

12 February 2021

David Swift  
Independent Deputy Chair  
Energy Security Board

*Submitted via email [info@esb.org.au]*

Dear David,

**Response to Consultation Paper on interim Renewable Energy Zone (REZ) framework**

Energy Networks Australia (ENA) welcomes the opportunity to lodge this submission in response to the Energy Security Board's (ESB) consultation paper on the interim REZ framework.<sup>1</sup>

ENA is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

As explained in the attached submission, ENA supports the development of a REZ framework to deliver customer benefits by promoting the orderly connection of renewable generation and storage capacity in REZs, consistent with the Integrated System Plan (ISP). ENA also welcomes the prospect that State Governments may be able to draw on aspects of the interim REZ framework while pursuing their own particular policy objectives. Such a framework will promote a nationally consistent approach to developing and maintaining REZs over time, to the benefit of customers, stakeholders and industry participants.

While ENA supports the objectives of the proposed reform, it is evident from the consultation paper that substantial further work is required to develop a REZ framework that can be confidently expected to achieve its stated objectives. The attached submission summarises ENA's key messages and then discusses a number of specific issues in further detail.

ENA looks forward to working with you and your team in further developing the interim REZ framework. If you have any queries in relation to this submission, please contact Verity Watson on (03) 9103 0407.

Yours sincerely,



**Andrew Dillon**  
Chief Executive Officer

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<sup>1</sup> Energy Security Board, Renewable Energy Zone, consultation paper, 26 November 2020.

## Key messages

- » The development of a nationally applicable REZ framework to facilitate transformational change in the energy market is supported. The orderly development of renewable generation and storage capacity in REZs across the National Electricity Market, consistent with the ISP or any jurisdictional identified REZs, will benefit customers by facilitating the lowest cost energy solutions.
- » ENA agrees with the consultation paper's description of the existing and emerging issues. In particular, substantial efficiencies can be obtained by coordinating connection applications to REZs; avoiding a disorderly connection process; managing the risks associated with marginal loss factors; and reducing the risk of inefficient congestion. ENA also supports the use of auctions or tenders to allocate the available REZ capacity to generators and storage.
- » The ESB's view that each State Government should appoint their own REZ coordinators is strongly supported. This approach will promote a national framework for REZs while also providing each State Government with flexibility to pursue their own policy objectives.
- » The role of the REZ coordinator is central to the effective operation of the proposed framework. The scope of the REZ coordinator's role is only described at a high level in the consultation paper and requires further work to ensure that the proposed approach is workable and efficient. The integration of this role with the REZ planning process in Step 1 of the REZ framework also needs to be better understood. In particular, the planning aspect of the REZ coordinator's role in relation to regulated REZs should be limited to fine-tuning the plans developed by the ISP and the jurisdictional planning body, and not to second-guess or revisit them.
- » Relatedly, the consultation paper suggests that if a tender process associated with a REZ stage fails to generate anticipated revenues, then future stages of the REZ would be reassessed and potentially modified or ceased. Such a proposition is not supported as revenue proceeds from an auction of access rights only provides information on generators' willingness to pay for those rights. As such, revenue proceeds is not a reasonable proxy for the net market benefit provided by the REZ over its asset life, which should drive the investment decision.
- » The consultation paper describes the REZ access regime as potentially providing a 'stepping stone' to national access reform. However, it is also important to acknowledge that the Coordination of Generation and Transmission Investment (COGATI) access reforms were not broadly supported by stakeholders and, therefore, there is no shared long term vision for national access reform. As such, it is best to regard the REZ access framework as 'an interim solution' that may or may not be superseded by a national access framework in the future.
- » Of the four REZ access options described in the consultation paper, Option 1 (physical access protection) and Option 2 (financial access protection) are credible options that should be explored in further detail. Options 3 and 4 are not supported, as neither option is likely to encourage generators to locate in a REZ. For Option 2, Transmission Network Service Providers (TNSPs) should not be responsible for managing the compensation arrangements, which can be managed by the REZ coordinator or through mandated contractual relationships between the REZ participants, outside settlements.
- » We do not support further work in developing the Public Interest Advocacy Centre (PIAC) model. The current planning and investment framework, including the ISP and the Regulatory Investment Test – Transmission (RIT-T), are rightly focused on delivering optimal outcomes for customers. The PIAC model adds significant complexity and risk to these arrangements, but it is unclear why the PIAC model would deliver better outcomes for customers. We also note that the ESB's proposed access framework will partly achieve PIAC's objective by creating a funding channel for generators to contribute to the cost of REZ developments, without creating new risks or uncertainties for investors and higher total costs for customers.

