12 February 2021

Dr Kerry Schott, Chair

Energy Security Board

COAG Energy Council

Lodged electronically: [info@esb.org.au](mailto:info@esb.org.au)

Dear Dr Schott

**Energy Security Board – Renewable Energy Zones Stage Two consultation paper – January 2021**

EnergyAustralia is one of Australia’s largest energy companies with around 2.5 million electricity and gas accounts across eastern Australia. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 4,500MW of generation capacity.

We appreciate the opportunity to provide feedback on the issues canvassed by the Energy Security Board (ESB) and support the further consideration of transmission access issues as part of renewable energy zone (REZs) developments.

The AEMC’s reform proposals under the Coordination of Generation and Transmission Investment (COGATI) project were refined through extensive consultation and have theoretical appeal. The ESB states that regimes involving dynamic locational marginal pricing (LMPs) coupled with some form of financial transmission rights (FTRs) are still the only alternative put forward to date that can apply across the National Electricity Market (NEM) and ensure efficient investment and system operation. However, the latest detailed design elements of COGATI involved various levels of complexity and potential risks, to generators and to customers, which would need to be examined further if they are to win sufficient stakeholder support as a long-term solution.

The regulatory arrangements dealing with REZs as part of an extended national planning framework, as elements of jurisdictional policies, and potentially as commercial arrangements, warrant careful consideration to ensure the costs and risks to consumers of the energy transition are appropriately minimised. We appreciate the challenges taken on by the ESB in exploring these matters however, as expanded below, we do not consider priority access models can be given appropriate treatment due to the ESB’s deadline for making recommendations to ministers. The need for, and feasibility of, access rights within REZs should also be scrutinised in more depth before forming part of any high-level design principles.

The need for access rights as a locational incentive and risk sharing mechanism

The ESB should revisit the need for specific access arrangements with respect to the objectives it is trying to achieve. For example, the ESB states that there needs to be some mechanism to ensure that generators locate within a REZ, on the presumption that this is an efficient outcome, and that access rights are a necessary locational incentive. These rights can then be auctioned, thereby providing a form of risk-sharing mechanism and potentially resulting in customers not fully bearing the cost of transmission investment. The ESB’s approach also appears to presume that renewable developments outside a REZ, under traditional open access provisions[[1]](#footnote-2), where there may be existing or future spare headroom to accommodate new entrants, are inherently and systemically inefficient.[[2]](#footnote-3)

To a large extent, the cost and risk exposure to customers of inefficient investment should be managed via the ‘Actionable’ Integrated System Plan (ISP) framework, RIT-Ts, and the associated ‘stage one’ REZ planning framework consulted on previously by the ESB.[[3]](#footnote-4) The ESB’s issues paper also does not examine whether locational incentives like exploiting economies of scale and streamlined connections processes could be a sufficient ‘carrot’ for new generation without offering access rights within the REZ (or beyond).

The ESB also notes that REZ planning and investment frameworks need to accommodate REZ developments outside of the ISP framework via government policy or mandates. In this situation, we would be supportive of exploring means to minimise the extent of customer and taxpayer exposure, either under a national regulatory framework or as part of any associated jurisdictional policy. The other situation giving rise to REZ developments, where this is done under some market-based arrangement, would involve proponents taking on the risk and cost of development, which can presumably be accommodated under existing regulatory arrangements, including in the same way as government funding contributions where only part of the investment is funded.

If the ESB considers that a national REZ development framework requires a departure from the foundational NEM tenet of open access, EnergyAustralia sees merit in access options that are less complex and thereby provide greater certainty on locational signals, and which can also be more directly tied to the funding of new and efficient levels of transmission investment. Ideally, the administration of access rights should be integrated as far as possible within existing national planning frameworks like the ISP.

We acknowledge that interim or priority solutions being contemplated by the ESB in terms of REZ frameworks may set precedent yet be suboptimal from a long-term perspective, particularly as they involve a much greater reliance on state-based policy and development in specific geographical areas, rather than relying on market signals that apply NEM-wide. However, the current policy landscape appears to be moving towards greater reliance on centralised intervention and planning, which is expected to deliver customer benefits by accelerating the energy transition to a cleaner generation mix and by allaying concerns around disruption to supply in this process.

