



Australian Energy Market Commission

PO Box A2449

Sydney South NSW 1235

2 November 2016

To whom it may concern,

Re: AEMC Draft Rule Determination: Local Generation Network Credits

The Northern Alliance for Greenhouse Action (NAGA) is pleased to take this opportunity to submit a response to the AEMC on the draft rule determination for Local Generation Network Credits.

NAGA is a network of nine northern metropolitan councils in Melbourne working to achieve significant emissions abatement and energy cost savings by delivering effective programs and leveraging local government, community and business action. Our council members include the cities of Banyule, Darebin, Hume, Manningham, Whittlesea, Yarra, Melbourne, Moreland, Nillumbik Shire Council and the Moreland Energy Foundation Limited. NAGA formed in 2002 to share information, conduct advocacy on climate change and energy market reform on behalf of its members and cooperate on research and develop innovative projects.

Our submission will concentrate on the impact of this draft determination for local governments in our region.

We consider the Local Generation Network Credit rule change a critical pathway for the energy market to evolve and transition to a more equitable low carbon future. It offered a real opportunity for energy market reform that we feel has been missed by this draft determination and has significant implications for the efficiency of the electricity system moving forward.

Efficient utilisation of the network

Without the LGNC local governments are incentivised to duplicate electricity network infrastructure through building private wires across property boundaries to share electricity with neighbours. Through our solar scale up working group, the NAGA councils have over the past five years installed almost 4MW of solar on council buildings in the region, ranging from 10-150kw in size. Most of our councils have exhausted the potential for large scale solar on their own buildings where they must size systems for self-consumption only. Similarly a number of our councils are investing in other technologies such as co-generation and tri-generation, and in other parts of the state, bioenergy and wind.

LGNC's would provide an opportunity for councils to significantly increase their ambition in local renewable energy generation by sharing export electricity with their local community. At the moment the business case only favours behind the meter consumption, with exports only receiving the small feed in tariff. Councils own many buildings with large roof spaces that have little daytime energy demand despite nearby facilities with poor solar potential having high demand.

In our view it is critical that a mechanism is developed to incentivise customers to use the existing electricity network, so as to avoid mass duplication of infrastructure through the building of private wires. It also prevents the likelihood of mass defection of load from the electricity network as consumers seek to generate and share their own low carbon energy in new ways. This risk should not be underestimated and would be the worst social, environmental and economic outcome for all consumers. We consider the electricity network to be an important asset in a low carbon energy future, but the rules need to change to facilitate optimal integration of new energy technologies and efficient

utilisation of existing assets. We think it a mistake that the AEMC decided these aspects were out of scope, as they seem to be of central importance when considering the cost and benefit of an LGNC.

Similarly there is significant potential for councils to work with electricity networks to identify areas of network constraints and how this might be alleviated through local renewable energy generation, and or demand management. There are significant opportunities and momentum for networks, retailers, local and state government and the broader community to collaborate on new integrated energy solutions at a local level, and this rule determination inhibits this opportunity.

Invalid decision based on invalid modelling

We noted the modelling performed for the AEMC to interpret the rule change was based on very different assumptions to the recommendations which emerged from the economic modelling undertaken as part of the multi-stakeholder ARENA project on LGNCs and electricity trading. We know that the draft determination was delayed from July to September to take account of these results. Therefore we do not consider that the current draft determination can rely on this modelling and request a review to be undertaken. In particular we note the following:

- The ISF modelling limited the credit being awarded to a minimum size of 10kw and excludes all existing systems. By contrast the AEMC includes all systems including household level solar PV.
- ISF modelling considered multiple forms of local renewable energy generation such as PV, wind, cogen, hydro and bioenergy. The AEMC only considered solar PV.
- Most of the benefits in the ISF model occurred upstream, in the transmission and sub transmission levels of the electricity network. The AEMC only considered ability to alleviate zone substation constraints.

Proposed alternative rule change regarding system limitations

We note the AEMC has proposed what it considers to be a preferable rule change in the form of requiring DNSPs to annually publish system limitations reports. We do not see how this addresses the same issues being proposed by the LGNC, nor do we see the need for this rule change given a number of current processes already underway that are more beneficial to consumers.

For example, the existing ISF [Network Opportunity Maps](#) provide a substation level visualisation of network constraints and associated opportunities at a national level. This has been developed in collaboration between networks and other stakeholders and is a positive step towards a cooperative low energy future.

