

Clean Energy Council submission to the QCA Issues Paper: Estimating a Fair and Reasonable Solar Feed-in Tariff for Queensland

Executive Summary

The Issues Paper has raised a question of fundamental importance to the viability of a solar photovoltaic (PV) industry in Queensland - "Is a net or gross metering arrangement most appropriate in Queensland?"

Gross metering would be neither fair nor reasonable.

Net metering has formed the basis of Australia's PV industry.

Gross metering would mean that all electricity generated by PV would be sold at the feed-in tariff (FiT) rate of 8 cents per kilowatt-hour (kWh) and all electricity consumed on site would be purchased from the grid at the significantly higher retail price of 17 to 35 cents per kWh. It would reverse the current situation, where companies and households effectively use the electricity from their PV system and only pay for the additional electricity they need to import from the grid. It would prevent PV owners from reducing their electricity purchases with electricity they generate on their own rooftop.

If implemented, the proposal for gross metering would increase costs to householders and curtail their ability to reduce electricity bills by generating their own electricity. By making solar PV less financially attractive, gross FiTs would reduce the rate of solar PV installation in Queensland, resulting in a corresponding reduction in the number of people employed in Queensland's solar industry. It would have a severe negative impact on Queensland's residential PV sector, and cripple the commercial PV industry in Queensland just as it is getting off the ground.

CEC wishes to register its opposition to the gross feed-in tariff proposal in the strongest possible terms.

Response to Questions raised in the Issues Paper

How should the term fair and reasonable be interpreted? Should it be interpreted as a subsidy-free value that reflects the benefits to retailers of electricity generated from small-scale PV generators? If not, how should it be interpreted and why?

The term 'fair and reasonable' should be interpreted as a subsidy-free value that reflects the benefits of electricity generated from small-scale PV generators to electricity retailers and to other parties (eg. distribution network service providers, other businesses and entities in the electricity supply value chain and other customers). It is fair and reasonable that the benefits brought by PV owners should be captured by PV owners.

Should the Authority include the benefits associated with PV exports to other parties (all customers and distribution entities) in setting the fair and reasonable value? Why?

Yes. It is fair and reasonable that the benefits brought by PV should be returned to those who created them.

It is recognised that the current National Electricity Rules (NER) were written when PV was immaterial. IPART acknowledges they need review and such a review may make it easier to pass benefits back to PV system owners. In the meantime, QCA should consider how its FiT structure can address issues such as:

- Benefits that PV systems deliver to the operation of distribution and transmission systems (reduced loads, delayed augmentation etc);

- Elimination of transmission and distribution losses through distributed generation;
- Retailers getting the solar energy exports cheaply (via the voluntary payments);
- Double counting of ‘green’ fees;
- Lower wholesale pool prices due to the ‘merit order effect’;
- Strong energy efficiency motivators for owners of PV systems.

We note that a net FiT is better able to address many of these issues compared to a gross FiT.

Are there any other issues that the Authority should consider in interpreting the term fair and reasonable value?

Yes. In the context of feed-in tariff policies, there are issues of fairness that extend beyond the methodology to determine any schedule of payments. For example, most reasonable people would consider retrospective changes to feed-in tariff schedules as unfair.

This is not to say that new PV connections cannot operate under a new regime and price structure – but it is critical that once approved for connection, the business or householder should be able to rely upon the regime in place at that time to continue for the period promised at that time.

Has the Authority correctly determined which costs a retailer can avoid when onselling PV exports?

In principle the logic used by the authority appears reasonable however, it should be noted that these have been calculated in the absence of detailed information. We would therefore argue that these are estimates only and a detailed study of the real costs across (for example) a sample of geographic areas is entirely warranted. This would provide real data on which to base decisions.

We would also propose that a detailed mapping exercise of where PV is of most – and least – value to network is overdue and could form the basis of geographically targeted values. There is a precedent for this very technique in Western Australia’s Horizon Energy network, where they offer up to \$0.50c kWh for exports.

Importantly we also note that there is currently no obligation for retailers or network companies to allow connection of systems or pay anything for exported energy and in some cases Ergon has refused to allow connection and declined to offer any reward at all for exported energy. This is a long way from ‘fair and reasonable’ and could be addressed through recognition of a ‘right to connect’ and a mandatory minimum payment.

