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Brian Parmenter
Chairman
Queensland Competition Authority
Level 19, 12 Creek St
Brisbane QLD 4000

electricity@qca.org.au

Dear Mr Parmenter

RE: Estimating a fair and reasonable solar feed-in tariff for Queensland

TRUenergy welcomes the opportunity to provide comments on the Queensland Competition Authority (the Authority) Issues Paper[1] (Paper) on solar feed-in tariffs (FITs) in Queensland.

Introduction

We understand the arguments made in the Paper for the more equitable distribution of network costs and for policy and price signals that contain peak demand and associated network investment costs.

TRUenergy does not see merit in moving to a regulated gross FIT. We are an established participant in the Queensland market for solar installations and move to gross tariffs would undermine the viability of the sector in the state.

Our strongest reason for opposing a move to a gross FIT is customer equity:

- Households that invest in rooftop photovoltaic systems do so in the expectation that they will be able to consume less grid energy, and thereby gain a sense of control over their costs;
- Under the proposed changes, households would be required to 'sell' energy to the grid at the cost of energy, and then 'purchase' energy for their own use, at up to three times the price;
- The complexity introduced through the requirement to have metering capable of support a gross FIT; and
- This would create significant confusion, and may create the perception that electricity retailers are benefiting at the consumer's expense.

In line with the objectives expressed in the Paper, we see potential benefit in the investigation of introducing Time of Use pricing for solar customers, and potentially calibrating the fixed network fee component.

[1] QCA, Issues Paper: Estimating a Fair and Reasonable Solar Feed-in Tariff for Queensland, Aug 2012 (Issues Paper)

TRUenergy have been an active participant in the solar industry for many years. Over this time, many states have introduced FIT schemes not underpinned by clear or consistent policy objectives. These FIT schemes and tariff levels have not balanced the benefits and costs adequately to solar photovoltaic (PV) customers, non-PV customers, retailers, distributors or the solar installation industry. Under these conditions, it has been difficult for customers to understand the likely payback period for their solar systems and for industry participants to understand the longer-term business models and propositions to customers.

We support a review of fair and reasonable solar FIT in Queensland that addresses these issues. We and other retailers have been voluntarily offering competitively priced FITs to our PV customers in Queensland for several years.

Given this, we do not see a need for the introduction of any regulated FIT. Regulation of prices is counterproductive as it stifles innovation and increases overheads, which drives up prices for customers.

In the discussion below, we explore these issues and other topics identified in the Paper.

Defining fair and reasonable

We agree with the Authority's stated positions in the Paper[2] that:

- The term 'fair and reasonable value' should be interpreted as the value to retailers of the PV generation exported to the network by their customers.
- Network benefits from PV exports are very difficult to determine, may be small or offset by PV related costs, and that any impacts should be reviewed by the AER and included in network charges.

Fair and reasonable value

In submissions to reviews of solar FITs in other states, respondants have often argued that 'fair and reasonable value' should be based on retail parity pricing or a set payback period. Retail parity pricing is clearly the wrong approach as it seeks to pay a return to PV exporters for costs they don't bear and services they don't provide (i.e. network services and retail operating costs). We go into this in more detail in the later section on avoidable costs.

Setting a FIT price based on a payback period is to risk sending a misplaced signal to potential PV customers that this form of generation is more desirable in the market than it actually is. Renewable generation is beneficial in many ways and should be broadly encouraged, but only at a price that is efficient as possible, otherwise overall costs increase. The VCEC report on FITs in Victoria discusses that wholesale market based FITs are not truly efficient either, but that they are a better choice than a payback FIT or a FIT that matches the retail price.[3]

Additionally, the PV industry is now well established in Queensland. The costs of PV systems have decreased significantly and will continue to decrease. This will continue to improve the payback period for PV customers without the need for setting a FIT to support a shorter payback period.

A move to a cost-reflective and market based FIT that is retained for more than several years will send the right price signal to customers of the value of small scale PV generation without further increasing the burden on customers who are unable to access PV generation at their sites.

[2] QCA, Issues Paper, pg 8
[3] VCEC, Power from the People: Inquiry into distributed generation – Final report Jul 2012, pg 167

Impacts to distributors from PV customers

Distributors may gain benefits from distributed generation if this enables the reduction of peak demand and allows network augmentation to be deferred and this deferral may lead to reduced costs for distributors. Any benefits of PV exports must also be weighed up against any costs that they bring. Higher costs can arise from network reinforcement work that may be required to avoid quality and reliability issues in the network attributable to the saturation of PV exports in localised network areas. These costs may offset the benefits form deferred investments. Without strong analysis of the costs and benefits it is difficult to ascertain any net present value.

