

Response to REZ consultation



INTRODUCTION

Rānui are a developer of renewable energy project in New Zealand with a focus on utility scale solar projects. Rānui are developing multiple solar farms across New Zealand with the initial project fully permitted and additional projects at various stages of advancement.

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RESPONSE

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 can be a major challenge and so developers need to identify low cost grid connection points which are not always optimal location in terms of resource and demand.

Q2.

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

Yes, given the need to add x GW of new renewables to the grid in the coming decades significant new transmission infrastructure is going to be required – REZ's should help minimize the cost of this infrastructure build out and therefore provide end users with more affordable electricity.

Q3.

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

The key factor influencing the location of REZ's should be the aim of delivering low cost electricity to end users. To that end initial REZ's should be in areas where minimal investment is required to unlock significant capacity. However minimal cost should not only focus on the infrastructure cost, but also on the impact on new RE on local wholesale market prices. Such an area must be suitable for hosting the appropriate amount of wind and solar farms.

Given the existing generation shortage in the north island it would make sense to commence development of REZ's on the north island.

We believe they should be geographically broadly spread to mitigate intermittency. We also think that consideration should be given not only to the availability of renewable resource but also the availability of grid infrastructure which is being freed up by the shutting down of fossil fuel generation plant.

We support REZ in Far North, Hawkes Bay and Taranaki.

Q4.

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

Speed of decarbonization

Delivery of low-cost electricity to end users

Potential to support economic development

Grid resilience and management of intermittency

Q5.

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

Principle 02 – purely relying on customer driven REZs may not be optimum. Customer driven is a good indication the area is suitable for a REZ but consideration should be given to locating REZs in areas where low cost renewables can be unlocked, even if at that point there hasn't been much customer demand in that area.

Q6.

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

Economically efficient network infrastructure – this should be considered on the basis of \$/MWh delivered as opposed to \$/MW of generation capacity

Network capacity in the region – this should not be a main criterion. The criteria should be unlocking new capacity regardless of the current situation. It may be the case that this is in areas where existing infrastructure is nearing capacity, but not exclusively.

Access to good renewable resource should be considered as a main criterion.

Future network capacity available from the decommissioning of existing generation should be considered.

Q7.

Do you agree with using a tender process for committing projects in a REZ?

Are there alternative processes that could be considered?

The proposed methodology is based on the Australia model – it is yet to be seen if this is a successful way to deliver new generation. There has been overwhelming interest from generation developers, but no REZ has yet delivered new generation. More emphasis should be placed on the Texas CREZ model which has already been proven to deliver new generation to the system.

Q8.

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

Transpower and the local distribution companies.

Q9.

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

Agree with the criteria; however criteria should be considered in a sequential manner. For example, financing should only be considered once the project already has land secured, consenting secured (and thus stakeholder engagement at least in progress) and design and network connection well advanced before any weight is given to financing progress.

Similar sequencing methodology should be applied to all criteria.

Q10.

Do you agree with the challenges we have identified?

We believe the free rider / first mover disadvantage problems are major hurdles to new investment in NZ RE capacity. This exacerbates the limited PPA market in NZ – an issue outside the scope of this consultation but relevant in that if government will not support a PPA market, it could instead support greater grid infrastructure to minimize curtailment risk.

We also note government's aims to move to electrification of heat where possible and EVs for personal transport. These shifts will increase load and so in considering cost of new grid capacity the additional requirement for load across the network needs to be adequately considered.

Q11.

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

A guarantee dispatch for new build renewables over a period of say 20 years would provide some certainty to encourage new renewables and de-risk the project. This de-risk would enable projects to better secure funding to pay towards new grid infrastructure.

Q12.

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