

Renewable Energy Zones – National Consultation

NZ Wind Energy Association Submission

April 2022



Transpower

By email: REZ@transpower.co.nz

Introduction

1. The New Zealand Wind Energy Association (NZWEA) appreciates the opportunity to provide a submission on the Renewable Energy Zones National Consultation.
2. The Association congratulates Transpower for its focus on progressing industry discussion on the future of the energy sector and consideration of opportunities to enable the development of renewable generation.
3. In particular we recognise the importance of Whakamana i Te Mauri Hiko - Empowering our Energy Future, the Net Zero Grid Pathways Programme to ensure the grid does not constrain development and this consultation to address the significant increase in interest in renewable generation projects.
4. Internationally transmission is recognised as a key enabler of generation development and Transpower's work programme to learn from other geographies to assess opportunities and manage the risk of constraining development is appreciated.

Executive Summary

5. NZWEA supports the concept of renewable energy zones and the potential opportunity to benefit New Zealand by achieving economies of scale from investment in transmission and distribution networks.
6. The Association recognises there are specific challenges in developing REZ's including the timing of major investment among generators will be hard to align. Also the size of the NZ electricity sector, when compared with overseas examples, may be a limiting factor.
7. Key to the Associations support for REZ's is that, as Transpower has identified, they must be customer driven. This is to ensure that the cost and risks of establishing a REZ are shared by generation or load developers who support the investment and are not be allocated to other market participants or underwritten by the Government.
8. From a wind energy perspective, the Association wishes to ensure that REZ's do not create competitive advantage for REZ customers when compared to stand alone developments beyond the benefits derived from the achievement of economies of scale resulting from the sharing of the grid / distribution investment costs.

Response to Specific Questions

1. Do you agree that the first mover disadvantage and high connection costs can be challenges for connecting new renewable generation and/or large electricity loads to the electricity network?

Yes. First mover disadvantage is a recognised challenge if the optimal size for the transmission line exceeds that required of the customer. Similarly multiple parties sharing costs may significantly improve the economics and enable new connections that on a stand-alone basis are not commercially viable.

2. Do you think the concept of a Renewable Energy Zone could be beneficial in a New Zealand context?

Yes.

3. What region(s) do you think would be suited to Renewable Energy Zones?

From a wind energy perspective MBIE's June 2020 Wind Stack Report has identified significant economic wind potential in the Far North / Northland, BOP Taupo, Wairarapa, Otago and Southland for onshore wind and Offshore wind in Waikato, Auckland and Taranaki.

4. What benefits do you think should be considered in the decision-making process for Renewable Energy Zones in New Zealand?

NZWEA supports the benefits identified by Transpower in particular in enabling new generation, and the potential for improved economies of scale lowering prices for consumers.

5. Do you agree with the proposed guiding principles? Are there any that you would change or add?

The Association agrees with the 7 guiding principles identified. In particular NZWEA considers principle 2 that REZ's are customer driven essential. This is to ensure that the cost and risks of establishing a REZ are shared by generation or load developers who support the investment and are not be allocated to other market participants or underwritten by the Government.

From a wind energy perspective, the Association wishes to ensure that REZ's do not create competitive advantage for REZ customers when compared to stand alone developments beyond the benefits derived from the achievement of economies of scale resulting from the sharing of the grid / distribution investment costs.

6. Do you agree with the proposed criteria for selecting suitable regions for REZ development? Are there any that you would change or add?

Yes. Given the intent for REZ's to be customer driven the key consideration is generation

developer demand and, in terms of future potential, access to good renewable resources. The Association does however note that the quality of the renewable resource although important is an early indicator of potential and does not necessarily translate to a commercially viable development opportunity.

7. Do you agree with using a tender process for committing projects in a REZ? Are there alternative processes that could be considered?

Yes. The Association considers a tender process essential to ensure transparency and maximise the REZ opportunity.

8. Who should be involved with co-ordinating and undertaking the various steps within a REZ development process?

The Association recognises Transpower's initiatives to provide thought leadership to enable the decarbonisation of the energy sector and support the transition to renewables. Given the establishment of REZ's will require transmission investment and commercial contracts with the grid owner Transpower would seem the logical organisation to co-ordinate within the development process.

9. Do you agree with the proposed project criteria? Are there any that you would change or add?

The proposed project criteria are supported and will be useful in gauging likelihood to proceed during the evaluation phase in establishing a REZ and in support of the progressive investment in feasibility studies etc. The Association notes that the requirement for prospective generation developers to contractually commit to partake and fund a portion of the transmission connection and/or distribution network upgrade prior to build is the actual test as to the viability of a REZ.

10. Do you agree with the challenges we have identified?

Yes, and the Association notes the open access and capacity rights issues exist irrespective of REZ establishment and that these are part of a generators assessment of the viability of a given project. The issue of timing of connection for different parties is specific to a multiparty situation such as a REZ. The Association also notes the complexity and risk of potentially multiple consent applications within a given area.

11. What are some of the ways to overcome these challenges and who should be involved?

As Transpower has noted the resource management system reform and the Strategic Planning Act may assist and the Association supports ensuring that the strategic focus proposed by the Randerson Review is encapsulated in final legislation.

A key concern of the Association is ensuring that any measures taken to address the challenges do not favour participants in a REZ over other generation projects outside of a REZ beyond the benefits of economies of scale.

12. Do you see any other potential challenges that need to be considered?

While covered in the consultation the Association highlights the complexity of aligning the timing of major investments between companies.

In respect of wind energy diversity of location is an important consideration to reduce overall variability and a concentration of generation into one node does lower prices and places pressure on the viability of projects. These will all be considerations for developers considering participating in a REZ and can only fully be addressed when the scale of the REZ and likely participants has been defined.

Market size may also be a factor in the New Zealand context depending on the scale of a potential REZ.

About the NZ Wind Energy Association (NZWEA)

- The NZWEA is an industry association that promotes the development of wind as a reliable, sustainable, clean, and commercially viable energy source
- We aim to fairly represent wind energy to the public, Government, and energy sector
- Our members are involved in the wind energy sector and include electricity generators, wind farm developers, lines companies, turbine manufacturers, consulting organisations and other providers of services to the wind sector
- By being a member of NZWEA you are assisting the development of wind energy in New Zealand and helping to reduce our greenhouse gas emissions to meet climate change targets.

The Association's strategy focuses on three key areas:

- Leveraging NZ's emission reduction imperative to enable the energy transition to renewables, particularly wind energy.
- Optimising wind energy's position and ensure the regulatory environment supports wind farm development.
- Expanding the opportunity for wind energy development to enable community and industrial projects including wind's integration with other technologies.

Contact details in relation to this submission:

Grenville Gaskell
Chief Executive
New Zealand Wind Energy Association
PO Box 553, Wellington 6140
grenville@nzwea.org.nz