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22 July 2011

Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Dear Sir

National Electricity Amendment (Inclusion of Embedded Generation Research into Demand Management Incentive Scheme) Rule 2011

Essential Energy appreciated the opportunity to provide a response to the Australian Energy Market Commission's (AEMC's) consultation paper – National Electricity Amendment (Inclusion of Embedded Generation Research into Demand Management Incentive Scheme) Rule 2011.

Essential Energy supports the AEMC's proposal contained in the consultation paper. Essential Energy's responses to the issues outlined in the consultation paper are below.

Issue - Prescription versus flexibility in applying the DMIS

- To what extent do DNSPs currently seek funding for innovation in connection of embedded generators or other forms of demand management projects as part of their opex and capex proposals?
- 2. How effective is the existing DMSI framework for incentivising DNSPs to pursue innovation projects on embedded generators?
- 1. Embedded applications to date have generally been large scale.
 - DMIS projects are demand management oriented but there is some embedded generation overlap where technologies used for load support can also provide flexibility for embedded generation connection. For example reactive power can be used to suppress embedded generation voltage rise.
- 2. The DMIS framework is not effective for stand-alone initiatives that do not have a direct demand management outcome. There is some value for technologies that can be applied to both demand management and embedded generation.

Issue – Level of DMIA and DNSP incentives to support embedded generation research

- 1. To what extent will the proposed Rule incentivise DNSPs to undertake more projects on finding cheaper ways to connect embedded generators? Is it likely to materially change the DNSPs existing incentives to pursue riskier and innovative trial projects?
- 2. What types of embedded generators are likely to benefit most from the proposed Rule change?
- 3. Will the proposed Rule result in the need for increased funding for DMIS and hence require higher DMIA than the current level of allowances?
- 4. Is there likely to be any material financial impact on electricity consumers to fund the increased DMIA resulting from the proposed Rule? How should this be weighted against the benefits of having embedded generators connected more cheaply?
- The proposed Rule change will encourage DNSPs to undertake trials aimed at better understanding the impact of embedded generation on the network and its potential for network support.
 - Improved knowledge of the issues associated with embedded generation will provide the basis for facilitating embedded generation connection without compromising fundamental network stability and supply quality considerations.
- 2. The types of embedded generators likely to benefit from the proposed rule change are small to medium connections probably in the range 5kW to 1MW. In this range there is scope for fast tracking connection enquiries, based on the network characteristics at the proposed point of connection. Under 5kW, most DNSPs will approve connections automatically and over 1MW there are often significant issues for network protection, power quality and reliability.
- 3. If the scope of the DMIS is expanded to include embedded generation initiatives that have partial or no demand management impact this would result in the need for increased funding in order to maintain existing levels of demand management innovation investment.
- 4. Given that the existing DMIS is less than \$1 per customer per year the financial impact should not be material.

Benefits should be assessed from a community, rather than a DNSP viewpoint and include generation/transmission/distribution capacity and losses along with greenhouse and other environmental savings.

Essential Energy would be pleased to discuss this matter further with the AEMC. Should you require further information please feel free to contact Jason Cooke on 02 6338 3685.

Yours sincerely

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