Sustainable Energy
Association New Zealand

8th April, 2022

Transpower
Renewable Energy Zones Consultation
REZ@Transpower.co.nz

Please find as follows the SEANZ (Sustainable Energy Association New Zealand) group submission on the Transpower consultation on Renewable Energy Zones.

For detailed information about SEANZ please check it out here.

Should you seek clarification of any points, please contact me as per details below.
Kind regards

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Renewable Energy Zones Submission from SEANZ Group Members

Q1.

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.

It is a major issue in areas with high generation resource potential and week grid. If not addressed properly it will slow down the electrification of the economy and decarbonisation process.

It is challenging from both generation and load point of view. The rules need to change to accommodate the energy transition. Facilitation of collaboration will play a big role.

Q2.

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

Yes.

International experience shows clearly that REZs, if done properly can:

- Decrease cost of electricity by lowering costs of the connection
- Revitalise local economies
- Speed up RES generation implementation
- Facilitate collaboration
- Improved resilience in electricity supply

Q3.

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

SEANZ proposes:

- Northland
- Waikato
- Taranaki
- Bay of Plenty
- Hawkes Bay
- Canterbury
- Southland

Q4.

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

SEANZ suggestions of the benefits to consider:

- **Connection cost reduction**
- **Increased, long term, economic benefit of the local communities**
- **Effective stakeholder engagement**
- **Attracting new industrial loads**
- **Include energy storage solutions in all REZs**
- **System, and integrated design approach rather than response to individual connection requests**

Q5.

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

4.1 Guiding principles for developing Renewable Energy Zones

01

REZs are built to harness and unlock renewable energy resource, storage and efficient network infrastructure to support the long-term decarbonisation and energy needs of Aotearoa, as well as the region hosting the REZ.

02

REZs are customer driven and are only built where there is clear demand from generation or load developers. This will help to ensure that a REZ is developed in line with the market, decreases the risk of investing significantly in infrastructure that may be underutilised or local consumers having to cover the incremental cost of network investment.

03

Local consumers will be no worse off as a result of developing a REZ. Our intent is to define a funding model that ensures new generation connections or demand developers cover the cost of the network investments required so that the additional costs associated with a pilot REZ in the Northland region do not fall on local consumers. The funding model needs to align with transmission and distribution pricing regulation.

04

REZs are developed through partnerships and collaboration with local iwi and stakeholders to ensure that regions hosting a REZ receive a net benefit from the development.

05

REZs deliver net benefits to Aotearoa's electricity system where existing connection processes cannot. For example, by increasing competition in the wholesale market to potentially lower regional electricity prices, increasing diversity or supporting reliability or security of supply.

06

REZ location and REZ participant selection are done via a transparent methodology to ensure potential regions and REZ participants are given the opportunity to build their case, including demonstration of any wider social, economic or environmental costs and benefits to the region.

07

REZs are enabled with minimal changes to the existing electricity regulatory framework. Large changes to the regulatory framework can take a significant amount of time to undertake and can have wide reaching implications to existing connected customers.

SEANZ comments on guiding principles:

- **GP1 – We agree.**
- **GP2 – We disagree.**

  Bigger picture must be taken into account rather than simply what's driven by local demand. National system planning must be considered.

- **GP3 – We agree.**
- **GP4 – We agree.**
- **GP5 – We agree.**
- **GP6 – We agree.**
- **GP7 – We agree.**

Q6.

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

4.3 Selecting regions for REZ development

- **Generation developer demand:** Are there already significant numbers of renewable generation developers seeking to build in the area?
- **Economically efficient network investment:** Is the estimated cost of network investment per unit of generation capacity ($/MW) lower in a REZ compared to connecting generation to the grid via current connection processes?
- **Network capacity in the region:** Are areas on the local network nearing capacity?

Other proposed criteria that could be considered:

- **Access to good renewable resource:** Does the region have high levels of wind, solar and/or other renewable resources in areas where lower cost land is available?
- **Potential added benefits to the grid:** Would additional generation and storage improve network resilience, diversity or enable interconnection investment deferrals?
- **Additional economic and social benefits:** Is there a socioeconomic case for investment in the region? For example, by enabling a just transition following departure of large industry.

SEANZ comments to selection criteria:

1. Generation developer demand

   We think this criterion is only partially addressing the issue. In many areas there is a long-term potential that needs to be unlocked stages. Selection should focus on long term approach and consider creating an access to the zone rather than access for selected developers in initial phase.

2. Economically efficient

   We agree.

3. Network capacity

   What if the area has significant resources that could economically connect to the interconnection network?

4. Access to good RE resource

   We agree.

5. Potential added benefits to the grid

   We agree.

6. Additional economic and social benefits

   We agree.

Q7.

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

In principle we agree, but there may be other assessment criteria worth considering like:

- ability to scale up in the future
- complementarity between different technologies, social licence or system benefits

Q8.

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

Transpower and Network Distribution businesses may be considered to be the "natural leader" of the process. Careful consideration between other stakeholders, proper and appropriate mapping and further consultation is needed. Herewith is a list of important stakeholders that should be considered:

- Regional councils and regional development agencies
- Central Government – MBIE, NZTE, Ministry of Energy

- Ara Ake
- Iwi/Hapu
- Electricity Authority
- Commerce Commission
- Connecting Generators
- Retailers and other energy market participants

Q9.

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

SEANZ agrees.

Q10.

Do you agree with the challenges we have identified?

SEANZ comments on the challenges identified are herewith:

5.1 Access and Firm Capacity Rights

- What about secondary movers to a newly constructed GIP in REZ pay the capacity related cost for the connection?

5.2 Funding and cost recovery

- We disagree with the statement on page 13 of the REZNC that " developers are committed up front so that network investment is designed to the right size, and all costs are shared and recovered from the connecting generators. This approach may inhibit the concept of REZs. We suggest that the cost should be anticipated by Transpower (or other entity created for that purpose) and then recovered from connecting generators or users.

Q12.

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

- Timelines
- Regulatory interference
- Social license