The ESB should focus on design principles, not detailed access models

We appreciate the ESB aims to submit recommendations for a national REZ framework for energy ministers’ consideration by April 2021. As raised in the ESB’s recent workshop, the ESB is engaging closely with the NSW Government on access design issues arising out of its Electricity Infrastructure Roadmap. Our expectation is that NSW arrangements will be consulted on over the course of 2021 and this process will raise and develop solutions for the full range of access issues and locational incentives in a fine level of detail. The NSW Government also seems likely to proceed with a specific approach to REZ access regardless of any ESB recommendations, which could address, to a large extent, the priority the ESB has assigned to this work. Furthermore, and noting the extensive consultation and time taken to refine access regimes proposals as part of COGATI (and its predecessors) it seems highly unlikely that the ESB would be able to move from an issues paper with high level access options, to substantive recommendations for implementation by governments, in the space of approximately 4 months.

We therefore suggest the ESB delay consideration of a national approach around transmission access rather than create a parallel consultation process with NSW, and moreover via consultation process that would be too short to properly explore the ramifications of alternative access models. Longer-term solutions for market design to be implemented on the back of other ESB post-2025 recommendations, namely signals for generator entry and exit, and pricing of new services, may also provide guidance for, or place restrictions on, how locational signals and any associated access rights can be best dealt with.

Design principles and objectives of a REZ development framework

Our feedback on some of the high-level framework features and objectives identified by the ESB are as follows:

* A centrally coordinated process, involving generators bidding for and receiving access rights, seems sound, noting the conflicting objectives of having participants pay for access rights while also receiving sufficient benefit to want to locate within a REZ, and that it is linked to a specific point in time and therefore the preparedness of parties willing to bid. The ESB should give further thought to the practicalities of bidding processes, such as how bidders could coordinate to deliver a combined technology solution (which could be seen as anti-competitive), what type of access is desired by owners of different generation technologies/ comparability of bids, and opportunities for non-network support options to be explored. Critically, this process would need to involve less complexity and be completed faster than connection arrangements outside of the REZ development.
* The ESB refers to a ‘specialised connections process’[[4]](#footnote-5) for new entrants associated with a REZ. We would appreciate clarification around this to better understand the intent and whether this has the potential to impact on connections outside the REZ under the traditional open access process, and the TNSP’s and AEMO’s attention to those.
* We also support mechanisms that attempt to more appropriately allocate cost and risk between TNSPs, developers and consumers. The REZ development frameworks contemplated by the ESB place considerable weight on the prudent staging and release of REZ hosting capacity, including completion of RIT-T assessments. The ESB should ensure planning processes give due consideration to the risks of under and over-investment in transmission capacity relative to associated generation investment this capacity is intended to service. As noted above, we consider that links to the Actionable ISP framework and associated RIT-T processes are fundamental design features. The timing of auctions for access or REZ hosting capacity are also critical, namely their alignment (or not) with RIT-T and contingent project approvals[[5]](#footnote-6), as well as government decisions on funding or investment incentives.
* A further ‘timing’ issue relates to potential market impacts of having large volumes of new generation connect simultaneously with the commissioning and energising of new REZ transmission infrastructure.
* We also support a regime whereby REZ hosting capacity, staged development options and other needs (e.g. how different technologies can be combined to optimise reliability, security and cost) are determined in accordance with overriding customer objectives — the National Electricity Objective, revenue and pricing principles and other guiding considerations already in the National Electricity Law and Rules. The ESB should give some consideration to how provisions would be monitored and enforced, including the role of guidelines for developers and decision-making bodies.
* We consider that the role of REZ coordinator should rest with the jurisdictional planning body, rather than have this role decided by jurisdictional governments as suggested by the ESB. While it seems unlikely, we would be concerned if multiple REZ coordinators existed in a single jurisdiction. Having the same coordinator across REZs (in effect the TNSP) will provide more certainty for developers, provide better coordination where REZ developments require cross-border considerations and also better integrate with regional planning arrangements (including those flowing from the ISP etc). REZ coordinators would need to have a close relationship with jurisdictional planning bodies/ TNSPs in any case, and the creation of a separate, specific body would add additional, unnecessary cost for consumers and taxpayers.

