



12 May 2010

Dr John Tamblyn
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney NSW 1235

Dear Dr Tamblyn,

Scale Efficient Network Extensions Rule Proposal (ERC0100)

The South Australian Chamber of Mines and Energy (SACOME) is pleased to have this opportunity to make a submission on the Scale Efficient Network Extensions Rule Proposal (ERC0100).

SACOME is the peak industry association for all companies with business interests in the resources industry in South Australia, including those with business, vocational or professional interests in minerals exploration, mining and processing, oil and gas exploration, extraction and processing, power generation, transmission and distribution, logistics, transport, infrastructure, and those with clients in these sectors.

SACOME represents over 300 core industry and services members.

SACOME retains a unique position among industry associations in Australia in representing a broad base of energy companies with interests in South Australia. This includes companies developing coal, gas, oil and uranium resources; renewable and emerging technologies such as geothermal, solar, wind, marine, underground coal gasification and coal to liquid; power generation and infrastructure (electricity and gas) companies; energy retailing; and a number of major energy users.

Connecting remote generation to the national electricity network

SACOME supports progress of the rule change proposal by the Ministerial Council on Energy (MCE) and the necessary amendments to the National Electricity Rules (NER) as per the *National Electricity Amendment (Scale Efficient Network Extensions) Rule 2010 Consultation Paper (ERC0100)*.

SACOME had already expressed support for the Scale Efficient Network Extensions (SENE) concept recommended by the AEMC in its report to the MCE titled: *Review of Energy Market Frameworks in light of Climate Change Policies: Final Report* (AEMC, 2009)¹.

Notwithstanding the Australian Governments delay of the Carbon Pollution Reduction Scheme (CPRS), climate change policy settings in the manner of the expanded Renewable Energy Target (RET) and any future price on carbon dioxide represent direct government intervention in to the energy market to correct a market failure and to drive the deployment of renewable energy. The current market and infrastructure was established around centralised generation plant; and this is reflected in the current NER. The NER does not accommodate the deployment of renewable energy which will initiate a departure from the current system to a more decentralised arrangement; a consequence of the very nature of the renewable

¹ SACOME submission to the *Review of Energy Market Frameworks in light of Climate Change Policies: 2nd Interim Report, August 2009*

resources. The principle of the SENE's reflects this to advance a more strategic and coordinated approach to planning network development in the NER to connect remote generation clusters to the national electricity grid. It is SACOME's view the proposed framework will capture benefits of economies of scale, deliver efficient locational and size considerations, and accommodate differential deployment in projects.

The SENE concept will create the right incentives to unlock South Australia's endowment of both renewable and non-renewable sources of energy-

Eyre Peninsula – Wind and wave energy. An estimated 2000MW of wind power is available.

Far North – Geothermal, solar, and coal to liquid. Geothermal projects at Innamincka and Paralana have the potential to generate over 1000MW of base load power into the national grid. The Coal to liquid project in the Ackaringa Basin includes a generation capacity of 250MW of export power into the national grid

Yorke Peninsula – Wind and coal to liquid.

South East – Wind, geothermal, wave energy and coal to liquid.

The development of SENE's also has the potential to deliver additional and significant benefits beyond the connection of remote generation.

The Chamber offers the following considerations to further develop the SENE framework.

Connection of load to SENE's

SACOME would like the AEMC to investigate options to extend the framework to allow load applications to be considered as part of a SENE.

The primary target of the SENE is to facilitate the efficient and timely connection of new generation not currently accommodated in the current NER. Although this new generation will be predominately renewable the SENE framework can be extended to other technologies remote to the national grid such as a power generation from coal gasification projects. In representing the interests of companies developing mineral, oil and gas projects SACOME would like the AEMC to investigate options to extend the framework to allow load applications to be considered as part of a SENE, and retained within the SENE framework. In other words connecting load would be treated under the framework like a connecting generator, rather than the network extension reverting to a prescribed service. In South Australia resource projects are typically very remote to the national grid (with exception of Olympic Dam, Prominent Hill and Leigh Creek). SACOME views there to be an advantage to extending the SENE concept to allow connection of remote load, and where the network extension does not cause additional connections to the shared network, as this could provide a positive economic case for mining operations to connect to network extensions in preference to on site diesel generation. A flow on benefit would be a reduction in mine site greenhouse gas emissions.

As the discussion paper contemplates (p 22), loads connecting to the SENE could be treated similarly to connecting generators and bear proportionate costs.

Review of SENE proposals

SACOME supports the implementation of appropriate checks and balances into the framework and the role of AEMO and AER in applying them.

A robust system of checks and balances is appropriate given SENE's will not be a prescribed service and will be essential to ensuring the prudent size and location of SENE's. The review process should also assess and validate the viability of connecting proponents; that the technology is proven and commercially viable, realistic timeframes for connection are considered and viable connecting capacity is proposed. This will protect the interests of project proponents, network service providers and consumers.

South Australian Chamber of Mines and Energy Incorporated

Mines and Energy House | Level 1, 290 Glen Osmond Road Fullarton, South Australia 5063
T: +61 8 8202 9999 | F: +61 8 8202 9900 | info@sacome.org.au | www.sacome.org.au

Risk burden/trade off

Allocation of risk in the development of SENE's needs to balance the likely consumer benefits with an incentive on generator proponents and NSP's to make prudent decisions on investing in SENE's.

The consumer benefits that will be derived by efficient SENE's as well as community and public policy driving appropriate responses to climate change validates energy users sharing in the risks associated with the development of SENE's. Nevertheless, risk needs to be weighted in a manner that presents generators with the incentive to ensure they progress reliable and properly developed connection enquiries and proposals.

Funding (SENE versus shared network)

The development of SENE's has the potential to deliver additional and significant benefits beyond the connection of remote generation, to improving security and reliability of electricity to other industries and communities.

The Eyre Peninsula of SA is one example, where the current electricity transmission system is significantly limited. SENE's could pave the way to overhauling the network. Augmentation of the network would be of considerable advantage to prospective mineral resource projects and create new commercial opportunities not recognised or available given the networks limitation.

Broader benefits provided by SENE's leads to the dilemma described in the discussion paper (p 22, section 6.2.2). That is the draft rule doesn't address how SENE's revert to the shared network.

The criteria around the incorporation of SENE's into the shared network need to be clarified. The AEMC should work with industry (generators, NSP's and consumers) to develop the criteria necessary to address this gap.

Where shared benefits from the development of SENE's can be reasonably identified upfront, the preliminary planning report required of NSP's under Sections 5.5A.2(b) - 5.5A.2(g) in the NER should present credible options that incorporate the balance between a SENE and shared benefits to apportion risk and funding mechanism (i.e. SENE or prescribed service).

In reviewing credible options for SENE's NSP's should have the option to suggest a SENE is not appropriate for some period due to the extended timelines for connection of generation presented by proponents.

Should the Commission wish to discuss aspects of this submission further please contact me on phone number (08) 8202 9999 or nlong@sacome.org.au.

Yours Sincerely,



Dr Nigel Long
Director, Environment and Sustainability

South Australian Chamber of Mines and Energy Incorporated

Mines and Energy House | Level 1, 290 Glen Osmond Road Fullarton, South Australia 5063
T: +61 8 8202 9999 | F: +61 8 8202 9900 | info@sacome.org.au | www.sacome.org.au