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Mr John Pierce  
Chairman  
Australian Energy Market Commission  
Level 5, 201 Elizabeth Street  
SYDNEY NSW 2000

Dear Mr Pierce

### **EnergyAustralia's submission on MCE options paper for Scale Efficient Network Extensions**

EnergyAustralia appreciates the opportunity to respond to the AEMC's options paper for the proposed Scale Efficient Network Extension (SENE) Rule. We support the AEMC's decision to undertake an additional consultation phase before making a draft decision. This is appropriate given the significant concerns raised by stakeholders with the proposed Rule.

In our previous submission, we stated that we do not support the proposed Rule. Following consideration of the AEMC's options paper and other stakeholder representations, we consider that the existing rules should not be amended, as none of the alternative options presented in the AEMC's paper appear to better promote the National Electricity Objective compared to current arrangements.

As a distribution business with over 1.5 million customers, we are concerned that the SENE framework will increase network charges levied on our customers. We note that NSW customers have recently experienced significant price increases, and are not in a financial position to take on the additional burden of underwriting generation developments as proposed in the SENE framework.

In response to community concerns on recent price pressures, the NSW Government recently announced a formal inquiry to investigate options to reduce or defer electricity network charges. The purpose of the inquiry is to place downward pressure on electricity prices. The NSW Government has noted that<sup>1</sup>:

"Rising electricity prices place pressure on the household budget, and families are feeling the pressure. Earlier this year the NSW Government extended rebates, and now one in three households in NSW are eligible for assistance with their energy bills."

It is apparent that customers in other jurisdictions are experiencing similar price pressures. Given the current environment, we consider that customers should not be required to pay additional network

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<sup>1</sup> NSW Government, *Press release – NSW Government to examine reducing electricity network charges*, 27 October 2010.

charges to facilitate generation developments, particularly where there is significant risk of asset under-utilisation and/or stranding.

We do not consider that the case has been made that moving to SENE framework is in the long term interests of consumers, and therefore we do not consider the additional costs to customers will satisfy the National Electricity Objective. Our reasons for coming to this view are:

- The AEMC and stakeholders have not demonstrated a need to change the existing Rules. There has been no evidence to support the view that there is a market failure in the connections regime.
- The SENE concept creates market distortions that do not result in efficient investment in the long term interests of consumers.

Our reasons are explained in further detail below.

### **No demonstrable need to change existing Rules**

The key issue being addressed by the Rules is a perceived market failure in the current connections regime. The essence of the argument is that high connection costs discourage the entry of inexpensive renewable generation in remote areas. It follows that lower connection costs (through larger scale connections) can reduce the barrier to entry, and that customers would consequently benefit through lower prices for renewable energy.

In earlier submissions to the AEMC, we questioned whether there was sufficient evidence of a market failure to justify a SENE framework. To date, there has been no evidence to suggest that the existing framework results in higher electricity prices for customers. We encourage the AEMC to undertake or commission modelling on this issue before considering a change to the Rules.<sup>2</sup>

In this respect, stakeholders at the recent AEMC forum in Adelaide referred to a study by ROAM consulting which suggested that the costs of connecting the most efficient sources of wind generation are very high. This may suggest that highly concentrated wind generation with substantial transmission investment is not economic. While we have not reviewed the report, we consider this would be a good first step in identifying whether there is a market failure in the existing regime.

#### *Existing incentives to reduce connection costs*

Stakeholders such as AGL consider that the existing framework already provides incentives for commercial parties to reduce connection costs through joint arrangements. AGL offer examples from the gas industry to show that market-led solutions have resulted in optimal connection arrangements in similar circumstances.<sup>3</sup> Further, economic theory would suggest that an industry would likely consolidate (for example, through joint ventures) to address scale issues, and this would result in lower average connection costs.

Our view is that the AEMC should exhaust all market-led solutions before implementing a regulatory solution such as a SENE. For instance, the AEMC could consider minor changes to the Rules which further encourage coordinated connections, such as 'open seasons' for connection applicants.

