

4<sup>th</sup> February 2016

Australia Energy Market Commission  
PO Box A2449  
Sydney south NSW 1235  
[www.aemc.gov.au](http://www.aemc.gov.au)

Project Reference Code: ERC0191

Dear Sir/Madam,

APA Group is pleased to have an opportunity to provide comments to the Australia Energy Market Commission (AEMC) with regard to the "Consultation Paper – National Electricity Amendment (Local Generation Network Credits) Rule 2015 (the paper). APA understands that the AEMC will consider the responses to the paper and use the feedback to conduct stakeholder workshops and further consultation, with a final determination to be released 6<sup>th</sup> October, 2016.

#### **About APA Group**

APA Group (APA) is Australia's largest natural gas infrastructure business, owning and operating approximately \$19 billion of energy assets. Its gas transmission pipelines span every state and territory in mainland Australia, delivering approximately half of the nation's gas usage. APA has direct management and operational control over its assets and investments.

APA also has an ownership interest in, and operates the Allgas natural gas distribution network, and operates the natural gas distribution networks of Australian Gas Networks (formerly Envestra Limited), which together contain approximately 27,000 kilometres of gas mains and 1.3 million consumer connections.

APA also owns other energy infrastructure assets such as gas storage facilities and wind farms. In addition to the Allgas Distribution Network, APA also has equity interests in a number of energy infrastructure assets, including the SEAGas Pipeline, and the Ethane Pipeline Income Fund. APA is listed on ASX and is included in the S&P ASX 50 Index.

APA thanks the Department for the opportunity to comment on the Paper. Please contact either Josh Hankey (07 3215 6632) or myself (08 8113 9197) should you wish to discuss our submission further.

Yours sincerely

Peter Gayen  
Manager Networks Commercial

## Executive Summary

APA supports in principle the Local Generation Network Credit (LGNC) rule change proposal from City of Sydney, Total Environment Centre and the Property Council of Australia (the proponents) and fundamentally believes that the LGNC methodology, when applied, will be in the long term interests of energy users.

This proposal, if introduced, would see the introduction of a new payment to be paid by electricity distribution businesses to embedded generators, reflecting the value that embedded generation brings to the electricity distribution network. Although issues related to the calculation of this payment are quite involved, APA believes this approach to identifying and paying the value provided by embedded generation will benefit energy consumers by putting downward pressure on electricity prices.

APA believes that the current mechanisms in the NER, designed to incentivise or reward embedded generators, still remain relevant, however small generators in particular will be rewarded more equitably and effectively under an LGNC mechanism, than under current mechanisms.

APA accepts that challenges still exist in regard to calculation of the value of the LGNC, but also believes that through consultation, an effective LGNC process can be established.

In regard to the consultation process, APA believes that the proposed AEMC process for the Rule Change consultation is logical and thorough. APA will continue to participate in the consultation process, which is planned to conclude with the Publication of Final Determination, 6<sup>th</sup> October 2016.

## Discussion

APA supports the LGNC concept and need for the introduction of a distribution network payment to embedded generators, to reflect the benefits embedded generators provide to the network.

### *How is the LGNC proposed to be structured?*

APA supports the proponents' general recommendations on how the LGNC should be structured; i.e. it is proposed that each LGNC is calculated to reflect values in at <sup>1</sup>"least two parts:

- A credit (negative tariff) based on an estimate of long-run marginal cost avoided stemming from not having to augment the local grid as a result of electricity exported to the grid during periods of network system (or local area) peak demand. It is expected that this credit would be based on:
  - The **long-run** avoided cost capacity and operational costs(analogous to LRMC) in upstream parts of network resulting from the collective operation of small-scale local generators connected to the distribution network, **less**
  - Any reasonable increase in capital and operating costs stemming from having to cater for **bi-directional/localised energy generation** in system peak demand periods, instead of utilising centralised energy generation
- A credit (tariff) based on the operating and maintenance costs that the network business would avoid (incur) as a result of electricity being exported by the embedded generator to the grid at other (non-peak) times. It is expected that this credit would be based on:
  - the avoided operational costs in upstream parts of network (e.g., the high voltage (HV) and sub-transmission (ST) network, assuming the generator is connected to the low voltage(LV) network), **less**
  - any reasonable increase in capital and operating costs stemming from having to cater for **bi-directional/localised energy generation in non-peak periods**, instead of utilising centralised energy generation.

*The components of the LGNC described above should also capture avoided transmission use-of-system charges. The credit could potentially also include a capacity payment based on the availability of the local generator at particular times (typically, through the peak period.)*

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<sup>1</sup> "Local Generation Network Credit Rule Change Proposal" –14<sup>th</sup> July, 2015 - page 8

APA believes if the LGNC methodology is ultimately approved in its proposed form by the AEMC, the NEM will experience more investment in embedded generation projects, than what has been seen historically.

#### *Local or smaller embedded generation*

APA agrees with the proponents when they propose that an LGNC payment should apply to *any* generation unit that is connected to the electricity distribution network although APA also acknowledges and agrees, that <sup>2</sup>*"The proponents refer to 'local generation' as shorthand for smaller scale generation."*

In particular, APA agrees with the thoughts expressed by the proponents that smaller embedded generators are typically less able to access existing mechanisms, otherwise available to all embedded generators in the market, i.e.

<sup>3</sup>*"However, the incentives for local generation in the current Rules either do not provide adequate recognition of the benefits that the local generation can provide, and/or may not be readily accessible to small-scale local generators."*

APA also agrees with the proponents, when they state that smaller embedded generators have difficulty accessing existing incentive mechanisms such as:

- Increased incentives through recent rule changes in relation to cost-reflectivity in distribution pricing
- Network Support Payments
- Payments reflective of decreases in avoided Locational Transmission Use of Service for distribution businesses
- Regulatory Investment Test – Distribution payments

Specifically, the proponents argue that small scale generators find it difficult to take advantage of the above, because of:

- High transaction / administrative costs; and
- Common inability of smaller generators to accept contracts with 'firm capacity' requirements.

