



Submission to ESCOSA re: Determination of Solar Feed-in Tariff Premium.

Introduction

The Clean Energy Council (CEC) is the peak national body representing Australia's diverse clean energy industry, with over 550 members from across the industry. This includes over 200 solar PV businesses, making us the biggest industry group for the solar industry.

ESCOSA's review comes at a critical time for the solar PV industry in SA, as the existing feed-in tariff (FiT) is wound down and the industry undergoes the difficult process of consolidation. But, as underlying technology costs continue to fall, and electricity prices continue to rise, the industry has a bright future if it is allowed to operate in a fair and reasonable regulatory environment.

No doubt ESCOSA is aware that the NSW IPART is undertaking a very similar review to determine the 'fair value' of energy generated from small scale solar PV units. The CEC's response to the ESCOSA discussion paper will be modelled closely on our contribution to the IPART review.

To help form our views on the issues of fair value we commissioned SKM MMA to undertake an independent analysis of many of the issues considered in the issues paper. While the specific data used in the SKM MMA report relate to conditions in NSW, the methodology and the general conclusions are entirely relevant to the South Australian context, although some minor adjustments in results are likely to occur.

The CEC has consulted broadly to refine the findings of the study and submit this report with the strong support of a wide cross-section of our members. Many of our members believe that there is additional value from solar PV and distributed energy generally that is not captured in the report, but almost all saw the SKM MMA analysis as forming the benchmark for determining a minimum value.

The SKM MMA report covers many of the issues raised in the ESCOSA review paper. We have confined the rest of our submission to the remaining issues, and briefly highlight aspects of the report that are most relevant to the concerns raised in the issues paper.

- ***What is the most appropriate method to calculate the fair and reasonable value to a retailer of electricity fed into the network by solar PV systems?***
- ***How should the variability in the value of energy be reflected in the approach that the Commission takes in determining a FiT premium?***
- ***Should the value be linked to wholesale electricity prices? If so, how?***
- ***Are there any other approaches to determining the value of energy exported from solar PV systems?***
- ***Should the FiT premium incorporate the benefits of any avoided loss factors?***

These issues are covered in detail in the SKM MMA report which finds that there is substantial value to exported solar PV in addition to the avoidance of purchasing energy on the wholesale electricity market. While the coincidence of peak production and peak load for residential systems is not as strong as has sometimes be assumed, there are a range of other avoided costs, such as from line losses and certain fees, etc.

Moreover, those benefits generally accrue more in regional areas where avoided line losses are the greatest, and this difference is high enough that it should be recognised in any regulated price determination (i.e. as two or perhaps three 'zones' which tiered values for exported energy).

It is important to be very clear that when we talk about the value of exported energy, and what proportion of the retail tariff that might be thought of as equal to, that does not mean that all of that benefit accrues directly to the electricity retailer. As our SKM MMA report points out, the benefits/avoided costs from solar come from various points in the generation-distribution-retail chain and needs to be clearly understand when assigning any obligation on parties to compensate households for those benefits.

- ***Are there any other potential costs or benefits to retailers from solar PV exports?***
- ***How should the Commission quantify these costs or benefits in the derivation of a FiT premium?***
- ***Are there any extra costs and benefits that retailers may incur as a result of increased uptake of solar PV systems?***

In terms of other indirect gains to retailers, we draw attention to the acknowledgement made by SKM MMA that their analysis did not consider “other benefits [that] are also possible such as a reduction in the wholesale price to other customers during peak periods, reduced network losses faced by customers in regions with a high level of uptake” (page 2). While the CEC believes the results of the SKM MMA report constitute the minimum definition of value to retailers, these other factors are also relevant to ESCOSA’s consideration and should be examined properly.

- ***Should some of the benefits to retailers be shared with all electricity customers or just those customers with a solar PV system?***

The CEC supports the idea of sharing part of the value with all electricity consumers, since some of these benefits are difficult to quantify and capture, and public subsidies have supported private purchases of solar PV systems.

