

5 April 2022

Transpower

Email: REZ@transpower.co.nz

Feedback on the National Consultation of Renewable Energy Zones

Introduction

1. Transpower presented the consultation on 8 March 2022 to provide context to REZ's.
2. Transpower also provided a copy of the presentation¹ to interested stakeholders
3. The purpose of the consultation is to seek interest across the industry to develop Renewable Energy Zones (REZ) in strategic regions across New Zealand.

Summary

4. Orion thanks Transpower for seeking feedback on its consultation of Renewable Energy Zones (REZ)².
5. Transpower invited submitters to respond to 12 questions posed in the presentation and consultation document.
6. Orion's feedback is detailed in this submission.

Orion Context

7. Orion's purpose is 'Powering a cleaner and brighter future for our communities' which is underpinned by a focus on selected United Nations sustainability goals where we believe we can provide positive outcomes through:
 - Sustainable cities and communities
 - Affordable and clean energy
 - Climate action
 - Decent work and economic growth
 - Responsible consumption and economic growth

¹ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/REZ_National_2022_FINAL.pdf

² <https://www.transpower.co.nz/REZ>

- Partnership for the goals
- Reduced inequalities.

8. To support our purpose, we have focussed on five strategic programmes:

- Transformation of our network for the future
- Customer engagement
- Tackling climate emergency and low carbon objectives
- Optimising performance
- Evolving industry capability.

9. Orion's commitment to sustainability includes, remaining open to using innovative ways to achieve sustainable outcomes and aspiring to be a leader for sustainability³.

Other Feedback

10. We support the feedback from the Electricity Network's Association on the consultation.

Questions and Feedback

Question 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?

We agree that the first mover disadvantage will create challenges where additional transmission investment is required for future growth, and

- Building transmission lines to accommodate future growth in renewable generation should not necessarily be borne by the first mover as this creates a barrier to achieve Net Zero outcomes.
- The first mover disadvantage will also be a challenge for smaller renewable generation facilities which may not be economically viable as standalone projects.

Customers may also look at onsite solutions such as solar generation and battery storage to avoid connection charges and investment in transmission assets, which will need to compete with these solutions. Consumers could also leverage opportunities to support localised offtake or peak capacity opportunities rather than engage with costly remote generation.

³ <https://www.oriongroup.co.nz/corporate/our-sustainability-commitment/>

While investment in interconnection may be the prerogative of, or based on connection applications with Transpower, there should be a transparent tender process that allows EDB's or other stakeholders to either work with Transpower or as a REZ entity.

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

We welcome the adoption of REZ opportunities beyond the current regions identified by Transpower.

However,

- there needs to be further research done by Transpower on the impact of injection into the grid,
- it should consider the potential growth in solar and battery storage in residential areas which may not necessarily mean that there will be an overall increase in load,
- Section 4.3 of the consultation⁴ considers the proposed criteria for REZ developments. We would recommend that the evaluation criteria be published to reflect the opportunities for REZ's before submitters commit to the concept,
- It needs to be strategically located close to constrained areas of the grid or where the supply is needed.

The REZ could be beneficial to reduce the headwind encountered by standalone initiatives.

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

Regions where there are connected assets would be a logical option. However, the concept should be available across New Zealand where future constraints are identified.

Region selection will also depend on the best placed locations for renewable resources and the appetite of REZ investors to make a joint upfront commitment to a grid upgrade for a site specific REZ.

⁴ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/REZ_National_2022_FINAL.pdf

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

There needs to be a tangible benefit to the local community e.g. job creation, with those benefits linked to the community needs.

The decision-making process also needs to provide a solution to address a local constraint in a specific region of New Zealand e.g. it might prevent other investment or provide important resilience benefits.

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

The consultation outlines the following proposed guiding principles:

1. REZ are built to harness and unlock renewable energy resource
2. REZ are customer driven
3. Local consumers will be no worse off as a result of developing a REZ
4. REZs are developed through partnerships and collaboration with local iwi and stakeholders
5. REZ's deliver net benefits to Aotearoa's electricity system
6. REZ's location and REZ's participation are done via a transparent methodology
7. REZ's are enabled with minimal changes to the existing electricity regulatory framework

We agree with the proposed principles and will need to address how investment occurs for an overall REZ, including lines ownership between individual generators and connection to the grid.

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

We agree with the proposed criteria outlined on Page 29 of the consultation document.

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

We agree with the proposed tender process outlined on Page 30 of the consultation document.

We also recommend that a competitive tender process be developed which will be open to Transpower, EDBs or other investors once it is agreed that REZ's should be established.

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

Transpower and/or the distributor/s who have received applications for renewable energy generation sites should co-ordinate the development of a REZ. This would be the logical initiating point in the development process.

This could later be handed over to a REZ investor's project manager, if Transpower or the EDB do not have a vested interest in the assets behind the connection point.

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

We agree with the project criteria outlined on page 30 of the consultation document. This will ensure that prior to commencement that there has been proper consideration of:

- resources allocations,
- land provisioning,
- financing,
- design,
- stakeholder engagement,
- consenting,
- connection concept assessment

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

We agree with the challenges identified in the consultation document.

However, first movers should receive a benefit through a reduction in charges when an additional generator connects to the REZ. Each generator should be responsible for their individual generation investment within the REZ. The cost of the shared assets and grid connection can be apportioned by the controlling REZ entity i.e. Transpower, an EDB or private investor. The REZ entity would also need to stipulate if any capital contributions are required by the generators when setting up the REZ. This would make it more attractive for early adopters to sign up to a REZ, knowing that costs may be further shared going forward as more generators connect to the REZ.

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

The controlling legal REZ entity, should allocate the charges appropriately e.g. capacity and asset usage for each generator at the REZ site. Costs should be re-apportioned when new generators connect at the REZ site in the future.

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

We agree that Transpower needs to be involved where a constrained asset has been identified. However, it is not clear in the consultation whether the coordinator, if it is Transpower, needs to be involved with the REZ development behind the connection point.

It is also unclear whether EDBs may develop REZ's equivalents within their network boundaries to achieve Net Zero objectives.

Further consultation should include:

- whether the REZ should follow the same consultation process as other generators,
- who will be allowed to develop and own (including private ownership) the infrastructure between the REZ and GXP.

Concluding Remarks

Thank you for the opportunity to provide this feedback. I do not consider any part of this feedback as confidential.

Please contact me if you have any questions on 027 234 4017 or rob.tweedie@origroup.co.nz

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rob Tweedie', enclosed within a hand-drawn rectangular box.

Rob Tweedie

Regulatory Manager