None of the recent reviews[4] have been able to identify whether the overall cost impact to distributors from PV exports is positive or negative. Even is this could be done, and an overall benefit is found, it would be difficult to include this value in the FIT as this value would vary significantly by region and the degree of PV saturation within a local network area. Including an amount in the FIT for network benefits or costs would add to the complexity of the FIT for both customers and retailers. Any such network related costs and benefits should be reviewed by the Australian Energy Regulator and allocated fairly between PV and non-PV customers as far as possible via capital expenditure allowances and regulated returns.

Estimating a fair and reasonable feed-in tariff

Avoidable costs

We agree that network and green scheme costs are unavoidable and that some components of wholesale energy costs are avoidable and are appropriate to be included in a feed-in tariff.

However, the Authority has incorrectly asserted that:

> *"...NEM participation fees and ancillary services charges are avoidable by retailers when a retailer on-sells PV exports and should be included in a feed-in tariff."* [5]

The recent Victorian Competition and Efficiency Commission (VCEC) recently reviewed this issue and found the AEMO costs that make up the National Electricity Market (NEM) participation fees and ancillary services charges are largely allocated costs as per the National Electricity Rules. Retailers in their roles as market purchasers cannot avoid these costs, as they will be reallocated via usage charge increases to all customers.[6] Furthermore, the intermittent generation nature of PV installations is more likely to increase the costs of ancillary services, as these services are required to stabilise system frequency and voltage support and the costs are directly related to the degree of generation and demand variability.

We also disagree with the preliminary conclusions that the Authority makes in the sections on retail operating costs and retail margin and headroom.[7] PV customers are more costly for retailers compared to non-PV customers. While it's true that retailers receive financial benefit from electricity exported to the grid from PV customers, we face a greater proportion of fixed retail operating costs. TRUenergy and other retailers have dedicated teams to manage PV customers.

Retail operating costs are greater for PV customers given:

- Extra handling time in processing connection orders and quotes

  From the time the customer has PV panels installed to the time they are exporting PV generation to the network is typically about 4-5 weeks and involves creation of extra paperwork, transactions and phone calls between the installer, distributor, retailer and

[4] VCEC, Power from the People: Inquiry into distributed generation – Final report Jul 2012; ESCOSA,2012 Determination of solar feed-in tariff premium – Final price determination, Jan 2012; IPART, Solar feed-in tariffs - Setting a fair and reasonable value for electricity generated by small-scale solar PV units in NSW — Final Report, Mar 2012

[5] QCA, Issues Paper, pg 10

[6] VCEC, Power from the People: Inquiry into distributed generation – Final report July 2012, pg 60

[7] QCA, Issues Paper, pg 11

customer. Customers may call up multiple times in this process to ask questions or to get progress updates.

- Extra billing complexity

  This is created by having additional components added to meter data, network and retail tariffs, and bills which increases the complexity of high volume transactions and provides a greater chance for error and misalignment throughout industry systems as well as our own. IT system changes can be more complex for some FIT schemes.

- Extra time and complexity in answering customer queries

  PV customers contract us more than the average customer does. The complexity of installations experienced by PV customers in billing and connection mean that our consultants need to spend more time on phone calls and investigating issues.

- Added complications of supporting an array of old FIT schemes for many years into the future

  Supporting a range of FIT schemes at the same time increases the potential for billing errors, and customer confusion and dissatisfaction. The additional complexity due to schemes phasing in and out of existence gives rise to the perception of people "missing out" as well a create a perception for a case for economic compensation.

These costs have been driven even higher by the spikes in solar PV sales (in some states). Having a stable and administratively simple FIT, good industry processes, and a small number of harmonised schemes would assist retailers in keeping operating costs to a minimum and hence reduce the pass through of these costs to all customers.

Additional operating costs for PV customers are currently at such a level that some retailers do not offer a voluntary solar feed-in tariff in Queensland. Furthermore, a mandated retailer FIT creates a disincentive for retailers to participate in solar markets. Setting a retail FIT that is too high increases the costs retailers face (over and above the higher administrative costs for PV sites) and could therefore diminish competition for PV customers or could induce retailers to attempt to offer higher priced tariffs to PV customers. These outcomes are inconsistent with national principles 3c and 4a set out by the Council of Australian Governments (COAG).

