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Integrated System Plan  
Australian Energy Market Operator  
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## **INTEGRATED SYSTEM PLAN (ISP) CONSULTATION – HIGH LEVEL DESIGN**

Origin Energy Limited (Origin) welcomes the opportunity to comment on the high-level design of AEMO's Integrated System Plan (ISP). Conceptually, Origin agrees that a nationally co-ordinated plan focused on potential generation and transmission investments would be informative and of value to the market. In particular, the identification of renewable energy zones (REZs) could inform investment decisions by highlighting the ideal areas for development.

The ISP can serve as an overarching document that examines national development trends across transmission and generation and could contribute towards commercial decision making for NEM participants. The incorporation of AEMO's existing NTNDP expertise, as well as additional information such as identified fuel resources (wind, solar and hydro), anticipated generation development derived from connection applications and potential transmission augmentations will also assist investment decisions. Packaging this information in one central location will help generation proponents and transmission companies to identify opportunities that can, and should, be progressed in a co-ordinated and efficient manner.

Notwithstanding the above, there are several factors that could undermine the effectiveness of any long-term system plan and the efficient development of REZs. Some of these factors include the current high level of policy uncertainty, the inherent coordination issues when building large connection assets and increasing levels of decentralisation in the NEM. These all combine to increase the risk of asset stranding. We note that many of these issues were raised at the REZ<sup>1</sup> workshops, and it will be crucial that in developing the ISP, these are taken into account. Specifically, we suggest that the ISP could include a discussion on the following key dot points.

- Any limitations of how the plan could be effectively used to inform efficient investment given the factors described above;

Currently there is a high level of policy uncertainty across the NEM, that stems from a changing generation mix and consumer demand profiles. While some of these issues are likely to be resolved through various Rule change and market review processes, there remains uncertainty over fundamental NEM design issues. The National Energy Guarantee has the potential to significantly alter investment trends in both renewable generation and traditional synchronous plant. We believe that the final report should clarify how these uncertainties will be managed, and identify any processes that might be put in place to alter any recommendations made, considering structural policy reforms in the NEM.

- Whether any measures could be put in place to mitigate some of the risks identified above;

There is a risk of stranded transmission assets if identified, and ranked, REZs, are constructed before commitments are made from generator proponents. This risk level will increase if the Distributed Energy Resources (DER) uptake rates increase significantly and a more decentralised NEM becomes apparent. The ISP should detail how these risks can be managed and if there are any measures that

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<sup>1</sup> Item 3.7, Table 4 of the ISP consultation paper, page 37.

can be put in place to ensure stranded asset risks are minimised and more efficient outcomes are achieved for consumers and the NEM overall.

- The sensitivity of any ranking of REZs given different scenarios;

The consultation paper discusses the development of REZs including performing a high-level assessment of the relative economics of each zone, and ranking the most prospective areas. Origin would welcome further detail and transparency on the methodology that will be employed when ranking the REZs. It will be important to show which variables are utilised and how they are weighted when determining the viability of a REZ.

- The economic assessment used to rank the zones and any inherent limitations in the methodology.

The paper discusses how AEMO will liaise with the AEMC on its market review into the coordination of generation and transmission investment. Origin believes that this cross-agency coordination will be beneficial in developing an economically sound approach to REZ ranking. It is also important to understand the limitations of economic modelling and detail how these might affect ranking outcomes.

On a final note, Origin believes that a next step in this process could be for AEMO to facilitate working groups between generation and transmission businesses to examine the identified REZs. It is difficult to justify the development of a Renewable Energy Zone without the backing of renewable energy proponents and this process could provide the economic justification with which to seek a RiT-T. Organising multiple generator to connect within a zone has the potential to lower connection costs and reduce the risk of stranded assets which would result in better financial outcomes for consumers.

Should you have any questions or wish to discuss this information further, please contact James Googan in the first instance via email [james.googan@originenergy.com.au](mailto:james.googan@originenergy.com.au) or phone, on (02) 9503 5061.

Yours sincerely,



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