Options for access within a REZ

Of the four potential access options listed by the ESB, we consider that the ‘connection access protection model’, involving contracted rights under a ‘do no harm’ arrangement, has the most merit in terms of its simplicity and ability to integrate with planning and connection arrangements. Our interpretation of this arrangement is that it is referenced from the DUID point of connection node within the REZ to the interface between the REZ and the broader shared network node.

Generally, we see the following elements as important in consideration of possible options, which touch on some of the observations made by the ESB in its consultation paper:

* Defining rights within the REZ boundary (and the boundary itself) will be difficult. Congestion and access to the regional pricing node will depend on power flows beyond the REZ boundary, and are far more complex in meshed network configurations.
* Access rights and locational incentives extend beyond the price and volume impacts arising from congestion and include impacts on marginal loss factors, maintaining compliance with performance standards or system strength and changes to other technical parameters arising from new connecting parties. Such factors, particularly where they are uncertain, are best accommodated through contractual negotiation at the time of connection, on a ‘do no technical or commercial harm’ basis.
* Access options should also accommodate the value that can be extracted from parties connecting after the initial round of capacity release (akin to third party access to LDCAs), namely in instances where the rights of incumbents are not affected, but value could be fairly recovered by them (and potentially passed back to consumers).
* The option involving the early allocation of FTRs requires certainty that a full regime involving FTRs/ LMPs will be established at some point. This appears unlikely given the focus on developing priority interim arrangements and questions around the suitability of COGATI reforms.
* Arrangements that can be integrated into jurisdictional planning arrangements and government-let contracts may be more likely to be adopted by governments. That is, those that are subject to market dynamics i.e. ‘pure’ economic incentives for locational decisions (in the form of FTRs and REZ regional pricing) operate outside of planning control, whereas direct compensation arrangements can be directly tied to the staged release of REZ hosting capacity.
* The auctioning of physical or financial access rights will give rise to a pool of revenue that can be better tied to hosting capacity, and potentially used to offset transmission costs paid by customers and taxpayers. While the specifics are not entirely clear from the ESB’s consultation paper, auctioning the early allocation of FTRs would, in theory, generate revenue in proportion to the expected value of FTR payout, with no (or perhaps much less) surplus that could be passed back onto consumers.
* The implicit access rights and revenue expectations of existing generators should be preserved where they are otherwise negatively affected by new REZ developments, or impacts should at least be explored by the ESB. The principles discussed by the AEMC recently under COGATI and the issue of grandfathering seem a useful starting point although potentially difficult to quantify e.g. modelling revenues under the counterfactual and considering mechanisms to make generators ‘whole’ for a limited time period.

If you would like to discuss this submission, please contact me on 03 8628 1655 or Lawrence.irlam@energyaustralia.com.au.

Regards

**Lawrence Irlam**

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1. As outlined by the ESB on slide 6 of its public forum presentation as the ‘do nothing case’ <https://prod-energycouncil.energy.slicedtech.com.au/sites/prod.energycouncil/files/Webinar%202%20February%202021%20REZ%20consultation%20paper.pdf> [↑](#footnote-ref-2)
2. We highlight that this inefficiency does not appear validated by the 2020 ISP outcomes and roadmap, where REZ extension developments do not appear to be an integral part of the optimal development path. [↑](#footnote-ref-3)
3. <http://www.coagenergycouncil.gov.au/publications/energy-security-board-renewable-energy-zones-planning-consultation> [↑](#footnote-ref-4)
4. ESB, *Renewable Energy Zones - Consultation paper*, January 2021, p. 24. [↑](#footnote-ref-5)
5. These two decision points are particularly important in terms of the costs customers ultimately bear, in situations where cost estimates used for RIT-T approvals, and those ultimately approved by the AER for cost recovery, materially diverge. [↑](#footnote-ref-6)