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Submitted online to: <http://www.aemc.gov.au/Markets-Reviews-Advice/Reporting-on-drivers-of-change-that-impact-transmi>

Dear Ms Grace,

**Coordination of Generation and Transmission Investment**  
**Reference: EPR0052**

The Australian Energy Council (the “**Energy Council**”) welcomes the opportunity to make a submission in response to the Australian Energy Market Commission’s (“**AEMC**’s”) *Coordination of Generation and Transmission Investment Approach Paper*.

The Energy Council is the industry body representing 21 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia and sell gas and electricity to over ten million homes and businesses.

### Introduction

As Australia transitions to a lower carbon emissions future, the type and location of generation within the National Electricity Market (“**NEM**”) will change. This may take the form of large-scale renewable energy generation at sites which have favourable resources (but may not necessarily be close to existing, adequate transmission infrastructure), or small-scale energy resources embedded within local distribution networks.

### Discussion

The Approach Paper discusses the increasing penetration of renewable generation and suggests that, “the absence of a price signal to generators of the impact of their locational decisions on transmission network costs *could result in inefficient overall locational decisions*”<sup>1</sup> [emphasis added]. In reality, transmission network cost price signals are likely to be a small part of the feasibility assessment for new generators, since fuel availability and land access are the main determinants of where a new plant is to be sited. In addition, there are already locational signals, in the form of marginal loss factors, interregional price variations and the risk of constraints in particular network locations – as well as the outcomes from the RIT-T process.

Locational pricing for generators is also likely to result in nodal pricing in addition to the existing regional reference price. Fragmenting the market in this way will result in reduced liquidity, financial instability, contract market detriment, and ultimately higher costs to consumers, as the wholesale market seeks to assimilate the increased risk from the changed market design.

The AEMC has also commented that there is a mismatch between customers paying TUoS charges (which they do in exchange for a regulated level of network reliability) and generators not paying TUoS charges. Since generators are upstream of the supply chain to customers, it makes sense that they do not pay TUoS charges, particularly as they have no entitlements to any level of firm access, and since any such charges would be passed on in the form of higher wholesale prices. The Energy Council would not support TUoS charges being applied to generators unless firm access were granted in return. In regard to the anomaly of batteries and other storage equipment acting as both generators and loads at different times, the Energy Council recommends that a separate registration category for storage be established, which would allow for

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<sup>1</sup> Approach Paper, p.18

specific consideration of TUoS arrangements for these participants, and they should be treated similarly to Market Network Service Providers.

To relieve transmission network congestion, the RIT-T framework is used to ensure network investment is optimised. While necessarily this process has limitations, such as the accuracy of the forecasts on which the assessment relies, and possible lags in transmission network investment, the Energy Council believes that the process is adequate at ensuring transmission investment matches generation developments, where this maximises net economic (consumer and producer) benefit.

However the Energy Council is concerned that Clause 5.19 of the *National Electricity Rules*, “SENE Design and Costing Study”, has not been used to foster network development. It is apparent that in some circumstances, for example the proposed connection of multiple intermittent renewable generation projects in north-west Victoria, the interests of consumers would be better served by TNSPs being required to perform an initial SENE review for the connection of the new generation plant rather than moving directly to the initiation of a RIT-T process. By commencing the RIT-T process immediately without a SENE review, the total costs and risks of stranding for any additional network infrastructure are passed through to consumers.

The Energy Council also believes that in assessing the potential for any SENE project, TNSPs should be required to consider alternative points of connection to the shared network, and not simply assume the appropriate connection point is the closest location point in the shared network. The current rules do not prevent the construction of a SENE that connects deep into the shared network on a major network flow path, and this potentially delivers a lower total system cost to consumers, with risks assigned to the appropriate parties. From 1<sup>st</sup> July 2018 the owner of the SENE will be required to publish an Access Agreement in accordance with Clause 5.2A.8 for any large connection asset, and this Access Agreement should not require the connection of additional generation in excess of that of the design capability of the network asset.

One of the issues also missing from the Approach Paper is the consideration of the effects of external subsidies to particular generation technologies. For example the Renewable Energy Target, and potentially the proposed Clean Energy Target will support generation which would not otherwise have been built. If this supply is in excess of that required to ensure ongoing reliable supply to consumers, there are questions about how the total system costs imposed by this excess build can be minimised, and who should pay the additional network costs for the surplus generation.

## Conclusion

In conclusion, the Energy Council supports the AEMC making its assessment using the principles outlined in the Approach Paper, but recommends that:

- the AEMC consider the effects of external subsidies to particular generation technologies; and
- any findings should also be contemplated in the context of the other reviews in progress, as well as proposed rule changes under consideration which may affect the outcome of this review.

The Energy Council also believes that the AEMC should consider forming an industry working group to assist in assessing the issues and formulating the best solutions.

Any questions about this submission should be addressed to the writer, by e-mail to [Duncan.MacKinnon@energycouncil.com.au](mailto:Duncan.MacKinnon@energycouncil.com.au) or by telephone on (03) 9205 3103.

Yours sincerely,



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