of the solar feed-in tariff is equivalent to the sum of the costs that Ergon Energy (retail) avoids when it on-sells a unit of electricity exported by its solar customers. Its inputs include:

- Estimated wholesale energy costs;
- Estimated NEM and ancillary services fees; and
- Estimated distribution and transmission loss factors.

The Essential Services Commission (ESC) in Victoria and the Essential Services Commission of South Australia (ESCOSA) has also used similar criteria in its annual calculations.

**Future solar feed-in tariff pricing mechanisms**

---

<sup>1</sup> Source: Queensland Competition Authority's final report on *Estimating a fair and reasonable feed-in tariff for Queensland*, published in March 2013 [www.qca.org.au](http://www.qca.org.au)

**ERGON ENERGY QUEENSLAND RESPONSE TO QPC SOLAR PRICING ISSUES PAPER**

The Queensland Government may wish to consider a range of different mechanisms to modify the existing solar feed-in tariffs or introduce new tariffs in the future. There are a wide number of possible mechanisms, however, some of these options could include consideration of the following:

- **Declining block export tariff** – define different volume export blocks and corresponding declining export rates
- **Time of export feed-in tariff** – this could incentivise customers to install solar on the western side of their roof by developing a feed-in tariff which has a higher price based on the time of day. This would allow better alignment with higher demand periods in the NEM which often occur in the early evening;
- **Combined battery and solar feed-in tariff**<sup>2</sup> – this could incentivise customers to purchase batteries for store their existing excess solar, or incentivise new customers to purchase combined solar and battery products; or

Ergon Energy is committed to being an active participant in initiatives including the roll out of solar and batteries to deliver a new energy future for Queensland.

---

<sup>2</sup> This would require a change to the current legislation which states that in order to be eligible for the feed-in tariff, the generator (solar PV) must be directly connected to the electricity grid. This means that a feed-in tariff which includes battery storage would be ineligible under the current legislation.