

3 June 2016

I found your Moonee Ponds presentation and the following discussion on the true value of distributed energy enlightening. The approach and preferred options seem well reasoned and should form a sensible response within the limitations of the scope of the review.

The following are points arising that I believe warrant your consideration. They are presented in the same order as the questions posed in your draft report (Box 71 p120). My recommendations for actions are **highlighted**.

Wholesale market value of distributed generation exports

1. I fully support the move towards a minimum FiT that reflects actual prices in the wholesale market while the market itself is not distorted by distributed energy generation.
 - a. I consider that the current practice of purchasing distributed generation for sale in peak periods based on an average rate that includes off-peak usage is unconscionable.
 - b. The more granular the time blocks the better it will reflect the actual wholesale price. The proposed 3 tariff structure peak / shoulder / off-peak seems a reasonable compromise between simplicity and accuracy.
 - c. While seasonal variation would provide greater granularity, the main improvement comes from recognising time of day.
 - d. Perhaps reflecting the retailers' structure may reduce their implementation costs; however, these are unlikely to be extensive and easily accommodated with the significant profits embedded in the differential between the purchase (FiT) and resale (full tariff) of distributed energy.
 - e. Allowing for critical peak tariff is essential. This is accommodated within my proposed refinement in point 2 below.
 - f. It wasn't clear to me whether or not "Avoided Ancillary Fees" were in your illustrated FiT as proposed (presentation). **Could you clarify your position and quantify this?** P41 I would like to think these savings to retailers are passed on.
2. In order to properly reflect the wholesale price, **the Average Wholesale price to apply must be the generation-weighted average**, not a simple average.
 - a. A simple average understates the revenue that would be generated by solar generation (in deed any form of generation) in the market. I am sure centralised generators would not accept a simple average.
 - b. The weighting could either be actual demand in the market (ie net of distributed energy). It is available and it reflects prices in the wholesale market. Net distributed generation could also be used as it would better reflect the price for distributed generation in each time block. **I would like to see the impact of these options on the proposed FiT.**
 - c. I expect this to result in a much higher (and fairer) average FiT (prices are higher when demand is higher).
 - d. This also potentially replaces the need for your proposed "critical peak" adjustment.
 - e. I suspect that the weighted average will be volatile (particularly due to variations in the critical peak tariff each year). This could be overcome by basing the FiT on the average over the past 2, 3, 4 or 5 years. Noting that the longer the averaging period the less responsive the calculated FiT becomes to changes in the wholesale rates.

3. **Negative wholesale prices should be removed from the calculation of the average.** Paying to generate is a commercial decision by some centralised generators. The impact of this decision should remain with those generators and not small scale generators. I recognise that this is likely to be off-peak, however, it is the principle I am arguing and it may affect wind turbines (I am a solar generator).
4. **Please clarify the operation of GST on the FiT for retailers to apply.** I have seen electricity statements that use different approaches. Needless to say it can easily be used by retailers to effectively reduce the FIT by the GST amount.
 - a. I would like to see the credit for distributed energy offset against usage (both ex GST) and then GST applied to the net position.
5. The proposed adjustments for line losses appears sensible. I have no opinion on the number of zones or whether they are geographical or distributor based. The distributor based model may be easier to implement for retailers, but geographical zoning should not be an issue for the industry to implement.
 - a. A review mechanism for the boundary is required to ensure it stays current.
6. The deemed output component appears sensible but I have not examined it sufficiently to make an informed comment.

Environmental and social value of distributed generation electricity

7. You have identified market fees and charges of 0.1c/kWh, which I understand will be credited to the FIT. I suspect there may be more such embedded costs in the electricity supply. The same treatment should be afforded to other identified costs that are not associated with distributed generators – eg the transmission network predominately supports centralised generators. I understand that this is one area that the ESC is to examine later in the year.
8. **I would like to see quantification of the retail price building blocks** (as displayed pictorially in your report and presentation Box2.2 p20). This would provide the transparency to understand what and how costs are being charged to consumers in respect of centralised generation that do not apply to distributed generators. This may serve to highlight those areas where distributed generators provide a measureable economic benefit. To illustrate, the profitability to retailers of distributed generation seems significantly higher than the purchase of centralised generation. Perhaps a proportion of these wind fall profit should be shared with distributed generators?

Implementation (retailers and distributors)

9. Compliance costs for retailers should be negligible given they currently bill for peak / off-peak usage.
10. Perhaps fully reflecting the retailers' structure may reduce their implementation costs; however, these are unlikely to be extensive and easily accommodated with the significant profits embedded in the differential between the purchase (FiT) and resale (full tariff) of distributed energy.

Batteries

11. Batteries are game changers. I imagine this will enable the storage of excess generation to be released in peak periods. This will itself act to reduce volatility in the ½ hourly rates.

12. Ultimately, this reduced volatility will be reflected in a lower FiT when it is calculated each year. Importantly, the FiT is an approximation with an inherent lag to market rates. This lag is not unreasonable and should not be an issue. I comment on this in point 2 (d).
13. More importantly, as I noted at the outset, I support the proposed method while *the market is not distorted by distributed generation* (and batteries). When it does, the FiT will need to be revised.

Other issues I consider important:-

1. Retailers should be required to disclose whether or not they have the capacity to purchase distributed energy in ½ hourly blocks.
2. Retailers should be required to accept a proposal (or at least show cause why they won't) to purchase on the half hour.
3. Retailers should continue to be required to purchase all distributed energy. P39
4. The FiT is a minimum.
 - a. This minimum must continue.
 - b. Given the FiT is a minimum and the inflated price at which distributed generations is sold, Retailers have significant potential to pay more. To facilitate this, **I recommend that distributed generators be free to contract with different retailers for the purchase of their generation capacity from the retailer they use for consumption.** At this point a true competitive market would be formed and we may be able to entice retailers to pay above the minimum.
 - c. The retailer supplying electricity to a household should be the retailer of last resort for purchasing distributed electricity (to ensure at least one retailer will buy this capacity).
5. You briefly mention the Small Generation Aggregation Framework (SGAF) p14. On the surface this appears to be an ideal concept for small scale generators to give them the purchasing power that is currently lacking. My point 4 (b) (immediately above) is my attempt to improve the negotiating position of distributed generators in a market where all the power appears to be with the retailers. The potential for SGAF to achieve this should be explored further.

Regards

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