Similarly, networks already publish this information in their Distribution Annual Planning Reports. United Energy has gone one step further in turning these maps into easy visualisations of [local network constraints](#). From a local council planning point of view we consider this to be a best practice example and the most useful for working together on demand management and non-network solutions. NAGA is currently undertaking a project called “Future Energy Planning” with Victorian networks and local governments to improve the exchange of information and collaboration between both sectors. As part of this project we are working with each of the Victorian networks to produce these maps in a similar format to the United Energy network. We are also hopeful that these maps will eventually become a planning overlay that will trigger when new developments are proposed in areas of existing network constraints.

We recommend that the AEMC encourages networks to instead provide network constraints at a finer resolution than the substation level that can be easily integrated into the existing Network Opportunity Maps.

Limitations of the AEMC rule making process

This draft determination is a clear demonstration of the limitations of the current National Electricity Objective (NEO) in not considering broader environmental and social objectives. The National Electricity Objective (NEO) is no longer appropriate to the current and future Australian energy market. The NEO does not recognise the interest of the community at large and confines consumer interests to economic interest alone.

The interpretation of ‘efficient investment’ has resulted in unbalanced rule making and a market bias that supports centralised infrastructure rather than demand management or other distributed generation solutions to network issues. The NEO is to be achieved with respect to “firstly, price, quality, safety, reliability, and security of supply of electricity and secondly the reliability, safety and security of the national electricity system.” In the absence of a NEO that recognises the need to reduce greenhouse gas emissions, incumbent fossil fuel generators, generator-retailers and network businesses have consistently used these current objectives to protect and advance their own interests and disproportionately influence regulatory reform.

Current energy market rules mean there are really only two main viable business models for local generation using renewables – behind the meter solar, or large-scale wind or solar. Community groups and councils have developed models for both of these approaches, but it means that a mid-scale community solar farm or bioenergy projects are currently not cost effective, constraining what communities can do. Particular challenges facing the economic viability of mid-scale renewables projects include:

- the difficulty negotiating a good power purchasing agreement (PPA) with a retailer;
- the cost of grid-connection; and
- the high cost of using the grid, even if just transporting energy a short distance.

Despite recent attempts to affect change in the energy market through rule changes, the AEMC is not required to consider the social and environmental benefits when making decisions. This is a huge barrier for proponents of new energy models and advocates of decarbonisation. If instead the NEO included considerations of the need to reduce sectoral greenhouse gas emissions and promote social equity, it is arguable that the AEMC would have landed on a very different outcome.

- **LGNC is not a cross subsidy at the expense of broader consumers**

We do not consider that a credit paid to local generators for the network value they provide to be a cross subsidy that is borne out by other consumers. The value paid to the generator should reflect the value they provide in deferring network augmentation by reducing underlying demand across the network, and particularly in reducing congestion on the transmission network. This value has been recognised by the Victorian Essential Services Commission (ESC) in its recent [inquiry into the true value of distributed generation](#). It has also been explored in depth by the Clean Energy Council in their report on [calculating the network benefit of small scale generation](#). Both of these reports point out that there is a real value that is being provided to all consumers from distributed small and medium scale generation that is currently not being recognised in any adequate financial payment.

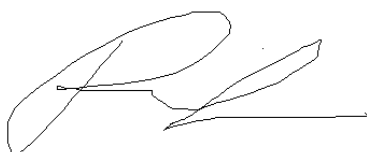
In summary, we consider the AEMC draft determination on the Local Generation Network Credit to be a missed opportunity for the transformation of our electricity system. We consider that business as usual will lead to ineffective utilisation of the existing network, and duplication of network infrastructure through those seeking to avoid exporting energy in front of the meter. We also do not consider the modelling performed for the AEMC to be adequately considering the scope of the proposed rule change and should be re-examined before a final determination is made.

- **Suitability of existing provisions to incentivise distributed generation;**

AEMC draft rule determination claims that existing network rules and mechanisms are adequate to support and incentivise distributed generation. This is not the case for smaller distributed generation systems. Particularly the main mechanisms of ‘Network support payments’ and ‘Regulatory Investment Tests (RIT-D and RIT-T) are unsuitable support mechanisms for smaller distributed generation projects that are less than 5MW or where projects would offset distribution or transmission costs by \$5 and \$6 million. There are little to no incentive for smaller distributed generators without the payment of a local generation network credit.

Please contact Rob Law (phone: 9385 8514 or email rob@mefl.com.au) if you would like further information, case studies or any clarification regarding the issues raised in this letter.

Yours sincerely



Rob Law

Project Manager

The views represented in this submission do not necessarily represent the views of all NAGA members individually.