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John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South, NSW 1235
Lodged online at www.aemc.gov.au

PROJECT REFERENCE CODE: ERC0100

SUBMISSION IN RESPONSE TO *NATIONAL ELECTRICITY AMENDMENT* (SCALE EFFICIENT NETWORK EXTENSIONS) RULE 2010 OPTIONS PAPER

Dear Sir/Madam,

Infigen Energy thanks the Australian Energy Market Commission (AEMC) for the opportunity to comment on Project Reference Code: ERC0100 – the AEMC's Options paper in regard to National Electricity Amendment (Scale Efficient Network Extensions) Rule 2010 (SENE).

Infigen Energy (ASX: IFN) is Australia's leading specialist renewable energy business. Infigen has five major wind farms in Australia with a total capacity of 508MW, and the future growth of our business is focused on Australia. Infigen also owns and operates US and German wind energy businesses taking its aggregate wind energy business interests to 35 wind farms with a total capacity of 2,194MW. Infigen Energy is the largest owner of wind energy facilities in Australia and was also shortlisted, along with its partner Suntech, for the Commonwealth's PV Solar Flagships program.

Infigen Energy is very supportive of the proposed introduction of SENEs into the National Electricity Market and believes that this initiative will assist Australia in meeting the challenges associated with Climate Change and increased renewable energy generation. Specifically, a successfully implemented SENE rule change will incentivise energy markets in overcoming some of the hurdles presently faced by renewable energy proponents. In particular, first mover proponents wishing to develop sites that are remote from the current electrical power system are currently significantly disadvantaged by prohibitive connection charges and network augmentation fees. The SENE rule proposal successfully targets this issue providing an opportunity for more efficient and effective grid connections.



Our specific responses to the key design features and five options raised in the consultation paper are provided on the following pages.

We would be pleased to discuss our submission with you in the future; please do not hesitate to contact me should you have any questions.

Sincerely,

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Infigen Energy has reviewed the Consultation Paper and makes the following submission.

Infigen Energy is very supportive of the work being undertaken by the AEMC in respect of the development of Scale Efficient Network Extensions (SENE) rule change and believes that the implementation of SENEs will support the National Electricity Objective (NEO) to,

- "...promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to-
 - (a) price, quality, safety, reliability and security of supply of electricity; and
 - (b) the reliability, safety and security of the national electricity system."

The proposed SENE rule change does this by promoting the efficient connection of new renewable electricity generation to the Australian National Electricity Market required by the Commonwealth's Renewable Energy Target legislation. When a Carbon Price is implemented, this will also result in increased demand for new connections of low emission electricity generation plants which the SENE rule change will facilitate in some instances.

Infigen Energy has examined the five SENE options presented by the AEMC in its Options Paper and considers that Option 1, with some slight modifications, has the most merit.

Infigen Energy provides the following comments on the 5 options presented.

OPTION 1: SENES WITH A COST THRESHOLD TRIGGER

Key Design Features Trigger for considering a SENE

While Infigen agrees that AEMO identifying potential SENE zones is a sensible trigger for consideration of a SENE, we do not see any reason to preclude having generator(s) submitting connection enquiries for a SENE also triggering consideration for a SENE. Infigen Energy believes that the nomination of SENE developments should be open to all Market Participants to suggest potential sites to AEMO for consideration. Therefore, as discussed at the end of Section 6.1.2, Infigen believes that a complementary approach of either the AEMO or generator(s) proposing a SENE being the trigger for consideration of a new SENE would serve the market best.

Investment Test

Infigen Energy agrees that the introduction of a 25% investment threshold for SENE construction will assist in reducing the risk of stranded assets with associated costs to customers. Infigen considers that the proposed trigger of 25% is reasonable as any higher



percentage would serve to preclude SENEs with more than 4 intended generators and a lower percentage would not significantly contribute to reducing asset stranding risk.

Cost Allocation

Infigen Energy supports the use of the average proportional cost for the use of a SENE proposed by the AEMC in Option 1. Infigen Energy agrees with the AEMC that this average cost approach would not serve to distort locational signals as typically generators have little flexibility regarding their location which is based on factors such as energy source, resources, land availability, planning constraints, etc. Requiring the first generator to pay the stand alone cost of the generation asset defeats the whole purpose of a SENE.