There are three cost components in the regulated tariff: retail operating costs, network costs and wholesale costs. The retail margin and headroom for the regulated retail tariff are calculated by applying a set percentage across all three components. All types of retail operating costs are the same or higher for PV customers than they are for non-PV customers, so there are no retail operating costs that the PV exporters allow retailers to avoid - quite the opposite.

When considering the wholesale energy costs, the concept of value and margin becomes very complex:

- the wholesale market prices vary dramatically and are difficult to forecast
- retailer's hedging strategies have to be taken into account
- energy losses vary by location, are complex to determine, and technically should be shared with others

  Small scale PVs require equivalent or larger loads to be present in the nearby vicinity for losses to be avoided. Customers contributing to these loads should therefore share in any financial benefit allocated by retailers. This would be impossible to administer. If benefits from avoided losses were applied only to PV customers, this would disadvantage the local non-PV customers.

- the risk/return profile for a retailer is a very different proposition compared to a small scale PV customer

For network costs, PV customers are by no means facing the type of financing and capital risks that retailers are (for example the level of credit support required to be paid to network companies by retailers that covers both the variable and fixed supply charges), so it's illogical that they should share in any margin on this component.

Headroom is a different concept from margin and the Authority has included an allowance for headroom in support continued market competition.[8] PV customers are not involved in competing for customers so we do not believe that there is any need to share the headroom allowance.

With all these issues in mind, we think it inappropriate for the Authority to consider that PV customers should reasonably receive a margin and headroom in any retailer funded FIT.

Varying the FIT by geographical location

We expect that the value of PV exports to retailers will vary slightly by location. However, as with all other tariffs, it is necessary to choose an appropriate level to apply the tariff to avoid both customer confusion and costs relating to administrative overheads. If, over time, geographical factors are deemed significant then a competitive market-based FIT will evolve to factor in these differences.

TRUenergy does not actively retail to customers in the Ergon Energy area and therefore will not be seeking to offer a FIT in this area. Our only comment on the Uniform Tariff Policy is that the FIT offered in the Energex area should reflect the value to retailers from PV customers in the Energex area alone.

Estimating a fair value

The determination of the value of the FIT based on the wholesale energy benefit received from PV exports should be left to the competitive market. For some time, retailers have been offering FITs to Queensland customers in addition to the Solar Bonus Scheme (SBS) outside of any obligation to do so. The FIT levels in Queensland are around the same level of voluntary FITs offered by retailers in other states. We believe that this price level reflects the fair value of PV exports from our customers.

The Authority has correctly outlined that this benefit is not driven by the actual generation profiles of PV customers, but by the reduction in each retailer's share of the overall Net System Load Profile. If half-hourly data were available to the market, then FITs would be priced at a higher rate under the current environment. This should be kept in mind when comparing FITs with states that have a higher proportion of customers on interval meters.

Implementation and review of the feed in tariff

Form of regulation

Voluntary FIT offers from retailers in Queensland (in the range of 6-8c/kWh) have been available for several years and reflect a fair (and stable) value for PV generation paid back to customers. These FITs have been offered in the absence of any obligation on retailers, so it seems hard to imagine that regulation of FITs is required in Queensland. There is no existing problem with voluntary FITs requiring a regulatory solution, other than the risk posed by the potential implementation of a regulated FIT.

We've already outlined the administrative overheads retailers face with PV customers nationally. A decision to place additional regulatory requirements on retailers will add to retail operating costs. The phasing in and out of different schemes and the requirements to update prices annually or for different regions are all examples of regulatory processes that introduce cost and detract from the benefit to customers.

Solar FITs are likely to change over time due to the introduction of time-of-use pricing, storage capability or other industry or market changes. Allowing retailers to determine a competitive FIT price and structure will be in the best interests of customers and the industry as the market will be more adaptive than a regulator can be in this changing environment. As

[8] QCA, Final Determination Regulated Retail Electricity Prices 2012-13, May 2012, pg 83

outlined in more detail in the next section, we suggest that PV users could be placed onto the time-of-use tariff to manage the concerns raised in the Paper.