## 1. Introduction

The context for this consultation paper is that the Step 1 draft Rules, which address the planning arrangements for REZs, are currently being considered by Energy Ministers. Step 2 of the reform, which is the subject of this consultation paper, is focused on establishing an interim REZ framework to facilitate the orderly connection of renewable generation and storage capacity in REZs, in accordance with the ISP.

The further development of the REZ framework comes at a time when State Governments are pressing ahead with initiatives to promote the development of renewable generation, as the transformation of the energy market continues to gather pace. In this context, an interim REZ framework that is capable of being applied nationally across regulated, Government and commercial REZ developments may provide significant value to participants and, ultimately, to customers through lower total electricity costs.

The remainder of this submission discusses the following topics:

- » **Identified issues** – ENA supports the description of the deficiencies arising from the current framework as presented in the consultation paper, and notes the importance of ensuring that the scope of the proposed reform is directed at addressing those issues.
- » **REZ coordinator role** – this role, which is central to the effectiveness of the interim REZ framework, requires further detailed work to ensure that it is appropriately defined and executed. A further feedback loop to the planning process to reduce the risk of asset stranding is not necessary or desirable.
- » **Access rights options** – the options of providing physical protection (Option 1) and financial protection (Option 2) of the generators' access rights are credible options that should be explored further.
- » **PIAC model** – this model is not supported because it creates additional complexity and risk, which will ultimately lead to sub-optimal outcomes for customers.

## 2. Identified issues

ENA agrees with the identified issues or 'problem definition' presented in the consultation paper, which explains that renewable generators may not currently have an incentive to locate in REZs identified in the ISP in an orderly fashion.<sup>2</sup> In order to meet customers' energy needs at the lowest total cost, a mechanism is required to promote efficient connection of generation and storage capacity in REZs. By facilitating the orderly connection of renewable generation and storage capacity, the existing risks of inefficient network congestion and low marginal loss factors may be avoided.

From the perspective of generators seeking connection in REZs, the potential benefits of a workable REZ framework are:

- » Lower cost connections, by capturing and sharing efficiencies between connecting parties;
- » Increased certainty during the connection and approvals process; and
- » Improved investment certainty.

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<sup>2</sup> Ibid, first and second bullet points, page 16.

These potential benefits, supported by the efficient deployment of storage capacity, should facilitate lower total energy costs and lower electricity prices for customers than would otherwise be the case. ENA therefore supports the objective of the reform, noting that it is ultimately focused on delivering better outcomes for customers.

For the proposed REZ framework to be effective, it should be designed to facilitate the orderly and efficient connection of renewable generation in response to known deficiencies with the current arrangements. As explained in further detail in this submission, ENA considers that the proposed REZ framework is appropriately targeted in the following respects:

- » It is focused on regulated REZs,<sup>3</sup> noting that the objective is to promote outcomes consistent with the ISP, which is an important driver of regulated transmission investments. As the interim framework applies to regulated REZs, it does not impose any obligations in relation to REZs that do not form part of the TNSP's regulated transmission network;
- » It introduces the role of the REZ coordinator to encourage the orderly and efficient connection of generation and storage capacity in REZs; and
- » It provides for an access regime, so that generators and storage that successfully obtain access to a REZ are able to secure access rights that protect their interests.

However, the consultation paper also raises the prospect of changes to the current arrangements that are not directly related to the 'problem definition' described in the consultation paper. In particular, the consultation paper suggests that:

- » Revenue receipts from the sale of access rights could inform the planning process for regulated REZs, possibly leading plans to be reassessed, modified or cancelled;<sup>4</sup> and
- » Alternative regulatory models may be considered that reallocate risk away from customers and allow generators to drive transmission investment decisions.<sup>5</sup>

We discuss each of these specific issues in later sections of this submission. The general observation to make at this point, however, is that these initiatives would extend into areas of transmission planning and economic regulation that have been the subject of numerous reviews and enhancements, some of which are currently being finalised.<sup>6</sup> While ENA is not opposed to improving these arrangements, a compelling case for change should be established before embarking on any further reforms, and should be addressed through a separate consultation process.

