

South Energy Response to Consultation Paper on Interim REZ Framework

No.

Issue

Question 1 *Are REZs an appropriate interim solution to the challenges associated with open access?*

Answer 1 We think that an interim solution is not an appropriate solution. A generator project lifetime is typically 20 to 30 years or more. For investment to occur, there needs to be certainty to the regulatory framework and a level playing field to market participants. We are concerned that an “interim” solution has the inherent risk of adding to the uncertainties instead of reducing risks. This is compounded with the partial nature of the solution offered by REZs, due to the localised impact within the REZ itself. Under current proposals there seems to be limited value in securing access within REZ, if there is still major congestion risk in the wider transmission system outside of the REZ. Therefore we are cautious about the REZ proposal and would like to see more coordination with the ISP to address the wider area transmission system limitations.

In addition, the current framework does not adequately address the impact on existing generators and new generators being progressed that are already within the proposed REZs. This is also an additional uncertainty risk which would potentially hamper the projects already within the REZs as they adopt a wait-and-see stance.

Question 2 *What are the likely consequences of a framework that addresses these challenges on a localised rather than a system wide basis?*

Answer 2 The likely consequences of a localised framework would include:

1. In cases where there is an issue in the wider area such as a lack of transmission capacity, the localised framework will not be of much value and may not offer sufficient incentive for projects to be developed within the REZs.
 2. In cases where there are no major issues with the wider transmission network, then there will be more value in the REZ, as it will help coordinate the cost sharing for shared connection works such as a new terminal station and related upgrades to enable cost effective solutions for a number of generators.
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Thus the REZs may have to be created in light of the wider transmission network capacity. There seems little benefit in advancing a REZ that sits within or connects to the shared transmission network where that wider network is already reaching capacity.

Question 3 *Do stakeholders agree with the proposed objectives for a regulated REZ development model??*

Answer 3 *Objective 1. Overcome current problems associated with an uncoordinated connections process for a REZ.*

Yes, we agree with this objective. We can see that a coordination of connection processes within a REZ will help speed up the process and reduce overall costs as several projects can be assessed at the same time. Also, any mitigation measures for localised network augmentation such as system strength or voltage stability equipment can be coordinated more efficiently if shared among a few generators.

Objective 2. Ensure that the group of projects that become part of the REZ (the REZ participants) is selected on a basis that aligns with the long term interests of consumers.

We agree with the objective to align with the interests of consumers which in general would be lower energy costs and reliable supply. However, we have concerns about the methods of achieving this objective as outlined in the paper. Looking at the example in 4.2.1, the REZ coordinator may have a choice between a cluster of generators sharing a single substation, or a series of distant generators with dedicated transmission lines. Assuming the cluster option has a lower cost, it would be selected by the REZ coordinator. However, given that renewable generators are not price setters, the energy price obtained for both options will foreseeably be the same. Therefore the selection of lower cost generators will simply be selecting more profitable projects to the disadvantage of those investors who may be happy with lower profits (the distant generators with transmission lines).

In order for the REZ to provide the right investment signals, the selection criteria should be based on concrete objective metrics.

We also think it is important for the ESB to understand what is a key project finance requirement in the market. In Australia it is common for projects under development to not have a financial arrangement until all permits (including grid connection) have been secured. Thus we think this metric should not be applied as part of the minimum criteria.

Objective 3. Reduce the level of risk and cost borne by customers.

We believe this objective can be subsumed within Objective 2.

Noting that renewable energy generators are generally price takers, the impact of a REZ on the risks and costs borne by customers are minimal, except where the REZ is funded by taxpayers.

Question 4 *Are there alternative, preferable options for deciding which generators become part of the REZ?*

Answer 4 All projects within the geographical area of the REZ should be eligible to participate in the REZ process. The market competition process should be left unhampered for generators to seek to secure land in the REZ through private contracts.

Question 5 *Which party is best placed to perform the role of REZ coordinator where the REZ is being developed in accordance with the regulatory framework? Should the decision regarding the identity of the REZ coordinator lie with the State government?*

Answer 5 We believe that Network Service Providers (NSPs) will be best placed to coordinate REZs, in consultation with AEMO. The main interface point for grid connection is the NSP. Hence we believe that the NSP should be the REZ coordinator.

Question 6 *Are the functions to be undertaken by the REZ coordinator in the regulated model appropriate?*

Answer 6 Our opinion is that the REZ coordinator functions should be limited to the following:

1. Facilitating combined connection groups (CCGs), whereby a few generators group together to fund a certain network investment and apply for joint study on the Full Impact Assessment.
2. Be the asset owner for the CCG's funded works, and manage future connections where feasible, by allocating cost sharing mechanisms. This function is another reason why the NSP is the most suitable candidate for the coordinator role.

Question 7 *What, if any, qualification criteria should the REZ coordinator apply to prospective REZ participants?*

Answer 7 The following criteria should be applied:

- The project should have secured land access within the REZ
- The project should have submitted a development approval or planning permit application to the relevant authority
- The project should have submitted a connection application
- The project wishes to connect to a part of the network which requires upgrades or new assets which would be more cost effective to be shared with others. For example, one large transformer in a single bay for several projects would be more

efficient than the case where each project funds their own transformer.

Question 8 *What objective or objectives should the REZ coordinator should seek to achieve when selecting successful tenderers?*

Answer 8 The objective sought by the REZ coordinator should be to unlock access to plentiful renewable energy sources by coordinating investment in the necessary transmission systems linking these REZs to the load centers. This means the overall capacity of the wider transmission system is the key issue. There is no benefit in developing a REZ without the ability to move the energy to the load centers.