Access Provisions

Infigen Energy considers that SENEs require firm financial rights with mandated compensation arrangements. Generators financing their average proportional cost of a SENE must have protection from "free riders" coming in after the SENE is constructed and constraining off the generators who organised (and paid for) the SENE. This is a key feature of SENEs and is necessary to provide investor confidence and certainty.

While there remains the potential for the shared network to constrain off a SENE, this potential exists for all grid connections.

Regulatory Oversight

Infigen Energy considers that AEMO and AER regulatory framework as described in Section 6.5.1 is sufficient to mitigate the risk to customers of stranded assets and/or inefficiently sized SENEs. AEMO's requirement to review the NSP's forecast generation profile in addition to the AER's ability to disallow SENEs for a variety of reasons as outlined in Section 6.5.1 serve to adequately protect customers' interests.

The one suggestion that Inifgen would make to assure that a SENE was designed and costed in an efficient manner in the first instance would be to add to the AER's terms of reference an assessment of the design and cost effectiveness of the SENE design. Infigen Energy has concerns that within the present NEM, there are incentives for NSPs to overdesign ("gold plate"), inflate costs, and over charge for the services they provide. As a SENE represents a minimal risk revenue opportunity to the NSP, we are concerned that NSPs could take a similar approach to SENE proposals.



OPTION 2: SENES WITH AN ECONOMIC TEST AND NO CAPACITY RIGHTS

Infigen Energy considers that the two changes made to Option 1 to essentially arrive at Option 2 are both steps backward with regards to implementing effective and efficient SENEs

The addition of an, as yet unspecified, economic test would likely add little, if any, value. In addition, as pointed out in Section 8.3.2, such a test and would likely result in significant delays --- particularly as such tests would be open to challenges which would cause even longer delays to potential projects. The whole purpose of the SENEs is to derive new rules to speed up the efficient generation of multiple renewable energy projects. Therefore, as noted by the AEMC (footnote 144), Infigen Energy continues its objections to such additional tests.

Infigen Energy notes that the other key difference between Option 1 and Option 2 is the absence of any explicit compensation arrangements by leaving these to be negotiated between the NSP and generators. While this may remove a significant layer of complexity from the proposed SENE framework, it adds a considerable layer of complexity to the negotiating process with NSPs who enjoy a monopoly position and have been very reluctant to entertain such concepts in the past. Without explicit compensation arrangements, first mover (or even second mover) generators will be very reluctant to invest in SENEs.

OPTIONS 3: INCREMENTAL APPROACH TO SENES, and OPTION 4: INCREMENTAL APPROACH WITH GENERATORS BEARING THE COSTS

Infigen Energy does not support either Option 3 or Option 4. Infigen Energy believes that both of these options will introduce unacceptable delays and uncertainty into the connection process because of the application of the RIT-T assessment, while providing the initial generator with little incentive to progress with a SENE.

In addition, under Options 3 and 4 the initial connection still faces the first mover hurdle and must pay all of the costs associated with a stand-alone connection, in addition to the RIT-T costs; therefore defeating the whole purpose of a SENE. It is difficult to comprehend why a first mover would bear the risk and costs associated with a SENE that would then encourage its competitors in the market to more quickly connect with much less risk.



OPTION 5: SENES AS SHARED NETWORK WITH GENERATOR CHARGE

While Option 5 offers some improvements over Option 3 & Option 4, Infigen Energy believes Option 5 still suffers from the same fatal flaw of relying on the extremely lengthy timelines and risks associated with the RIT-T test. The onerous requirements of the RIT-T make it incompatible with encouragement of efficient generator connections in a time effective manner. The RIT-T, and its predecessor, have yet to fund any material augmentation of the network, and one would have to be very optimistic to assume this situation will change in the future.

CONCLUSION

Infigen Energy supports the strategic development of the electrical power system to facilitate the future connection of both generation and loads and the appropriate allocation of costs for this provision to the ultimate beneficiary, the end use customer. Of the five options described in this paper, Infigen considers that Option 1, with some slight modifications as noted above, is the superior option.