If the Authority is persuaded to oversee or regulate FITs in some way, then we encourage a light-handed approach such as that taken in NSW.[9]

Changes to existing schemes

Major changes to schemes can certainly create dissatisfaction and confusion for customers and peaks and troughs for the PV industry – including retailers and distributors. When announcing the lowering of the SBS FIT rate from 44 to 8c/kWh, the impact was minimised substantially by having the new tariff apply to customers who had sent their application to Energex by a particular date in the future.

If a scheme change includes a change to metering arrangements (discussed below), this could bring additional costs, inconvenience and complexity and needs to be fully considered through a clear articulation of the quantitative costs and benefits.

Metering arrangements

We acknowledge that net metering brings disadvantages to non-solar network users as outlined by the Authority in the Paper.[10] The lower metered usage of PV customers with net metering reduces their liability for volume-based network charges. This may lead to the distribution businesses increasing tariffs for all customers to address under-recovery of revenue. The Authority is correct in pointing out that the usage component of the distribution tariffs are set higher than the cost-reflective rate which exacerbates the issue.

There are some issues associated with moving to gross metering that may also need to be taken into account:

- Customer confusion and discontent that they can't use their own generation to reduce exposure to retail prices and must 'sell' all generation back to the grid at a much lower price than they buy it
- Industry implications of reducing the attractiveness of investing in PV panels
- Extra costs to reconfigure existing net meters to record gross PV exports [11]
- Potential for network reinforcement costs to be higher with gross metering as all generation is exported to the grid
- Operational complexities of having sites potentially moving off the 44c/kWh net FIT onto a gross FIT and having to have their metering reconfigured
- Additional operational costs associated with having customers on different PV metering arrangements (affects assignment of network tariff, customer enquiries, etc.)

On balance, we prefer net metering although we see benefits and costs associated with either metering arrangement, particularly that a change to a net feed in tariff will cause dissatisfaction amongst customers.

The broader issue is that Queensland urgently needs to tackle is peak demand. This issue will not be impacted appreciably by small-scale PV generation, but instead by ensuring that appropriate metering and cost-reflective, time-of-use network tariffs are put in place and allowing the market to send the right price signals to customers.

To avoid some of these issues with net and gross metering and to realise the potential benefits of PV, a better approach may be to keep net metering and introduce time-of-use pricing for

[9] IPART, Solar feed-in tariffs - Setting a fair and reasonable value for electricity generated by small-scale solar PV units in NSW — Final Report, Mar 2012
[10] QCA, Issues Paper, pg 16-17
[11] Referring to Energex's pricing schedule, we expect this to be a cost of at least $75 ex GST, http://www.energex.com.au/about-us/network-regulation-and-pricing/network-prices.

new PV customers. PV generation tails off at around 4pm, prior to the peak network demand being reached. This means that PV customers are contributing to a worsening demand profile (increased sharpness of the peak) and are not assisting at all with reducing peak demand.

We believe that linking the installation of PV to the time-of-use tariff should provide the right price signals for the investment in PV and will support the objective of trying lower peak demand. It will also provide an incentive to the embryonic battery storage industry to develop solutions for customers to be able to store PV exports for use at peak times.

Sharing of Solar Bonus Scheme costs

The SBS was very generous and there seems no good way of more equitably distributing these significant costs. We encourage the Authority to review all possible avenues to minimise the costs in future years. For example, costs could be minimised by ensuring that new tenants or owners don't continue to access the 44c/kWh FIT due to rorting or administrative oversight when the original customer moves out of the premise.

Continuing to direct attention to network cost drivers in general (i.e. to improve regulation of networks, addressing peak demand) may also assist in minimising costs and price impacts to customers in future years.

If retailers are to contribute to the ongoing costs of the SBS, then the level of contribution shouldn't exceed the real value to the retailer of the PV exports. Any retailer contribution process should be simple and straightforward. It would also be helpful if the government and the Authority played a part in creating awareness of the reasons for bringing in any new cost sharing arrangements as SBS customers are likely to be confused and disgruntled if their current retail FIT is removed because of this decision.

Summary

TRUenergy maintains that the FITs provided voluntarily in the Queensland market for many years are fair, reasonable and competitive.

We see no need for a mandated or regulated FIT, as this would hinder competition and innovation and create additional costs.

We recommend that the Authority consider retaining net metering and placing new PV customers on time-of-use pricing to create and incentive for these customers to reduce peak demand.

If you have any questions on this submission, please call me on (03) 8628 1242.

Yours sincerely

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