We also note that commercial customers are specifically excluded from the current FIT and not specifically mentioned in the review. We would argue that a significant number of commercial customers are very keen to connect and are currently either prevented and de-incentivised via a lack of any enshrined right to connect or minimum mandatory payment. This is a long way from ‘fair and reasonable’.

Is it reasonable to use cost estimates from notified prices to determine the feed-in tariff? If not, which cost estimates should the Authority consider using?

The Net System Load Profile (NSLP) does not recognise the premium value of daytime generation from PV, which is likely to affect the retailers’ cost of servicing the customer, as well as the value of export. Moreover, it should be noted that the introduction of smart meters could change the methodology of retail cost calculations.

What proportion of distribution losses are avoided when PV exports are on-sold?

Network losses vary widely by region and can be as high as 20% in some nodes, considerably increasing the value of net exports at those nodes. Specific power flows of exported distributed generation are invariably over far smaller distances than for centralised energy. PV generation (whether exported or consumed on site) also reduces the nodes' loss factor. This is a benefit for all consumers on that node and the retailers that service them.

Is it reasonable to split retail margin and headroom between the retailer and the PV exporter? What are some of the considerations in providing a greater proportion of the costs to either party?

This seems reasonable. It recognises the risk that PV owners take on when buying a PV system. It also reflects the reduced risk faced by the retailer associated with electricity price volatility.

Is it fair and/or reasonable to have different FIT based on geographical locations in a market with the Uniform Tariff Policy in place? What are some of the benefits or complications of creating geographically based FIT?

Yes, it would be fair and reasonable to have different FIT rates based on geographical locations. Greater transparency and better, geographically specific information regarding network congestion and PV penetration would assist in enabling consumers and industry to understand decisions regarding FITs and other decisions taken by distribution network service providers. This should be strongly supported by distributors.

What other issues should the Authority consider in determining the fair and reasonable value of PV exports?

PV has a proven ability to lower wholesale prices to the benefit of the wider community. This represents a net economic benefit, which should be considered when developing new policies for PV. It would appear that the reduction in wholesale prices caused by PV generation has not, as yet, been passed on in the form of a corresponding reduction in retail electricity prices, unless these were incorporated into the tariff caps imposed in Queensland by the QCA.. It would seem 'fair and reasonable' for the benefits to be passed on to consumers (in the form of lower retail electricity prices). We note that this issue is currently being analysed by the Melbourne Energy Institute.

What form of regulation should be applied when implementing a fair and reasonable feed-in tariff in Queensland? Alternatively, should the fair and reasonable tariff be determined by market competition alone, without regulatory intervention?

FiT rates should be set by regulation. We note that the NSW Government has decided to allow feed-in tariffs to be set by market competition alone. A number of retailers in NSW do not offer any financial reward for electricity exported by PV systems and the number making such offers is declining. In addition the information needed to promote competitive offers for PV exports has been withdrawn from the myenergyoffers website. This removes transparency and effectively requires customers to negotiate on a one-on-one basis with electricity retailers. This places consumers in an extraordinarily weak negotiating position. In contrast to NSW, the Victorian Government recently decided to set FiTs by regulation until 2017, at which time it will review feed-in tariff arrangements, including a review of the success or otherwise of the NSW approach. CEC would recommend a similarly cautious approach be taken by the Queensland Competition Authority (QCA). FiTs in Queensland should be set by regulation, at least until the success or otherwise of the NSW approach can be properly evaluated.

An unregulated price limits the ability for the price to include contribution for factors not otherwise directly captured by retailers, such as reduced network losses.

The QCA does not appear to have considered the extent to which market structure may pose a barrier to competition. The vertical integration of 'gentailers' means that additional PV generation reduces the profitability of generators. Thus retailers are less likely to encourage PV generation with a voluntary feed-in tariff.

In making the case for light-handed regulation, the QCA notes that PV customers are more likely to be well informed and to actively seek out competitive market offers. This is doubtful. Many owners of PV systems have been motivated by a simple desire to reduce their electricity bills and have no more interest than anyone else in understanding a plethora of electricity price offers.

Which regulatory approach is most appropriate to support competition in the Queensland electricity market, while recognising the need for certainty for small PV system owners?

The most appropriate regulatory framework would include net metering, regulated minimum prices and an enshrined right to connect.

The majority of costs should be reflected in the energy costs and charged at the relevant time of day to reflect both energy purchase and network demand costs.