### **SENE will not result in long term benefits to customers**

A SENE framework is likely to distort the 'market-based' connections framework in the existing Rules. Under the current arrangements, proponents close to the shared network have a 'natural' cost advantage over remotely located generators. This provides incentives for investment proponents to reduce total costs of delivered energy by:

- seeking low fuel sites close to the shared market; and

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<sup>2</sup> In our view, a market failure may exist if the modelling showed that the likely mix of generation under the existing framework will result in higher electricity prices, relative to a SENE framework. Such analysis would need to take into account the total system costs (connection and fuel source) under each scenario.

<sup>3</sup> AGL, *Submission to the AEMC on the SENE proposal*, 13 May 2010, p4-5.

- entering into commercial agreements and/ or joint ventures to lower the average cost of connection. These incentives ultimately benefit customers as the least cost generators enter the market, resulting in a lower price for electricity. The SENE framework distorts these market arrangements by offering a 'leg up' to renewable generators in a SENE zone. Generators in these areas are able to transfer the risk and cost of coordinated connections to customers.

Stakeholders have identified four key problems that arise from this market distortion:

1. *Asset stranding*

The perceived benefits from a SENE framework rely on the assumption that future generation investment will be consistent with forecasts. To the extent that generation does not materialise, customers will bear the costs of asset stranding, leading to higher prices for renewable electricity.

Stakeholders have demonstrated that generation forecasts are likely to be highly unreliable and prone to error. We refer the AEMC to evidence provided in AGL's submission<sup>4</sup>, which shows that only one third of generation plant announced between 1998 and 2008 proceeded to construction phase. If this was applied to a SENE situation, customers would fund 66 per cent of the costs of building excess capacity for the lifetime of the SENE.

2. *Bypasses efficiency considerations under the regulatory test.*

The current regulatory test has been designed to test whether a proposed investment provides market benefits. The Australian Energy Regulator has noted in previous submissions to the AEMC that a SENE framework bypasses any efficiency consideration under the regulatory test, and consequently leads to a heightened potential for inefficient investment.<sup>5</sup>

3. *'Crowds out' efficient investment*

A SENE framework provides preferential treatment to generators located in a SENE zone, and therefore is contrary to the principle of competitive neutrality. This principle is a key design feature of the National Electricity Market, and ensures that competitors with the lowest costs are not 'crowded out' by proponents that receive special advantages. In the absence of an efficiency / market benefits test, the SENE framework is likely to result in crowding out of low cost renewable generation.

4. *Perverse behaviour by generators*

As noted above, prospective generators can walk away from a proposed connection after the SENE is built, without penalty. In these circumstances, a proponent may 'hedge' development options, by signalling interest in a number of SENE zones. There is a risk that the generator will connect in only one of these locations, leading to asset stranding for other SENEs. This demonstrates that the shift in risk from generator to consumer can lead to unintended market distortions.

For the reasons identified above, EnergyAustralia does not consider that a change to the existing Rules will meet the National Electricity Objective to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity.

### **Options for the SENE framework**

As noted above, EnergyAustralia does not support the proposed Rule, or the alternative options in the AEMC's paper. However, in the event that the AEMC proceeds with the SENE concept, we consider that the AEMC should make a more preferred Rule, which draws on the options identified in its paper.

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<sup>4</sup> AGL, Submission to AEMC on the SENE proposal, 13 May 2010, p3

<sup>5</sup> Australian Energy Regulator, *Submission: Review of Energy Markets Frameworks in light of Climate Change Policies*, 23 February 2009, p10.

