

27 May 2017

Independent Pricing and Regulatory Tribunal Review of Solar feed-in tariffs 2017/18 Level 15, 2-24 Rawson Place SYDNEY NSW 2000

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Dear Sir or Madam,

Re: Solar Feed-in Tariffs 2017/18

The Southern Sydney Regional Organisation of Councils (SSROC) is an association of Councils in the area south of Sydney harbour. SSROC provides a forum for the exchange of ideas between our member Councils, and an interface between governments, other Councils and key bodies on issues of common interest. We facilitate collaboration between councils on joint ventures, procurement, and projects including advocacy. Together, our member Councils cover, a population of over 1.7 million, or one third of the population of Sydney.

SSROC is committed to increasing the proportion of energy consumed within the region that is derived from renewable sources. To achieve this objective, we are delivering projects to increase the take-up of solar PV and to enable the community to improve energy efficiency, enabling our residents to save money of their electricity bills. An increase in the feed-in tariff is welcome. However, SSROC has the following concerns:

- reduction in the value of avoided losses,
- the methodology for calculating the feed-in tariff is not comprehensive,
- the feed-in tariff does not fully reflect the disruptive nature of distributed electricity generation,
- the methodology may be contributing to the trend for electricity costs to rise,
- Independent Pricing and Regulatory Tribunal (IPART) may miss an opportunity to contribute to the reform of the NEM,
- Distributed Network Service Providers (DNSP) need to participate in the review.

These issues are further explained below. SSROC is concerned that the regulatory framework surrounding the energy market, which was designed to supply electricity from centralised generation, is not changing to accommodate increasing decentralised generation.

Reduction in the Value of Avoided Losses

While welcoming the increase in the benchmarks overall, SSROC is disappointed to see that transmission losses component of the benchmarks has decreased (figure 4.1 of the Solar feed-in tariffs in 2017 Draft Recommendation). The description of the modelling methodology covers avoided losses, but gives no explanation of why this has fallen both in total and as a proportion of the whole benchmark value, for all three time periods. SSROC urges IPART to provide some further explanation of this change, as it is currently not possible to see any justification for it, and we are very keen to see the benchmarks reflect the real benefits that feed-ins deliver.



The Methodology

The current methodology for calculating the Feed-in Tariff accounts for forecast wholesale electricity price, solar premium, cost of transmission losses, and NEM costs, all of which we understand to be factors that affect the value of the feed-in to the electricity retailer and therefore reasonable. However, the methodology does not account for the value that the feed-in represents to the distribution network.

There is a continuing need for investment in the distribution network to expand it or to increase its capacity, and this need is escalating as existing network infrastructure ages, new suburbs are developed and urban intensification occurs in metropolitan Sydney. This investment has been a significant contributor to increasing electricity costs in recent years.

Distributed energy generation, including small-scale solar, has the potential to delay or even to avoid the cost of that additional investment in poles and wires, which is a benefit to the distribution network that is not recognised in the current methodology. This benefit needs to be quantified, and reflected in the value of the solar feed-in tariff.

Disruptive Technology

The feed-in tariff does not fully reflect the disruptive nature of distributed electricity generation. Small-scale solar (and other distributed generation) is changing the signals for network investment. Network investment has been triggered by demand and by ageing infrastructure, but demand has stayed quite steady in recent years, while infrastructure continues to age. As a result, prices rise, creating an incentive for both energy efficiency measures and for small-scale solar generation. This in turn reinforces the disruption to historical methods for planning network investment. In failing to incorporate the benefit to the distribution network into the feed-in tariff, the tariff contributes to the inaccurate investment planning caused by this disruptive technology.

Electricity Price Increase Trend

The methodology may be contributing to the trend for electricity costs to rise. As noted in the paragraph above, recent years have seen electricity prices rising even though demand has held steady. By not accurately reflecting the costs and benefits of distributed generation in the feed-in tariff, a problem is being created: as energy storage becomes more viable at a small scale, small-scale generators will be increasingly inclined to use battery storage and not to feed into the grid at all, or even go entirely off-grid. There will no incentive to consume grid electricity, as the reward for the feed-in is substantially less than the cost of grid electricity, and the potential savings from battery storage will soon be sufficient to justify its cost, which is already falling.

With grid electricity consumption (and even the number of consumers) falling, prices will have to rise even more for those who continue to use grid electricity. Risk of the so-called death spiral increases.

While the current contribution of small-scale generators is small, it is growing, and the potential is significant. SSROC would suggest that a better option is to use those increasing small-scale contributions to feed into the grid, by recognising and fully, accurately valuing their contribution. There is even potential to establish stable island networks that could function in isolation from the grid during a fault situation.

Incorporating small-scale distributed generation into the mix of feeds would be beneficial to the distribution network, and this should be acknowledged in the feed-in tariff.

IPART and NEM Reform

IPART may miss an opportunity to contribute to the reform of the NEM. SSROC is aware that calculating the benefits and costs of the contribution of small-scale generators to the distribution network is complex. However, we also suggest that it is a necessary part of the process of reforming the NEM to fairly and equitably deliver clean, secure and reliable electricity.

SSROC therefore recommends that IPART develop its methodology to incorporate recognition of the small-scale generation as a benefit to the distribution network. EY completed a report in 2015



for the Clean Energy Council¹ with funding from ARENA on exactly this issue. The report (page 11) identifies seven value categories to be included in the framework:

- 1. Network augmentation
- 2. Network support
- 3. Voltage regulation
- 4. Power quality issues
- 5. Reassessment of fault level coordination
- 6. Network reliability
- 7. Potential future islanding capability.

Also of note is a report by Frontier Economics for the Energy Networks Association². SSROC recommends these reports for consideration.

DNSP Participation

The benefits to the distribution networks would need to be identified and quantified with the participation of the DNSPs. It is not clear to SSROC that DNSPs are ready for reform, nor that the issues and potential benefits to them are well understood. It is possible that distributed generation is perceived as an inconvenience, or even as a threat. This is a barrier that will have to be overcome to achieve clean, secure and reliable energy supply in the future. Participation in the development of the methodology would begin to build a more positive attitude towards distributed generation.

Conclusion

SSROC strongly urges IPART to review its methodology for calculating feed-tariffs, and to engage with DNSPs as well as other stakeholders in this process.

Please note that due to the timing of this review it has not been possible for this submission to be noted or endorsed at a formal meeting of SSROC. I will contact IPART should any issues arise as a result.

For any enquiries regarding this submission, please feel free to contact me or Helen Sloan, Program Manager SSROC on 02 8396 3800 or ssroc@ssroc.nsw.gov.au.

Yours faithfully,



Namoi Dougall General Manager Southern Sydney Regional Organisation of Councils

¹ Evaluation Methodology of the Value of Small Scale Embedded Generation and Storage to Networks Task FPDI TA-2C for the Clean Energy Council, July 2015. Available: http://fpdi.cleanenergycouncil.org.au/reports/value-of-small-scale-generation.html Accessed: 23/5/17.

² Frontier Economics, Valuing the impact of local generation on electricity networks: a Report Prepared for The Energy Networks Association (ENA) February 2015. Available: http://www.aemc.gov.au/getattachment/6916f3a3-31d9-457b-8228-5530b64e1fcf/Energy-Networks-Association-Frontier-Economics.aspx Accessed: 23/5/17.