

Reference: ERC0191

Re: Consultation Paper - National Electricity Amendment (Local Generation Network Credits) Rule 2015

GO energy welcomes the opportunity to respond to the *Consultation Paper* under project reference code ERC0191.

GO energy is an Australian 'Clean Tech Energy Retailer', focused on reducing customer utility costs and reliance on energy from traditional fossil fuel sources through the provision of clean technology opportunities. GO energy has a background in energy efficiency and renewable energy products and services, and is particularly interested in the development of an energy market environment that can facilitate the uptake of embedded generation that is not solely behind the meter, but can deliver solutions to local communities.

Incentives for small scale embedded generators

GO energy has reviewed the proposed rule change and while the recommendation may have merit in those situations where there is the opportunity to involve the local network service provider due to potential impact on network investment, it does not provide any solution for implementation of small scale embedded generation where there is no network impact.

Our view is that the primary objective should be to determine whether the end users of the market service, the energy consumer, derives greater benefit from the implementation of small scale embedded generation. Whether the DNSP derives a benefit may be consequential, although it is recognised that any DNSP should not be disadvantaged by any rule change.

It is pointed out in section 2.2 of the *Consultation Paper* that there are mechanisms in the NER to incentivise efficient use of non-network solutions. What is not stated, but is implicit, is that every one of these mechanisms is under the power of a DNSP to instigate or approve. The market mechanisms have been established on the historical notion of a centralised distribution network supporting large scale generation, whereas the notion underlying the request for this rule change is to enable changes to distribution networks to support small scale, distributed generation.

What GO energy sees in the current market, and driven by the lack of incentives that are non-network centric, is a scramble for ideas and concepts that can promote effective implementation of small scale distributed generation.

Barriers to implementation of small scale embedded generators

In the opening Summary of the *Consultation Paper* it is stated that the rule change request is focussed on the network support benefits. It is also pointed out in section 5.2.1 that the location of any local generator, based on whether that location is where additional network investment will soon be needed or where there is spare network capacity, will in part determine the value of the generation *to the network*.

This focus on future network investment is a major impediment to the future of small scale embedded generation investment.

A cursory review of the network landscape of today reveals two distinct scenarios: those network zones that will potentially see growth and those that are forecast to see decline in consumption and demand. A review of the network planning papers submitted by the DNSPs in recent years suggest that there is far more decline than there is growth. If the only value that is to be considered for a rule change to promote small scale embedded generation is the deferral or down-sizing of network investment then the majority of the market is immediately excluded for consideration.

What is required is a market environment that encourages effective utilisation of network assets, not under-utilisation.

At present the market process allows for a DNSP to obtain an agreed return on their network assets, regardless of the utilisation of those assets. Once the AER has agreed on the network capital strategy each determination, each network then prepares the pricing plan that achieves recoupment of their target revenue entitlement. With the continuing decline in consumption and demand since 2009, the DNSPs are resorting to an increase in fixed charges in their pricing mix to ensure receipt of revenues.

This sequence of events does not encourage any action on behalf of DNSPs to promote use of their services, nor any emphasis to correctly size future capital investment, be it for growth or aged asset replacement. And by setting across-network location charges there is no incentive to review the zone variances of under-utilisation, and subsequently put any market incentives in place to generate more effective usage.

Small scale embedded generation outside of the market

It is recognised by all market participants that small scale embedded generation, in particular PV solar, is being installed behind the meter and therefore outside of market control. Where this embedded generation is connected to a network the market can capture information about generation capability and subsequently estimate the consumption that is no longer being managed through the market. Nearly all this local generation is for self consumption, the only exceptions being pilot projects for community-based generation where a single embedded generator may deliver electricity to more than one consumer, and it is understood that the facilitation of these pilot projects requires relaxation of some market rules.

So, in an environment where embedded generation is only of value where the generator is also the consumer, there is a distinct divide between those consumers that have the physical space to install embedded generation and those that do not.

As an example, The Ultimo-Pymont Sustainable Precinct (Smart Locale) has undertaken an assessment of those properties in the Precinct in Sydney to determine installation capacity on rooftops. Whilst GO energy is not privy to all of the information collected, an outsider observation of that precinct can easily identify that a proportion of real estate is unsuitable for rooftop solar, and Smart Locale says its study identified 22 buildings with potential for a total of 2MW of renewable generation, of which 6-7 were deemed most prospective. Under current market incentives, or lack thereof, if this project were to proceed there would be a proportion of the precinct that has solar installed for direct benefit, and the remainder goes without.

The end result, from GO energy's view, is that:

- The market will see further reduction in market use,
- The DNSP will see further reduction in network utilisation,
- We will all see an inefficient installation of local generation because of the limitation of 1:1 generation to consumption.

A better outcome for the Ultimo-Pymont community would be the installation of a concentrated, community-based embedded generator (or generators) that could service the demand of the broader community, and not just those consumers with rooftop space. Smart Locale has advised Go energy that it has recently sought grant support from the City of Sydney to conduct a feasibility study for a 'distributed renewable energy power station' of 1-2MW in Ultimo Pymont.

Appropriate incentives for small scale embedded generators

The rule change in the *Consultation Paper* may have merit where the location of embedded generation is an area of network growth (and Ultimo-Pymont may be situated in such an area). GO energy is not providing comment on this aspect.

The rule change, and the objective as a whole, does not appear to create any benefit to the end consumer community, who ultimately pay for the existence of the market, where embedded generation is being contemplated in an area of network under-utilisation or soon-to-be under-utilisation due to forecast decline. GO energy recommends that the subject of rule change consider the two different situations in our network areas, and recommends the introduction of zonal network pricing for embedded generation to encourage efficient utilisation of network assets, which we, as consumers, are already paying for.

Zonal network pricing

The need for the market and DNSPs to consider zonal network pricing is founded on the premise that the end user community will continue to embrace local generation, with or without the encouragement of the government. The continued expansion of local generation, *conducted in the manner imposed by market rules in place today*, means that the resulting generation is substantially forfeited by the market transmission and distribution systems, other than some modest feed-in. Due to the one-size-fits-all approach to network pricing, local generation for local community use is being planned to *avoid* the market.

What is likely to happen is that there will be the emergence of substitute local networks to achieve the desired distribution, which seems obsolete when there is an already built and functioning solution, which is about to be under-utilised. If this seems improbable, consider the duplication of fixed line telephony infrastructure implemented by Optus when contestability in the telecommunications market commenced in Australia.

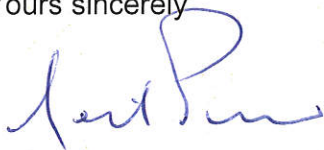
To encourage utilisation of the current network there needs to be a greater awareness of under-utilisation at the substation, or zone, level of a network. Shared community generation, in the context of small scale distributed generation, is most likely to occur within a zone of the network. Similar to the ideas that have created the concept of Virtual Net Metering, zonal pricing is about recognising the desire to use a local zone of the broader distribution network to transport electricity for that local community. The addition of local generation to an under-utilised portion of the network can add value for the network provider, provided the network pricing is beneficial to the community small scale generation project, to the point that use of the network is the most attractive option.

Separation of small scale from large scale generation

It is GO energy's view that the issues in promoting small scale embedded generation are specific to small scale, and should be considered separate to large scale generation.

Should you have any questions in relation to this submission, please contact David West, National C&I Manager, at GO energy, on 02 8907 7427.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Neil Purser".

Neil Purser
Chief Operating Officer
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