

**Aurecon New Zealand Limited**  
Spark Central  
Level 8, 42-52 Willis Street  
Wellington 6011  
PO Box 1591  
Wellington 6140  
New Zealand

**T** +64 4 472 9589  
**F** +64 4 472 9922  
**E** [wellington@aurecongroup.com](mailto:wellington@aurecongroup.com)  
**W** [aurecongroup.com](http://aurecongroup.com)



08 April 2022

Renewable Energy Zones consultation  
Transpower New Zealand Ltd  
Via [REZ@transpower.co.nz](mailto:REZ@transpower.co.nz)

### **Renewable Energy Zones (REZ) Northland Pilot Concept**

Thank you for the opportunity to submit on this consultation on behalf of our clients Pārengarenga Incorporation and Yinson Renewables. We have answered the specific consultation questions regarding the REZ Northland Pilot Concept. No portion of this submission is confidential.

Please contact us if you wish to discuss any details of our responses further.

Ngā mihi,

A handwritten signature in blue ink, appearing to read "Blair Walter".

Blair Walter  
Future Energy Practice Leader, NZ

[Blair.walter@aurecongroup.com](mailto:Blair.walter@aurecongroup.com)

021 644 858

A handwritten signature in blue ink, appearing to read "Rebecca Mehtens".

Rebecca Mehtens  
Technical Director Future Energy & Power  
Generation

[Rebecca.mehtens@aurecongroup.com](mailto:Rebecca.mehtens@aurecongroup.com)

021 244 3438

**Q1. Do you support the development of a pilot REZ in Northland? Please provide your reasons as to why or why not.**

We are supportive of the REZ concept and see benefit of using the framework in Te Tai Tokerau/Northland from:

- A fair and transparent process to determine how renewable energy developments are connected to the local networks and/or the Grid.
- The focus on community infrastructure from iwi and local companies rather than large developers.
- The 'right-sizing' of an individual REZ based on factors based on economic, social, environmental, and cultural factors.
- Getting the right mix of wind and solar developments to best suit the natural resources in Te Tai Tokerau.

**Q2. What potential benefits of a REZ are important to you? Consider economic, social, cultural, and environmental factors.**

The potential benefits of a REZ, that are important to Pārengarenga Incorporation and Yinson Renewables include:

- Lower electricity prices for local consumers and communities (economic).
- Improvements in the local Top Energy network will mean increased security of supply for Te Tai Tokerau, especially in Muriwhenua/Far North. This will lead to fewer power cuts for communities (social).
- The ability to use renewable energy developments to kickstart other economic developments for Pārengarenga Incorporation to build a diverse commercial portfolio. This could include other renewable generation developments, agriculture, horticulture, or other food production activities (economic, social, cultural, environmental).
- An opportunity for energy mana motuhake for iwi (cultural, social).
- The sharing of capital costs for connection assets will improve project economics and increase the likelihood of the project proceeding (economic).
- Additional local renewable generation at reasonable prices will also incentivise other major electricity users to grow in the region, providing regional economic opportunities and benefits (economic).
- Downstream effects of industrial growth through increased employment opportunities (economic, social).
- A combined approach with other REZ participants will potentially reduce the need to build additional transmission assets, therefore not further impacting the receiving environment (environmental).

**Q3. What potential costs of a REZ are important to you? Consider economic, social, cultural, and environmental factors.**

Potential costs of a REZ that are important to Pārengarenga Incorporation and Yinson Renewables include:

- The ability to be flexible. When agreeing to a REZ it is important that flexibility is retained to reassess the REZ commitment should the process not go to plan e.g. other parties pull out and leave us significantly delayed or stranded in a worst case scenario.

- The design and construction programme for the developments in an individual REZ is of upmost importance. Delaying the wind farm because another REZ party pulled out has downstream effects on commercial viability and staff employment
- The fair proportioning of the network upgrades between REZ parties, and the mitigations should a party pull out or is late.

**Q4. Do you support enabling developments through upgrades to existing lines and substations as demand for connections to the networks emerge? If not, what alternatives would you propose?**

Yes, we support the spreading of the cost of network upgrades amongst REZ participants to enable renewable development when it is optimal to do so. There may be instances where this is not possible and new lines and network infrastructure is required to be built.

**Q5. If new lines needed to be built to connect resources, where should they be constructed/not constructed?**

- New lines should be built to provide better geographic coverage of Te Tai Tokerau, including right up to Muriwhenua where there are some potential wind and solar sites such as Pārengarenga.
- A regional assessment should be conducted for each project to ensure an optimal approach is taken from an economic, social, cultural, and environmental perspective.
- Construction should not be undertaken over iwi sensitive land or inefficient/costly routes and should utilise existing infrastructure assets where possible to reduce costs.
- Consideration should be given to any land required within or adjacent to substations to minimise additional impacts, reduced timeframe for connection works and preventing ransom strips being created.

**Q6. Are there alternative proposals that you think we should consider?**

The timing of developments in a REZ is a key risk and the recovery of costs for network upgrades (and the proportioning of the costs) needs careful thought and discussion. In the circumstance that a REZ party pulls out there needs to be a mechanism for the other parties to continue their construction and have the network upgrades continue uninterrupted. Some solutions to ensure projects are not delayed in this situation are:

- Introduce a 'REZ bridging finance' type product that can be drawdown in the event a REZ party withdrawals and a replacement party is not readily available (timing difference). This will enable the project to proceed and mitigate project delays until a replacement party is confirmed.
- Introduce a 'EECA GIDI' fund type programme provided by Government where grant funding is provided for transmission related infrastructure projects only (say max funding of \$5M per project). This could apply to parties wanting to join the REZ later who missed the opportunity to join initially. This fund could also apply for a project that is completely isolated and / or unable to collaborate with other parties for a variety of reasons.
- A 'Transpower REZ' fund provided by Government to enable transmission upgrade works downstream of the REZ (benefits an entire region or zone, not just the REZ) which could potentially be very costly. Strategic investment is a key component of a REZ, and in Te Tai Tokerau it's important that potential future projects are also considered. Current projects may not be able to afford the transmission upgrades for future projects, but these strategic upgrades would encourage future renewable energy growth in the region. Therefore, just

protecting financially against developers dropping out might not give the encouragement for the renewable industry to grow further in the REZ and create full value.

**Q7. Do you have development projects that a REZ might assist you to construct and connect?**

Pārengarenga Wind Farm is a proposed development near Te Kao with a potential capacity of 300MW. Additionally, there is the ability to expand to a larger development by including neighbouring land parcels with similar characteristics and adding solar PV to create a renewables precinct with significant economic benefit for the region.

The landowner, Pārengarenga Incorporation, previously investigated the potential of the site for wind development and erected an 80m mast for the period January 2007-June 2013 which confirmed good wind resource. However, connection to the Grid is challenging with the Top Energy 33kV network only going to Pukenui (approx. 30km south of the site) and has limited capacity to absorb generation from a large wind farm.

Aurecon has facilitated an exclusivity arrangement between Pārengarenga Incorporation and international renewable energy development firm Yinson Renewables to explore the potential for wind development based on strategic investment in the transmission network in Northland.