Attachment A to this letter provides EnergyAustralia's preferred design for a SENE framework should the Commission decide to make a more preferred Rule. We consider there are two critical elements in our preferred design:

- AEMO should identify and rank SENE areas based on an economic assessment of long term benefits to customers, and a SENE should only be considered if connecting parties contribute more than 25 per cent of the capital costs of the works. This will mitigate some (but not all) of the risks and costs faced by customers.
- The SENE should be classified as providing standard control (prescribed) services. We consider this classification is appropriate for a SENE, where there is no scope for negotiation on terms and conditions, and where the asset provides system wide benefits. This classification is particularly important for a meshed distribution network, where load is more likely to connect to the SENE.

EnergyAustralia appreciates the extensive consultation undertaken by the AEMC on the proposed Rule.

If you wish to discuss aspects of our submission, please do not hesitate to contact Ms Catherine O'Neill on 9269 4171.

Yours sincerely



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System Planning and Regulation

## Attachment A – EnergyAustralia’s comments on design options

EnergyAustralia considers that the options presented in the AEMC’s paper do not address the structural problems inherent in a SENE framework. In the event that the AEMC still considers a SENE framework is required, we consider that the AER should adopt an alternative model to the framework proposed in the Rule. We consider the alternative model should seek to achieve the following objectives:

- Minimise the inherent risk to consumers, in terms of initial funding and asset stranding.
- Use existing frameworks in the Rules, such as application of the regulatory test.
- Simplify cost recovery arrangements, such as classifying the SENE as a prescribed/ standard control asset.

Table 1 identifies EnergyAustralia’s suggested design options for a SENE framework. The design draws on the options in the AEMC’s paper, but does not relate to any single identified option. We note the model is consistent with EnergyAustralia’s supplementary submission of 16 June 2010, except that we now propose that an NSP conduct ‘least cost’ regulatory test, rather than a market benefits test.

EnergyAustralia has altered its view after reviewing submissions made by other stakeholders. We consider that a test of market benefits would occur at the time that AEMO nominates a SENE zone. The NSP’s role should be limited to a ‘least cost’ regulatory test, in the event that a connecting party seeks to trigger a SENE development. This would be more consistent with the relative responsibilities and market knowledge of AEMO and NSPs. This is further explained in Table 1 on the next page.

Table 1 – EnergyAustralia’s suggested design options should the AEMC decide to make a more preferred Rule

Design element	AEMC Option	EnergyAustralia’s preferred design option	Reason for EnergyAustralia preferred design option
Trigger for considering a SENE	Option 2 with refinements	<p>AEMO should identify and rank SENE areas based on an assessment of market benefits</p> <p>SENE should be triggered if connecting party(s) is located in a SENE zone, and seeks a connection under this framework. The parties must contribute more than 25 per cent of the expected capital costs of the estimated cost of the SENE to trigger a regulatory test.</p>	<p>SENEs should only proceed if AEMO can identify a market benefit (ie: lower electricity prices) from building a SENE framework.</p> <p>A minimum threshold will minimise the initial funding and asset stranding risks for customers.</p>
Classification of services	Option 5	Asset should be classified as providing prescribed/standard control services. This could be accommodated by introducing a new type of prescribed service in the Rules.	<ul style="list-style-type: none"> <li>▪ The characteristics of a SENE are different to that of a dedicated negotiated connection service. The SENE is shared by many generators (and potentially load in the future) and it is therefore very unlikely that there will be scope for negotiation: <ul style="list-style-type: none"> <li>- From an engineering perspective, it will be almost impossible to provide a generator with a different level of service (eg: redundancy) relative to another generator on the SENE.</li> <li>- It is very unlikely that all generators on the SENE will independently require the same terms and conditions (eg: higher level of redundancy). In this case, it is more likely that a standard system asset will be built, and that standard terms and conditions will apply.</li> <li>- Given that customers are paying for excess capacity, they should not be required to fund an above average standard asset.</li> <li>- There is no scope for negotiation on price, as an NSP will be required to charge the customers based on a formula in the Rules.</li> </ul> </li> <li>▪ The underlying reason why customers underwrite capacity on the SENE is that the asset provides system wide benefits (benefits that extend beyond the generators).</li> <li>▪ Classifying the SENE as providing prescribed services simplifies the regulatory arrangements: <ul style="list-style-type: none"> <li>- AER does not need to undertake a complex exercise of reclassification in cases where load connects to the SENE, as</li> </ul> </li> </ul>