### 3. REZ coordinator

A key aspect of the proposed framework is the establishment of an auction or tender process to optimise generation and storage connections in REZs, supported by arrangements to protect the access rights secured by the successful bidders. In addition to optimising the use of REZ capacity, the proposed framework is intended to provide incentives for generation and storage capacity to locate in REZs, as

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<sup>3</sup> It should be noted that regulated REZs may also include REZs identified by the jurisdictional planning body, in addition to REZs identified in the ISP.

<sup>4</sup> Energy Security Board, Renewable Energy Zone, consultation paper, section 4.3.1, page 30.

<sup>5</sup> Ibid, section 4.3.3, page 31.

<sup>6</sup> For example, the AER's draft Guidance Note on the regulation of ISP investments.

envisaged by the ISP. By coordinating connections in a REZ, efficiencies may also be obtained in designing and constructing connection assets to meet the needs of the connecting parties at the lowest cost.

ENA supports ESB's view that each State Government should determine which party performs the role of REZ coordinator. This approach will provide flexibility to the State Governments while ensuring that the REZ coordinator role is recognised in the national framework, which will provide valuable consistency across the national electricity market.

The consultation paper recognises that the activities associated with establishing and maintaining a REZ requires the role of REZ coordinator to be introduced. The consultation paper explains that the role of REZ coordinator could include the following functions:<sup>7</sup>

- » selecting the successful tenderers;
- » returning net auction revenue to customers;
- » providing information to help transmission planners assess whether future REZ stages should proceed; and
- » managing the access regime that applies within the REZ.

ENA notes that the consultation paper does not provide much detail regarding the scope of these activities or how they would dovetail with the existing planning and investment framework. For example, the Step 1 draft Rules, which address the planning arrangements for REZs, require the jurisdictional planning body to prepare a REZ design report that, amongst other things, has regard to the anticipated location and configuration of connection assets, together with any associated infrastructure. In addition, in preparing the REZ design report, the jurisdictional planning body must consult with interested parties wishing to register their interest in developing one or more projects in the REZ.

Evidently, the role of the jurisdictional planning body in relation to REZ design appears to overlap with the REZ coordinator's role in conducting the tender process and optimising generation and storage connections. ENA notes that the consultation paper makes mention of the need for the REZ coordinator and the jurisdictional planning body to work together,<sup>8</sup> noting that the plans set out in REZ design reports would not be 'set in stone'.<sup>9</sup> While ENA has no doubt that the relevant parties will work together to ensure that the planning arrangements work as smoothly as possible, efficiencies can be achieved if overlapping responsibilities and iterative processes are minimised.

ENA considers that further work is required to clarify the planning responsibilities of the REZ coordinator and the jurisdictional planning body. For example, it seems appropriate that the REZ coordinator's contribution is to assist in fine-tuning the REZ planning undertaken by the jurisdictional planning body, rather than revisiting or second-guessing those plans.

A related issue is the suggestion that the REZ coordinator may assist transmission planners in assessing whether future REZ stages should proceed. The consultation paper comments that the REZ framework could further protect against the risk of asset stranding by linking the success or otherwise of preceding REZ stages to the development of subsequent REZ stages. In particular, the paper explains that if a REZ

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<sup>7</sup> Energy Security Board, Renewable Energy Zone, consultation paper, section 4.3.3, page 31.

<sup>8</sup> Ibid, page 28.

<sup>9</sup> Ibid, page 15.

tender process “fails to generate anticipated revenues, then future stages of the REZ would be reassessed and potentially modified or ceased.”<sup>10</sup>

As noted in the previous section, ENA’s concern is that this proposed role for the REZ coordinator does not address a deficiency or gap in the existing transmission planning and investment framework. Firstly, the jurisdictional planner will be fully aware of the current and projected level of asset utilisation in each REZ, and does not require this information to be provided by the REZ coordinator. Secondly, an unexpectedly low utilisation for an existing REZ would be considered by the relevant TNSP in deciding whether to proceed with a subsequent stage of the REZ. In particular, the following aspects of the transmission investment and planning framework reinforce the business practice of reappraising projects in light of new information:

- » Chapter 6A has been designed to provide strong financial incentives on each TNSP to minimise its actual capital expenditure, subject to meeting its performance targets and compliance obligations
- » Clause 5.16.4(z3) of the National Electricity Rules requires a RIT-T proponent to reapply the RIT-T if there has been a material change of circumstance which affects the preferred option.