Supporting the proponents' concerns regarding the limited opportunity for smaller generators to be incentivised by existing mechanisms, are thoughts from the Essential Services Commission of Victoria (ESCV) in its current consultation "Inquiry into the True Value of Distributed Generation – Key Issues for the Inquiry", when the paper says:

<sup>4</sup>*"There have been a number of changes to the NER to support distributed generation and there are mechanisms for recognising the economic benefit of distributed generation to the distribution networks, specifically: Network Support Payments, Avoided TUOS and the RIT-D mechanisms, however, these are unlikely to be accessible to the smaller distributed generators that are the focus of this inquiry. This is because smaller distributed generators are unlikely to have the knowledge or expertise to get access to these mechanisms, and the costs associated with calculating the necessary payments may outweigh the benefits."*

APA believes the above comments from both the proponents of the LGNC methodology and the ESCV, summarise the current issues facing small scale embedded information in regard to current incentives, and indeed, although anecdotal, these comments are consistent with comments that APA has heard over a number of years. Although the 'barriers to entry' issue for embedded generation has been the subject of much consultation over many years, issues still exist, as follows:

- adequate reward for generation provided;
- information asymmetry;
- countervailing power issues;
- network connection.

Although the LGNC process will not resolve all of these issues, it will take embedded generators closer to a workable environment, whilst also providing energy consumers with better outcomes.

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<sup>2</sup> "AEMC Information" media release – 10<sup>th</sup> December 2015

<sup>3</sup> "Local Generation Network Credit Rule Change Proposal" – 14<sup>th</sup> July, 2015 - page 1

<sup>4</sup> Essential Services Commission of Victoria - "Inquiry into the True Value of Distributed Generation – Key Issues for the Inquiry" – page (51)- December 2015

In summary, although much more attention has been given to small scale generation in recent years – and some improvement has been seen as a result – the implementation of the LGNC is still required in order to encourage more small scale generation to participate in the energy market.

### **Specific points of comment**

#### *An LGNC cannot be paid if it increases electricity tariffs*

Although APA believes that the introduction of an LGNC process will result in downward pressure being placed on electricity prices. APA agrees that if the reverse occurs, the LGNC cannot be paid. APA agrees that an LGNC value should then be reviewed each year, as a part of the Distributor's Annual Operating Plan review. This process therefore, will give consumers confidence that an LGNC will only be paid when it provides value to consumers i.e. does not result in electricity tariff increases for energy users.

#### *Consistency of payment because credit will be paid by DNSPs under guidelines established by AER*

As the paper proposes, a LGNC value will be calculated and paid by a Distributor, using guidelines and advice provided by the AER. This approach therefore, will ensure that consistency of approach will be maintained across each of the nation's electricity distribution businesses, thus not only providing assessment and payment consistency, but also providing confidence for those small scale embedded network investors, who may operate across a number of distributors or jurisdictions.

#### *Time of Use (TOU) information and Voltage Levels (VL) should be included in the evaluation*

Both the AEMC consultation and the ESC paper referred to in these variables. APA believes both TOU information and voltage levels should be taken into account when calculating the LGNC, thus providing a true and accurate assessment of each project's embedded network value. These variables are important given the installation point of the embedded generation within the electricity network, has a specific value to the distribution businesses, when both TOU and VL values are considered. These values, therefore, should be reflected in each LGNC calculation.

Further, in regard to the locational values associated with embedded generators, APA believes that although locational value *should be* a variable also considered in any embedded generation value calculation, given the current complexities of calculating same, further work is required to determine easier processes for locational values, before locational values should be included in the valuation of the LGNC.

#### *LGNC payment cannot become a charge*

The proponents have stated in their request for the rule change, that the LGNC can only be calculated as a credit, and not be allowed to transition to a charge. To APA this seems quite a reasonable argument, given that the electricity network business in any case, would be obligated to recalculate the value of the LGNC each year, under its Annual Operating Plan review.

#### *Optional*

The proponents have also recommended that the payment of an LGNC to be an optional arrangement, i.e. the embedded generator can choose whether or not to participate in an LGNC arrangement. APA support this approach as this would then provide the embedded generator with the choice of whether or not they would wish to bear the costs of metering associated with the installation usually associated with an LGNC process. This would then allow embedded generators to choose between an LGNC method and an alternative approach, based on their individual project economics.

### **Summary and recommendations**

APA supports in principle the<sup>5</sup>“proposal from City of Sydney, Total Environment Centre and the Property Council of Australia, to introduce a new payment from distribution networks to encourage local generation, as an alternative to further investment in the electricity network”. This proposed payment would be called a “Local Generation Network Credit (LGNC)” and APA believes that this type of payment would be in the long term interests of consumers.

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<sup>5</sup><http://www.aemc.gov.au/News-Center/What-s-New/Announcements/Consultation-starts-on-the-Local-Generation-Networ>

APA accepts that challenges still exist in regard to calculation of the value of the LGNC, but also believes that through the AEMC consultations, an effective LGNC process can be established.

APA believes that the current mechanisms in the NER to incentivise or pay embedded generators remain relevant, but in APA's opinion, small generators in particular will be rewarded more equitably and effectively under the LGNC mechanism, than current mechanisms.

Finally, APA believes that the AEMC consultation process as outlined in the paper is logical and appropriate. APA will continue to participate in the consultation process that is planned to conclude with the Publication of Final Determination, 6<sup>th</sup> October.