

3 November 2016

Mr John Pierce
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Local Generation Network Credits

Dear Mr Pierce

The Energy Networks Association welcomes the opportunity to make a submission in response to the Australian Energy Market Commission's (AEMC) draft determination on Local Generation Network Credits.

In summary, for the reasons outlined below, the ENA strongly supports the AEMC's decision not to proceed with the proposed Rule. The ENA also supports a mechanism which gives providers of non-network solutions ready access to information in a consistent and usable format. However, the ENA has a few concerns with some elements of the preferred Rule which are also outlined below.

Context in which the draft determination is made

The AEMC's draft decision comes at an important time for the energy industry which is going through a period of substantial change. The AEMC is correct in its observation that the sector is moving towards greater diversity in how, where and when electricity is produced and consumed, and how it is delivered. The ENA's response to the Rule Change proposal noted that:

- this dynamic environment will continue to rely on electricity networks as enabling platforms for how consumers choose generate, store and use electricity, and
- efficient integration of distributed energy resources into the network, provides greater opportunity to reduce future network costs while ensuring grid resilience and reliability for the ultimate benefit of consumers.

The work currently being undertaken by ENA with CSIRO on the development of the Electricity Network Transformation Roadmap¹ (Roadmap) has revealed that customers, rather than traditional utilities, are likely to determine more than a quarter of all system investment decisions between now and 2050. There are a number of alternative transition paths to manage this change and the Roadmap attempts to identify a preferred transition path with a focus on network resilience, customer choice and lowest cost.

To support the development of the Roadmap, CSIRO and Energeia jointly modelled how different tariff structures and tariff assignment mechanisms affect customer decisions around the uptake and operation of new technology or new tariffs and the consequence of this for network expenditure,

¹ For details on the Electricity Network Transformation Roadmap, refer to <http://www.ena.asn.au/electricity-network-transformation-roadmap>

energy prices, customer impacts and overall economic efficiency. Based on the quantitative analysis, Energeia recommended that networks need to develop additional incentive mechanisms to “orchestrate” distributed generation at a dynamic and locational level in addition to broad based pricing arrangements to achieve lower costs over time².

ENA supports AEMC’s decision not to proceed with proposed Rule

The indicative findings in the Energeia report are relevant for the current Rule change which looks at the operation of a broadband network credit mechanism to incentivise investment in embedded generation. In its submission to the original rule change proposal, the ENA noted in particular that the application of a mandated set of uniform and highly averaged network credits may risk:

- incentivising inefficient investment in, and use of, Embedded Generation in locations, quantities or technologies where it may create little benefit to networks
- incentivising inefficient investment in, and use of, EG in locations, quantities or technologies where it imposes net costs on networks
- disincentivising efficient investment in and use of EG in locations, quantities and technologies where it has the potential to create material net benefits to networks

While further attempts have been made by the proponents and other stakeholders to improve the original rule proposed, these problems still remain.

The AEMC correctly points out that, apart from the costs of connection, embedded generators are not exposed to:

- risk of increases in net costs for networks or
- any excess of payments made to generators which are not offset by reduced forward network investment

Under the existing National Electricity Rules the recovery of these costs solely falls on end use customers in the form of higher prices. Therefore, for the proposed Rule to promote the long term interests of customers, there would need to be a clear demonstration that the total network costs, including the cost of estimating and administering the scheme, and the credit itself, are less than the costs that a DNSP would have incurred to meet demand in the absence of energy exported by small-scale embedded generators. The ENA concurs with the AEMC’s consultants applying the proposed Rule would not allow for a lower cost outcome for customers over time.

Shortly after the Rule change proposal was published, ENA members accepted an invitation from the Institute of Sustainable Futures to develop 5 case studies for the purpose of creating a virtual trial of the credit scheme and to identify the financial impact of the introduction of LGNC payments. These case studies included:

- Winton, in Ergon Energy’s network area
- Byron Bay, in Essential Energy’s network area
- Willoughby, in Ausgrid’s network area
- Wannon Water, in Powercor’s network area

² Energeia “Network Pricing and Incentives Reform”, October 2016 – refer to [link](#)

- Moira/Swan Hill, in Powercor's network area.

ENA members contributed information and resources to assist ISF undertake analysis of different options, with and without embedded generation, and with different types of incentive arrangements. All the case studies resulted in Local Generation Network Credit payments being made by the network service provider to the embedded generator and these payments would have been passed on to customers under normal pricing arrangements. Importantly however, none of the case studies selected were able to identify any reduction in future network investment as a result of the embedded generation.