Given the above observations, ENA does not consider that an additional feedback loop is required to safeguard against asset stranding. In addition, the consultation paper’s suggestion that the proceeds from the tender process should inform future investment decisions is not supported. The level of proceeds obtained will reflect the value that generators place on the access rights they receive, which will be influenced by numerous factors. The value attributed to these access rights will be a poor proxy for the expected net market benefit provided by the REZ over its asset life, which should drive the investment decision.

ENA notes that the existing ISP and RIT-T planning and investment arrangements have been designed to drive efficient transmission investments. These planning arrangements, together with supporting AER guidelines, have recently been updated to incorporate the ISP projects to ensure that only efficient and prudent investments proceed. Given these circumstances, ENA’s position is that it is not necessary or desirable for the REZ coordinator’s role to stretch into the transmission investment process.

As already noted, ENA recognises that further work is required to define the REZ coordinator’s role and ensure that it dovetails with the existing transmission and investment planning arrangements. ENA looks forward to working with the ESB to further develop this aspect of the interim REZ framework.

## 4. Access rights options

In order to maintain a REZ, it is necessary to protect the allocated network capacity to those parties that initially secured it through the tender process. ENA therefore supports the development of an access rights regime as an integral component of the interim REZ framework. ENA also supports the consultation paper’s view that the proceeds from the tender process should defray the costs of the transmission network that is borne by customers.

In developing this framework, it should be acknowledged that the access reform canvassed by the COGATI review did not obtain broad stakeholder support. As a consequence, there is no shared view on the design of a future national access regime or its likely timing. Given this observation, ENA’s position is

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<sup>10</sup> Ibid, page 30.

that it is not necessarily helpful to regard the REZ access regime as a ‘stepping stone’ to a national framework. Instead, ENA considers it preferable to design a regime that is appropriate for REZs and provides flexibility to transition to a national access regime should one eventuate.

Of the four options described in the consultation paper, the connection access protection model (Option 1) and the financial access protection model (Option 2) appear to be the most credible options. In contrast, the proposal to create a region for each REZ (Option 3) is likely to discourage generators from locating in the REZ<sup>11</sup> (contrary to the stated objective), as the newly established regional reference price is likely to be lower than adjacent regions. Option 4 appears to be impractical, as it depends on the introduction of a national access regime at a known point in time.

In relation to Option 1, ENA notes that in order to protect the access rights of those parties connected within the REZ, it may be necessary to impose obligations on new connecting parties ‘in the vicinity’ of the REZ, i.e. outside the REZ boundary. Evidently, it is not clear how ‘in the vicinity’ should be defined, which will inevitably create some uncertainty for participants. The determination as to whether physical rights will be infringed by a new connection will also involve an element of subjectivity, as the assessment will depend on the system modelling and assumed operating conditions.

A potential benefit of Option 2 is that it provides financial protection of access rights, which is inherently more flexible and tailored to reflect the costs imposed on holders of access rights compared to Option 1. A further potential benefit with respect to Option 2 is the incentive for storage to locate in a REZ and operate in a manner that relieves congestion, thereby enhancing the effective capacity of the REZ. Whilst these aspects of the Option 2 are positive, the arrangements to support the compensation payments will need to be considered in detail to ensure that they are workable. For example, while such payments may occur outside the settlements process, a payment mechanism will need to be developed that is acceptable to participants. ENA’s position is that TNSPs are not well placed to manage this process.

Option 2 also faces the same challenge as Option 1 in managing infringements on access rights that arise from new connections outside the REZ. A potential remedy is to widen the REZ boundary in Option 2 to capture these cases. However, it seems inappropriate for the definition of the REZ to depend on the design of the access regime. This observation suggests that the boundary for the REZ would need to be broadly defined for both Options 1 and 2, if the objective of protecting REZ access rights is to be achieved.