- ***Does the level of the current voluntary FiT premium on offer from some retailers in SA accurately represent the value of the energy to that retailer?***

Across the country retailers are making voluntary offers to PV customers on top of mandated FiTs, but these are all within a very narrow range of values (6-8c) which essentially aligns with the view that the value of exported energy is simply that of avoided wholesale electricity prices. While many retailers no doubt set these voluntary offers at a level which they believe reflects the fair value, the analysis from SKM MMA would indicate that the minimum value is significantly higher.

While the SA FiT was set at 44c the value of voluntary payments was not a significant issue for consumers or the industry because the FiT was sufficient stimulus and the retailer contribution was generally treated as a 'bonus'. But under the new 16c tariff, and then in October 2013 when mandated FiT expires entirely, the value of the payment to households is critical, not just to the economics of household PV, but to maintaining consumer support for the technology by avoiding any perception that their contribution to the grid is undervalued.

- ***Should residential customers have a different FiT premium to business customers?***

The question of whether different customer types should receive a different tariff rate is an important one. The CEC is in the process of finalising a new report with SKM MMA on commercial installations of PV which will go some way to addressing this issue. Our preliminary findings indicate that there is a significantly higher benefit to installing PV on commercial premises rather than households, because of a stronger coincidence of peak demand and peak solar generation. The methodology in the original SKM MMA report would recognise that value, although we have not conducted an assessment of what the value of commercial installations would be under that regime.

Commercial installations do warrant a higher tariff, as too should households (and companies) in rural and regional areas, based solely on the application of the pricing methodology we propose for household systems.

- ***What are the implications of setting the FiT premium too high or too low?***
- ***How would this impact on competition in the retail market, particularly competition for solar PV customers?***

Given the wide range of potential direct and indirect benefits from distributed solar PV generation, and the difficulty in precisely quantifying or capturing all of those effects within the bounds of a tariff price, it is safe to assume that whatever decision ESCOSA come to in terms of the value of exported energy is most likely to be an underestimate of the true value.

We accept that there are limitations to what the modelling and analysis can determine at present, but it should be acknowledged that our understanding of how distributed energy

generation interacts with the functioning of the grid and the energy market is still evolving and we should expect the findings of this review to be superseded in the future by new information.

That issue notwithstanding, there are real implications for the retail competition market if the tariff rates are substantially out of line with what is objectively fair and reasonable. In our submission to IPART we expressed concern about an assumption raised in their issues paper regarding the likelihood of the retail market being “sufficiently competitive” to result in retailers offering premiums beyond the mandated ‘fair’ price (and therefore indicating that even if the mandated price was set ‘too low’ the market would compensate). While this may happen to a very limited extent it is nowhere near sufficient to compensate for a tariff price that is substantially below ‘fair’ pricing.

However, creating a disincentive for retailers to connect solar systems (by setting the price ‘too high’) would be a major impediment for the industry, and needs to be avoided. This issue of the ‘right to connect’ is emerging in a range of States for various reasons, as a significant issue for the industry and we appreciate the importance of this decision in that regard. The impact of whatever new tariff is agreed to will ultimately have to be tested in practice, and may change over time as the scale of PV penetration grows.

The CEC supports a competitive market for electricity retailers, and feel strongly that a minimum ‘fair tariff’ rate (as defined by our SKM MMA report – split into two zones, urban and rural) needs to be mandated. This will avoid the onus being put on the consumer to negotiate the terms of a fair price (a negotiation which would be particularly one sided) and avoids the perception that some customers will be paid an ‘unfair’ price if they are unable to negotiate effectively for the export price.

- ***How should the feed in tariff be updated over time?***

A mechanism to review the tariff over time has merit, although it would be best to avoid making these reviews too frequent, which would create uncertainty for consumers. A review on the basis of ‘evidence to the contrary’ (new evidence which materially alters the findings of this review) would be preferable to a carte blanche review process.

In terms of the tariff itself, as far as possible it should be structured as a percentage of the retail tariff, or in any other way which indexes it automatically against changes in the market price, to avoid the need to constantly update the tariff. The SKM MMA report provides a framework for how to do that.