What evidence is available of the number of solar PV customers receiving voluntary feed-in tariff premiums in Queensland? Does the level of these tariffs represent a fair and reasonable value for the electricity exported by solar PV customers?

This evidence does exist but it resides with the retailers who make such offers. We would argue that it is in the interest of the public and the government to require evidence of this data to be submitted so that an indication of the quantum and value of such investments can be made. Alternatively, the Government could, using its own database of connected customers survey all customers to ascertain the information.

What, if any, specific arrangements might be required when implementing the fair and reasonable feed-in tariff in the Ergon Energy distribution area? In particular, should different forms of regulation be used in the Energex and Ergon Energy network areas?

The principles for determining arrangements for implementing the fair and reasonable feed-in tariff should be broadly the same for Energex and Ergon. However, the actual values paid may legitimately differ. For example, a location-specific component of the feed-in tariff would differ both between and within the Energex and Ergon distribution areas.

Is a net or gross metering arrangement most appropriate in Queensland, and why?

Net metering has formed the basis of Australia's PV industry.

Gross metering would mean that all electricity generated by PV would be sold at the FiT rate and all electricity consumed on site would be purchased from the grid at the significantly higher retail price. It would reverse the current situation, where companies and households effectively use the electricity from their PV system and only pay for the additional electricity they need to import from the grid.

If implemented, the proposal for gross metering would have a severe negative impact on Queensland's residential PV sector, and cripple the commercial PV industry in Queensland just as it is getting off the ground. It would represent a major barrier to consumers wishing to reduce their electricity bills.

The CEC strongly opposes this proposal.

Are the benefits to retailers different under net and gross metering arrangements?

Gross metering would favour electricity retailers, to the detriment of PV owners and Queensland's PV industry.

Gross metering would require PV system owners to sell all of the electricity they generate at 8 cents per kWh and purchase all the electricity they consume at 17 to 35 cents per kWh. It would prevent PV owners from reducing their electricity purchases with electricity they generate on their own rooftop. Such an arrangement would clearly be advantageous to electricity retailers. It would increase costs to householders and curtail their ability to reduce electricity bills by generating their own electricity. By making solar PV less financially attractive, gross FiTs would reduce the rate of solar PV installation in Queensland, resulting in a corresponding reduction in the number of people employed in Queensland's solar industry.

Are there any other factors the Authority should consider when recommending an appropriate metering arrangement?

Time-of-use metering should be encouraged as a means of improving the economic efficiency of Queensland's electricity system. It would assist with managing peak demand and would enable PV owners to be rewarded for the value for the electricity they export at times of peak demand.

How often should the fair and reasonable value be reviewed or updated?

The NSW and Victorian Governments have committed to an annual process for reviewing and updating recommended 'fair and reasonable' values for electricity exported to the grid by solar PV systems. This would seem to be an appropriate frequency. Any less often would potentially penalise owners of PV systems as electricity prices can change markedly over the course of a year. Revised prices should apply to new PV connections only and should not be retrospective for existing PV connection approvals in place at the date of the price changes.

Should the Authority recommend a flexible review mechanism which allows updating the value in response to relevant changes and developments?

An annual review process should be sufficiently regular. If there is an annual review process in place, an additional flexible review mechanism would likely be unnecessary.

If a flexible review mechanism is recommended, what criteria should be applied when deciding if an update to the value is necessary?

Changes to the NER would be an important consideration. Significant changes to the average price of a PV system (say, plus or minus 20%) could also be used a trigger. However, an annual review system would likely to adequate.

What are the implications for the current review of a potential transition to a national feed-in tariff established through COAG processes?

It is unlikely that COAG will establish a national feed-in tariff prior to the completion of this review. Establishment of a national feed-in tariff would be a suitable trigger for a flexible review mechanism.

What factors should the Authority consider to ensure the costs of the Solar Bonus Scheme are equitably distributed?

There should be no retrospective changes to customers already part of the Solar Bonus Scheme.

Are there any other issues that the Authority should take into account in setting an appropriate retailer contribution to the Solar Bonus Scheme?

There should be no retrospective changes to customers already part of the Solar Bonus Scheme.

What other options should the Authority consider for minimising the costs of the existing Solar Bonus Scheme?

The projected costs of the existing Solar Bonus Scheme should not be over-estimated. Industry sources estimate that only about 30 to 60% of Solar Bonus Scheme customers will install a PV system.