			<p>would likely occur in a meshed distribution network.</p> <ul style="list-style-type: none"> <li>- assets that provide prescribed services are subject to the regulatory test (unlike a negotiated connection asset), and hence the Rules do not need to construct an entirely new investment test for SENEs</li> <li>- A DNSP is able to recover revenue from customers through cost reflective network charges (X-factors) rather than as a separate revenue item.</li> </ul>
Investment Test	Option 3	<p>NSP would perform a 'least cost' regulatory test, when SENE is triggered by connecting applicant.</p> <p>AEMO should provide most likely generation forecasts and locations to NSP when regulatory test is being applied.</p> <p>A modified and streamlined regulatory test may be required.</p>	<p>An NSP is not capable of assessing all generation scenarios to determine whether a SENE would deliver market benefits. AEMO should undertake this assessment as part of its role in identifying and ranking SENE zones.</p> <p>Unlike load, a DNSP is not in an informed position to undertake generator forecasting. AEMO has more market knowledge and understanding on the likelihood of generation forecasts</p> <p>The current RIT-T and likely RIT-D do not enable an NSP to satisfy the regulatory test on the basis of 'least costs' to meet generation forecast. This suggests that a simpler limb of the regulatory test should be developed to address the SENE. This would acknowledge that AEMO has already undertaken a market benefits test when it identified the SENE zone. A distributor would then only need to justify the investment based on meeting the least cost design to meet the generation profile nominated by AEMO. The modified RIT could also simplify processes to ensure timely connections.</p>
Cost allocation and charging methodology	Option 4 with refinements	<p>The asset would be part of the RAB, and be included in building block proposal</p> <p>A pass through provision would need to be developed for SENEs that were not allowed for in the regulatory determination. No materiality threshold should apply.</p> <p>Generators would pay network charges based on proportional use of the asset (charges based on</p>	<p>As the asset provides prescribed services, the asset would be part of the RAB.</p> <p>Under the ex-ante capex incentive, an NSP would lose the return on and depreciation for investment if the investment was not included in the AER's determination. An NSP should not be penalised if the investment does not satisfy the materiality of a pass through event, as this would create disincentives for the NSP to undertake investment.</p> <p>This would allow for a simple cost recovery process that enables an NSP to recover revenue from generators and customers through the annual</p>

		maximum capacity). This would likely require a change to clause 6.1.4 of the Rules (prohibition of DUOS charges). Customers would pay residual amount through network charges.	pricing process. A simple cost recovery process would also remove disincentives for the DNSP to connect SENEs.
Access provisions	Option 5	Consistent with existing Rules (ie: no new access and compensation arrangements)	<p>SENE generators should be subject to the same access regime as other generators in the NEM. We note that the issue of access and compensation should be considered holistically as part of the Transmission Frameworks Review, rather than as part of the SENE Rule change.</p> <p>In our view, access and compensation arrangements are overly complex and immensely difficult to implement.</p> <p>In respect of a SENE, we note that a DNSP will have practical difficulties in determining the extent of constraint given the intermittent nature of wind generation. Provision of non-firm access would require some pseudo-dispatch model by DNSPs to restrict output when there were high levels of wind. We would have extreme difficulty in determining the extent of the constraint and the level of compensation.</p>
Regulatory oversight	Option 3 with refinement	Consistent with existing Rules.	<p>AEMO should be required to provide forecast advice to an NSP at the time of a regulatory test (rather than have an oversight role). This would reduce the timeframes for a SENE.</p> <p>Disputes on the RIT-SENE should be limited to process issues, rather than the configuration of the SENE. This will allow for timely connections.</p>