

Submission to AEMC rule change proposal: Local Generation Network Credits

Community Power Agency

Introduction

Thank you for the opportunity to provide a submission to the Local Generation Network Credits rule change proposal (ERC0191).

About Community Power Agency

Community Power Agency (CPA) was established to grow a vibrant community energy sector in Australia. Since founding in 2011, CPA has worked with and researched over 60 community energy groups across Australia and internationally. We have significant experience in policy design and implementation to stimulate community energy. Examples include helping the NSW Government design their community energy policy, being part of the development of the National Community Energy Strategy and playing a review and assessment role in all of the ACT Government's Reverse Auctions.

In addition to our expertise in community energy, the Community Power Agency team has significant renewable policy and energy market experience.

Submission focus

This submission is in two parts:

1. Firstly, we critique the treatment, by AEMC, of the Local Generation Network Credit proposal submitted by the Institute for Sustainable Futures at UTS (ISF).
2. Secondly, we address the draft determination as proposed by AEMC

For more information

For more information about any of the comments or recommendations made in this submission please contact Tom Nockolds, Director, Community Power Agency, 0400 992 112, tom@cpagency.org.au, www.cpagency.org.au.

Preamble – LGNC relevance to community energy

The Local Generation Network Credits rule change is highly relevant to the community energy sector. Communities are motivated to implement local energy infrastructure so that they can have greater levels of self determination of the way in which their energy is provided. When these generation assets are locally developed, they invariably deliver a greater set of benefits for those communities.

The current regulatory environment creates an artificial situation whereby community energy groups are corralled into developing behind-the-meter generators, sized for minimum export to the grid. This is despite the desire for many communities to maximise available roof space, system size or to consume the energy within the local distribution area.

In almost all cases it is not currently financially viable for a community energy group to consider a “in-front of the meter” medium sized (100kW to 1MW) local generator (such as wind, solar PV, bio-energy, storage and so forth) which exports energy at peak times; this is because the only value these generators receive is the export value of the energy, not the network benefit they may be providing.

Another example of community groups ‘hacking’ around the rules is when communities create embedded micro-grids in an attempt to extract some value through their collective action.

The combination of low wholesale cost of energy (export price paid for electricity) and high network costs, in an environment where there is no recognition for the value that embedded generators can potentially bring to the network, including through continued use of the network, create these perverse outcomes.

Network Support Payments are often an inappropriate or inaccessible mechanism for community energy groups are developing projects which are too small to handle the transaction costs of entering into an agreement of this sort.

Part 1 – AEMC treatment of the proposed rule change

We are troubled by the treatment and response by AEMC to the proposed rule change. For example:

- The ISF modelling showed that the main benefits to the network occurred at the transmission and sub-transmission level. AEMC specifically excluded transmission and sub-transmission benefits from their analysis of benefits.
- The ISF modelling included a broad range of generation technologies. AEMC restricted their modelling to only include solar PV and arrived, as expected, at non-beneficial outcomes.
- AEMC disregarded the ‘highly asymmetric’ outcome of the sensitivity analysis conducted with respect to energy demand growth rates. Australia’s energy market institutions have in the last decade had a poor track record in making predictions on future energy demand. The failure by AEMC in recognising the value in a proposed rule change with huge potential up-side benefit (for a high growth-rate scenario for example through EV uptake) and very low down-side (for a low-growth rate) is disappointing.

The proponents undertook significant stakeholder engagement in developing the proposed rule and we’re worried that this consultative approach was dismissed by a regulator that thinks it knows best without considering the views of stakeholders. AEMC’s refusal to consider the valid concerns raised by stakeholders regarding private wires and partial use of the system is also disappointing.

All experts and observers agree that energy markets are undergoing a period of unprecedented change. The draft determination is a business-as-usual solution that draws on a knowledge set that is ill-prepared for the change our energy systems are going through. Sticking with these business-as-usual approaches at this time is dangerous and the best strategy for dealing with the uncertainty is to consult widely and frequently as the dynamics of our energy system change. Community Power

Agency advocate for human-centred design, which starts with the hopes, fears and needs of the users to determine what is most desirable and will appeal most to the users of our energy system.¹

Part 2 – The AEMC draft determination

It is clear that the AEMC has taken the view that the proposed rule change was flawed. For reasons outlined above, we strongly disagree with this view. The alternative “draft determination” in our view is the wrong process, misses the point and is retrograde step given recent developments.

The wrong process

If AEMC felt that there were flaws in the submission, they should have worked with the project proponents to develop an alternative determination.

For example, AEMC has failed to shed any light on the impact a LGNC mechanism would have on network costs. The modelling supporting the proposed rule change specifically excluded small generators and existing systems because it was known that including these would result in no overall benefit. By repeating this methodology, and limiting it to only solar generation, AEMC has brought no new information to light, so failing to demonstrate that a LGNC is unable to reduce network costs. We are perplexed as to why the alternative modelling presented by the rule change proponents was disregarded by AEMC and wonder what beneficial alternative rule change could have been achieved with a more collaborative approach by AEMC.

Another troublesome process failure is AEMC’s unwillingness to accept new information which came to light during the development of the proposed rule change. The specific exclusion of small (<10kW) and existing generators from the calculations was a late addition to the rule change proposal. Simply dismissing this as being in conflict with the original rule change proposal demonstrates a culture that is inflexible and jumps at opportunities to maintain the status quo.

Missing the point

The draft determination misses the point and does nothing to address the issues the proposed rule change sought to address.

It is important that network operators are able to implement incentives to encourage local energy generators. Without adequate incentives, we will see increasing numbers of behind-the-meter generators, grid defections, embedded network and private wire solutions – all of which have the potential to offer worse outcomes for the network operators and consumers alike.

In the absence of changes to the rules, communities across Australia are left to ‘hack’ around the rules in an effort to make their projects stack up financially. Some communities, for example, are considering the approach of making their town an embedded network by installing a ‘head meter’ which could allow use of the network behind that head meter at reduced cost. The result is something akin to load defection, with reduced payments going to network operators and so the costs needing to be smeared over the remaining customers located elsewhere and still connected to the network. With an LGNC in place, specifically targeted at community scale generation, it is unlikely these sub-optimal solutions would need to be implemented.

A backwards step

The information which the draft determination would require to be published already exists in the Network Opportunity Maps². This resource, developed by ISF is an online map and database format and is more extensive in its scope than the data proposed by the draft determination.

¹ The Field Guide to Human-Centred Design, Ideo.org

² <http://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/our-research/energy-and-climate-1#-span-view-the-network-opportunity-maps-span->

Requiring network operators to publish this information in PDF form as an appendix to their annual reporting requirements is not as accessible or useful as the existing data which is already available online, including in the federally funded AREMI map³.

Further, regulating the provision of this information as part of annual reporting will very likely result in some network operators choosing to opt out of the voluntary reporting they are already doing by providing the data to the existing resource. ALL network operators nationally are voluntarily reporting this information as a result of the work of ISF and it would be a backward step if one or some of them decided that voluntary reporting was no longer required once mandatory reporting was implemented.

The draft determination is a misinformed and backwards idea and we strongly discourage AEMC from proceeding with this off-topic and unhelpful rule change.

Recommendation

We recommend the AEMC retract the draft determination and re-engage with the proponents behind the proposed rule change. There are a number of alternative options which have potential to actually address the issues behind the proposed rule change and these should be explored further with active involvement from AEMC.

³ <http://nationalmap.gov.au/renewables/>