ENA considers that a simpler version of Option 1 is also worth exploring, where connections in the REZ are limited purely through an administrative allocation of access rights through the tender process. For this version of Option 1, those parties connecting in the REZ would accept the possibility that new connections outside the REZ may infringe on their access rights. This benefit of this model is that it would eliminate the need to consider the impact of new connections outside the REZ and avoid the costs of network augmentations to maintain existing asset rights. While the access rights of those in the REZ may be degraded over time, this loss of value may be more than offset by the cost savings in applying a simpler framework.

Apart from the design of the REZ access regime, it is also important to highlight the significant transitional issues that will arise as a result of its introduction. In particular, the treatment of existing connected parties and connection enquiries is a challenging issue that will need to be carefully considered. In addition, the transitional arrangements will need to anticipate that the interim REZ framework may be replaced by a national access regime sometime in the future.

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<sup>11</sup> Ibid, penultimate paragraph, page 43.

Given the complexities noted above, ENA welcomes the ESB's commitment to engage further with the industry in developing a workable access regime. At this stage, ENA supports further consideration of Options 1 and 2, or some combination. ENA also remains open to other options that may be identified through the ESB's consultation process.

## 5. PIAC model

The consultation paper seeks stakeholders' views on whether there is merit in exploring models that potentially go further in terms of reallocating risk away from customers and allowing generators to drive transmission investment decisions, such as the one put forward by PIAC.

In responding to ESB's question, it is important at the outset to note that the identified issues or 'problem definition' described in the consultation paper relate to:

- » The absence of a mechanism to promote efficient generation and storage connections in REZs, in accordance with the ISP; and
- » The risks of inefficient network congestion and low marginal loss factors in an environment where there is disorderly connection to REZs.

The PIAC model would not address either of these issues. Instead, the PIAC model is concerned with an alternative set of arrangements for how "the cost and risk of investment in new and existing transmission for REZs could be shared between consumers, generators, transmission network service providers, and other investors."<sup>12</sup>

In contrast to the PIAC model, the consultation paper is focused on arrangements for managing access to regulated REZs that have been tested through the ISP and RIT-T.<sup>13</sup> In other words, the economic case for the transmission investment that underpins the REZ has been thoroughly tested, including through stakeholder consultation and, if necessary, dispute procedures. If a project satisfies the RIT-T, it is reasonable to conclude that the process ensures that stranded asset risk has been minimised. Furthermore, the project proponent is required to reapply the RIT-T if there is a material change in circumstance that changes the preferred option.

The PIAC model argues that customers will face reduced stranded asset risk if part of the cost of the investment is borne by generators. PIAC summarises the benefit to customers from the proposed model as follows:

"Consumer exposure to the risk of underutilisation is capped at a fixed, limited portion of the investment value. This limits their liability, relative to current arrangements, under the 'worst case' where utilisation is low. If the generation and transmission investments enabled through the speculative investment prove to be efficient and prudent, then consumers will benefit and these costs will effectively be passed through to them through the wholesale market."<sup>14</sup>

ENA supports minimising costs to customers by ensuring that the regulatory framework drives efficient outcomes. Through numerous reviews, the RIT-T process combined with the incentive arrangements in

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<sup>12</sup> Ibid, first paragraph, page 50.

<sup>13</sup> Ibid, final paragraph, page 24 and fourth paragraph, page 26.

<sup>14</sup> Ibid, third paragraph, page 53.



chapter 6A of the National Electricity Rules are designed to deliver the lowest cost outcome for customers. These arrangements have been consciously designed so that risk is allocated to the party best able to manage it, as this approach minimises total costs to customers.

In contrast to the current arrangements, PIAC's model seeks to reallocate stranded asset risk to an investor. While reallocating risk away from customers may appear attractive in the first instance, ultimately customers will need to pay the investor for taking on that risk – a risk that the investor is unable to manage or reduce. As customers are ultimately paying the total costs of the electricity supply, the reallocation of stranded asset risk to an investor will result in increased costs for customers.

ENA also notes that the PIAC model is not directly relevant to the issues raised by the consultation paper, and therefore should not be considered further in this workstream.

To the extent that the PIAC model seeks to obtain funding for transmission investment from parties other than customers, ENA notes that the consultation paper contemplates using generator proceeds from the tender process to defray the costs of transmission. As already noted in section 4, ENA supports this initiative. In contrast to the PIAC model, it will share the costs of the transmission network without adversely affecting the total costs of providing energy solutions to customers.