

15 December 2015

Mr Kim Wood, Principal Commissioner
Solar Feed-In Pricing Inquiry
Queensland Productivity Commission
PO Box 12112
George St QLD 4003

Inquiry into solar feed-in pricing in Queensland

Dear Mr Wood

I am writing to you following the recent commencement of the Queensland Productivity Commission's (the Commission's) *Inquiry into solar feed-in pricing in Queensland* commissioned by the Queensland Government. The purpose of this letter is to provide the initial perspectives of Australia's energy network sector on some of the issues under consideration in the review.

The ENA and its members recognise that the economically efficient integration and pricing of distributed solar generation is a significant opportunity to promote the long-term interests of all network customers by seeking to minimise overall energy costs to consumers, and minimise unfair and inequitable cross-subsidies between network users. Electricity networks will play an increasing role in managing and integrating an increasing pattern of 'inflows' and 'outflows' from a variety of distributed energy resources and connections. This could in the future have implications for the recovery of costs to be extended to all distribution network users, based on generation and consumption, rather than solely falling on consumption as it currently does under the existing *National Electricity Rules*.

Distributed generation is not the largest driver of implicit network cross-subsidies between customer segments, with more significant distortions caused by peak demand appliance use such as air-conditioning. However, under volumetric tariffs the average current cross-subsidies between solar and non-solar households have been estimated as at approximately \$120 per household by independent studies recently commissioned by the Australian Energy Market Commission (AEMC).¹

Importantly, analysis of future energy scenarios indicates that, in the absence of cost reflective tariffs being implemented, these implicit cross subsidies due to network tariffs will increase substantially over time, potentially reaching up to \$655 per annum by 2035. It would be appropriate for the Commission to have appropriate regard to the effect of such cross-subsidies and the incidence of cost impacts, if they remain in place when considering changes to incentives for distributed generation.

Energy network businesses consider the review will be one of a number of important opportunities to promote efficient integration of increasing levels of distributed generation within electricity distribution networks in Australia. ENA also recognises that the Commission's review will occur in the context of a series of separate but directly related initiatives, including the Victorian Essential Services Commissions' inquiry into the value of distributed generation, and the proposed introduction of a local generation network credit scheme under a current *National Electricity Rules* change application soon to be considered by the AEMC. The ENA notes these developments occur within a national electricity market. In ENA's view, a preferred outcome is a robust and nationally consistent framework and methodology

¹ NERA *Efficiency of Tariffs for Current and Emerging Technologies, A Report for the AEMC*, 21 July 2014

for the derivation and attribution of any network value of distributed energy resources, including solar PV.

ENA wishes to provide some early perspectives on the important task before the Commission. In particular ENA wishes to emphasise the following points:

- **Technology neutrality** – The review should also adopt an approach which is technology neutral and which does not introduce any additional distortions in consumers’ choice of fuels.
- **Need for comprehensive assessment** - Any robust report on the value of distributed solar generation should identify and evaluate the full range of costs and benefits of that generation. It would be undesirable for the Commission to be commissioned to provide a report on the value of solar generation which ignores material factors which impact on economically efficient investment and usage signals for all types of distributed generation.

This includes operational use cost impacts on the shared network (for example, costs related to two-way energy flows and voltage management), and investment requirements necessitated by the operation of the generator. This analysis should take a comprehensive approach to the material factors which influence the value of embedded generation. This includes the timing, location and nature of the output.

- **Potential benefits of developing a formula-based approach** – ENA recognises the substantial data-gathering, empirical and quantification challenges of determining a specific value for solar generation, particularly given that such a value will inevitably vary with location and time. Given this, a pragmatic, constructive first step may be to develop and consult upon a formula-based approach capable of adoption and shared application by networks and distribution solar generation owners, operators and proponents.

Such an approach has the benefit of potentially reducing scope for disputes, and being capable of ready and least cost application at the most efficient point of implementation. Such an approach would also be an opportunity to inform the national consideration of these issues in the two separate reviews referred to above.

- **Promoting equitable outcomes** - The design of feed-in tariffs or other policy support schemes should where possible seek to be equitable. As an example, schemes that have avenues for all customers to participate (i.e. customers occupying rental properties, or multi-storey dwellings) rather than owner-occupier customers with useable roof spaces should be preferred on equity grounds. Grid scale, community owned and commercial solar can be ways to address this issue.

Similarly, methodologies or values that have the practical result when implemented of perpetuating or expanding cross subsidies between households will fail to produce equitable outcomes, and may themselves also result in inefficient outcomes (such as inefficient network bypass).

The Commissions’ draft and final report are likely to provide a substantive focal point for public and policy-maker discussions at a state and national level on measures to facilitate the efficient integration of greater levels of distributed solar generation throughout electricity networks.

In ENA’s view, this reinforces the need for the Commission’s approach and independent findings to clearly discuss the *full* range of relevant societal costs and benefits to determine the *net* value of distributed solar generation and assess proposed regulatory or market interventions in this policy area.

As the Commonwealth Government’s *Smart Grid, Smart City* project identified, one of the key risks of incomplete or distorted investment and usage signals is the potential for costly outcomes for consumers broadly, and the promotion of inefficient and inequitable subsidies between network

customers or customer classes. The network sector encourages close analysis by the Commission of these issues in the draft and final report.

Should you wish to discuss any of these issues further, please feel free to contact either myself (02 6272 1555) or Garth Crawford, Executive Director, Economic Regulation on 02 6272 1507.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'John Bradley', written in a cursive style.

John Bradley
Chief Executive Officer