Question 9 *Should the Rules establish a framework to ensure that the REZ delivers an optimal supply mix?*

Answer 9 What is or isn't an "optimal" supply mix is a subjective question, so it is hard to imagine how a framework can be sensibly developed to deliver this. Particularly while the absence of a carbon price that applies to the electricity sector means coal-fired and gas-fired power stations can continue to pollute without ever having to face these costs, thus providing an unfair advantage over other generators and harming the long term interests of consumers.

In the absence of agreement, we believe the optimal supply mix should be market driven based on the multitude of dynamic investment signals presented.

Question 10 *Should REZ developments be subject to a requirement that they may only proceed if a certain proportion of the planned capacity of the preceding REZ stage is subscribed?*

Answer 10 Such a requirement is likely to slow down the development of REZs, because it can be quite difficult to secure the agreement or financial commitment of a large number of generators prior to proceeding with a REZ. The way to avoid this dance is to adopt the CREZ model from the ERCOT region in the USA, where their version of REZs were funded by consumers through their bills rather than waiting for enough individual developers to make a financial pre-commitment.

It is essential that the REZ coordinator is engaged with the market to understand the desire to invest in certain areas. If necessary, the REZ coordinator may need to fund studies to assess the renewable energy resources and make that publicly available prior to the market consultation. In addition, the REZ coordinator must engage with AEMO

and the NSP to do a stability analysis, as this is likely to be the limiting factor to the size of the REZ being feasible. Once a MW size is determined to be feasible, this would be compared to the market interest. Regions where market interest meets or exceeds the REZ capacity should get the focus for transmission development. But any threshold level of financial pre-commitments from generation developers should not be necessary for a REZ to proceed.

Question 11 *Should the REZ coordinator return any surplus auction proceeds to customers in the form of a reduction in TUOS charges?*

Answer 11 We propose surplus auction proceeds to be either refunded or put into a fund for the ongoing operation and maintenance of the relevant REZ assets.

Question 12 *Should the ESB consider REZ models that allow for speculative investment that departs from the ISP, in order to reallocate risk away from customers, such as the one put forward by the Public Interest Advocacy Centre (PIAC)?*

Answer 12 We believe that speculative investments should be left to individual investors depending on their risk appetite. The REZ model should be simple and focused.

Question 13 *How should pre-existing developments be treated within a REZ framework? At what stage of development should a project be considered a pre-existing development?*

Answer 13

- The REZ framework should not preclude other projects from connecting within the REZ under open access regime.
- However, the REZ framework should not disadvantage pre-existing developments any more than they would face under the existing open access regime.

Question 14 *Should the interim REZ framework contemplate brownfields developments? If so, should developers have the ability to influence the location and configuration of the REZ transmission assets within a brownfields REZ?*

Answer 14 The objective of REZ should be focused on new developments. Brownfields REZs may be considered as far as additional developments are involved such as in expansion or additional capacity to be installed. But it is likely that this will be highly difficult to do without prejudicing existing project owners in those geographical areas.

We believe that generators, with respect to greenfield or brownfield REZ expansion, should have a say on the location and configuration of the REZ transmission assets.

Question 15 *Are the evaluation criteria set out in the introduction to Chapter 5 appropriate?*

Answer 15 It is difficult to see generators committing funds without a clear quantifiable return. The fact that the current proposed REZ design only potentially eliminates constraints within a REZ is unlikely to encourage investments.

Question 16 *Which option for access within a REZ is preferable?*

Answer 16 We propose that a cost sharing mechanism for immediate physical connection works are the most appropriate.

Question 17 *Are there alternative options that the ESB should consider?*

Answer 17 For the REZs to really work, we believe that the model used in Texas known as the Competitive Renewable Energy Zone (CREZ) framework is a good one to be applied in Australia. Texas has a similar situation where the renewable energy zones are far from the major load centers. The solution is to build transmission lines linking the REZ and load centers, initially funded by the consumer. In Australia, a similar approach can be used. Further details can be found at:
<https://cleanenergygrid.org/texas-national-model-bringing-clean-energy-grid/>

Question 18 *Are there potential improvements to the options that the ESB should consider?*

Answer 18 We think it is best to avoid introducing Financial Transmission Rights (FTRs) until this has broad support across the electricity industry. The response of investors to the FTR proposal contained within the AEMC's "COGATI" reforms has been almost uniformly negative.

Question 19 *If the ESB were to adopt one of the access options outlined in this chapter, would it be necessary to restrict connections outside of REZs?*

Answer 19 From a consumer point of view, the more generators connecting, the better price outcome. However, if the REZ is to be funded by generators, some kind of access protection is demanded to make the investment worthwhile. Since the current REZ design is not removing transmission

system limitations, it is of little benefit and further restricting generators outside REZ will only negatively impact the market and hurt end consumers.

Overall we support the financial access protection model if we were pushed to choose any of the four options in the ESB paper.

Question 20 *If the ESB were to adopt the financial access protection model, should it also adopt measures to avoid winner takes all outcomes?*

Answer 20 No comment

Question 21 *If the ESB were to adopt the financial access protection model, should subsequent connecting generators be required to provide compensation that reflects the regional reference price?*

Answer 21 No comment

Question 22 *If the ESB were to adopt the financial access protection model, how should financial compensation be allocated between REZ generators? Is generator availability an appropriate metric?*

Answer 22 No comment