This observation is consistent with analysis by AECOM for the AEMC showing that the proposed Rule would have resulted in many instances of payments being made to embedded generators with no corresponding reduction in future network costs. Even where there is a projected system limitation, AECOM demonstrated that LGNCs are likely to significantly increase costs to consumers while offering little or no deferral of network investment.

Other reasons supporting the AEMC decision

The AEMC is correct in expressing concerns over the potential overlap of this particular credit scheme with other mechanisms already in place. The ENA's earlier submission outlined the various regulatory mechanisms in place to deal with the incentives for embedded generation connection. Many of these mechanisms are relatively new or still being developed and it was not clear on how the proposed rule would interact with the relevant features of the regulatory framework as it currently stands and operates. The ENA similarly agrees with the AEMC's findings that LGNCs, no matter how designed, are likely to result in significant implementation, administration and operation costs for DNSPs and the AER.

Preferred Rule

The ENA strongly supports mechanisms which:

1. allow for more constructive engagement between providers of non-network solutions and DNSPs
2. ensure providers of non-network solutions are able to easily access information about system limitations
3. allow ready access to information in a consistent and usable format
4. operate under a consistent but flexible framework that can readily adapt to changing conditions without stifling innovation

The AEMC's draft determination highlights initiatives that already exist to provide better information to assist providers of non-network solutions in their Distribution Annual Planning Reports (DAPR). The ENA and members have also been working closely with the Institute for Sustainable Futures (ISF) and in collaboration with AEMO, the AEMC and the AER on Network Opportunity Maps³ aimed at achieving the above goals. These maps are an *industry led mechanism*, developed jointly with proponents and advocates of non-network solutions and visually presents information about grid constraints and investment opportunities in a consistent and easily accessible format. The ENA hopes to work with stakeholders to develop these maps further, allowing them to evolve to changing conditions and improved information over time. The intention is for the Network Opportunity Maps reporting

³ <http://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/our-research/energy-and-climate-1>

mechanism to support more specific and comprehensive information contained in each network services provider's DAPR.

The AEMC's preferred rule establishes a new "system limitation report" as a separate *regulatory mechanism* to achieve the above four objectives. Both the Systems Limitation Report and the industry led Network Opportunity Maps are designed to achieve similar objectives and are likely to overlap. However the ENA believes the merits of an industry led mechanism to a regulatory mechanism should not be ignored. In many ways, a single industry led mechanism is superior to a regulatory mechanism (or an overlap of the two) in terms of specificity, proportionality, symmetry and cost minimisation.

Should the AEMC prefer a separate regulatory mechanism in addition to one that is industry led, customers would benefit from regulatory mechanisms aligning with industry based developments wherever possible. This is particularly the case for system level constraint information which is likely to change and improve over time – and hence may supersede regulatory mechanisms over time. The AEMC may wish to consider how it may cater for this in the design of the preferred rule or in the operation of the framework through the AER. This would be consistent with the AEMC's goal of a flexible reporting framework that can readily adapt to changing conditions without stifling innovation.

In terms of the specific Rule requirements, there is a risk that a compliance and assurance-driven reporting framework will create problems for networks and for customers when dealing with overlapping information. In addition to the overlap with the industry mechanism, the information requirements for the System Limitations Report will necessarily overlap with the DAPR. The AEMC has addressed the potential overlap in the preferred Rule by ensuring the Systems Limitation Report is not new information, but is sourced from what is provided in each DAPR. In other words, the Systems Limitation Report is intended to present the same information in the DAPR, but in a useable, consistent and accessible format. If the Rules are clear in this approach and there is consistency between the two reports, the risks are somewhat minimised.

The ENA seeks clarification on the information requirements for investment solutions and deferral value. The Rule as drafted could be interpreted as requiring network providers to publish the actual dollar value of proposed solutions to alleviate a constraint. Publishing the dollar value of actual or expected solutions may diminish the competitive process for non-network alternatives and be counter to what the AER is trying to achieve. Other metrics such as indicative or benchmark costs, or alternative, more specific information about the amount of capacity and time needed to alleviate the constraint may be more suitable.

If you would like to discuss this submission further, please do not hesitate to contact Brendon Crown on (02) 6272 1515 or via email at bcrown@ena.asn.au.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'John Bradley', is positioned above the typed name.

John Bradley
Chief Executive Officer