

Northpower



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Tēnā koutou katoa,

Submission on: Transpower Consultation on Renewable Energy Zone (REZ) and Northland Pilot Concept

Northpower and Top Energy fully endorse the REZ concept and the Northland Pilot.

The REZ in Northland has significant opportunity to contribute to the economic growth and prosperity for our region, support hāpu and iwi groups to participate in renewable generation, lower power prices in one of New Zealand's highest power price regions and reduce many examples of energy poverty, and ultimately support New Zealand climate change and renewable energy targets.

Northpower and Top Energy would like to thank and congratulate Transpower for their openness to working with us in developing the REZ concept and the Northland Pilot. It is a real tribute to the collective commitment and collaborative approach adopted that we have advanced from concept to this consultation process within nine months.

The opportunity to leverage regional economic contribution to enable decarbonisation solutions is real and compelling. We need to keep moving at pace, NZ needs to decarbonise, Northland has enviable renewable resources in our region, and our local networks have progressive upgrade solutions available. The stars are aligning to make a strong move that will benefit Aotearoa, its regions and the North.

Northland is ready for the REZ!

As an input into our submission we have briefly set out our context as EDBs and why we are personally promoting the potential of Renewable Energy Zones.

Northpower

Northpower is deeply rooted in the communities of Northland. From humble beginnings, we've built a company to be proud of. We're a company borne of the North, who operates in service of Northland communities, and of Northland's economic development.

Northpower has operated and maintained the electricity distribution network in the Whangarei and Kaipara region for over 90 years and we now have over 61,000 connected customers. Over the last decade we also rolled out high speed fibre to Whangarei city and towns across our region. We're a company that believes in the value of infrastructure in enabling regional outcomes.

Northpower also provide specialist contracting services to our partners, other network owners and operators, across the North Island of New Zealand. Contracting is a successful business in its own right, which brings profits back to Northland. But it's also key to us learning and developing. We get to 'work with the best' in the power industry, and Contracting gives us the 'can do' attitude to try new things.

This organisational DNA is at the heart of our focus on exploring and deploying Renewable Energy Zones. We want what is best for our community, what is best for our industry and consumers, and we're willing to roll our sleeves up to make it work.

For more information <https://northpower.com/>



Top Energy's vision is *"Enabling Northland to contribute to the decarbonisation challenge"*.

Top Energy is the local electricity network provider which supplies over 33,000 electricity consumers in the Far North. We are owned by the power consumers of the Far North and profits are returned to the consumers through discounts and dividends. Top Energy provides significant community support through our grants, sponsorship program and local employment.

Top Energy is a major contributor to the community's financial well-being and as one of the largest businesses based in the area, is uniquely placed to act as a catalyst to develop economic potential in the region.

For more information <https://topenergy.co.nz/>

Please find below our Northpower's and Top Energy's combined submission. We would be happy to discuss any details of these at a convenient time.

Renewable Energy Zone Submission

<p>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?</p>	<p>We agree that first mover disadvantage and high connection costs are a significant barrier for generators and developers being able to connect new renewable generation.</p> <p>Specifically in Northland with the influx of renewable generation applications, areas of the local distribution networks are now constrained or at capacity for future export, so this is now a significant impediment to future renewables development.</p> <p>The REZ, with a coordinated approach to new capacity, should support generators and developers mitigating the first mover disadvantage and high connection costs barriers.</p>
<p>Q2: Do you think the concept of a REZ could be beneficial in a New Zealand context?</p>	<p>Yes, we strongly agree that the REZ can be beneficial in the New Zealand context.</p> <p>If NZ is to meet our climate change and renewable energy targets and obligations NZ will require significantly more renewable energy. The REZ will enable a coordinated and economic approach for renewable developments to connect to the network.</p> <p>Leveraging existing infrastructure and low impact technology first will be less disruptive on communities than building new infrastructure.</p> <p>It makes sense to optimise and upgrade what we currently have, rather than building new (although new infrastructure may be required in the medium to longer term).</p>
<p>Q3: What region(s) do you think would be suited to REZ?</p>	<p>Northland is best placed for the first REZ.</p> <p>A pilot in Northland would prove up the concept, enabling it to be further deployed across NZ.</p> <p>There are compelling reasons to start with Northland – including the region’s enviable renewables resource, strong interest from developers and ability to access New Zealand’s largest load centre, Auckland, via the underutilised Bream Bay to Huapai 220kV network.</p> <p>Other regions near significant renewable resources and demand should be considered following a successful Northland pilot.</p>
<p>Q4: What benefits do you think should be considered in the</p>	<p>We consider the following benefits should be considered:</p> <ul style="list-style-type: none"> • Areas where incremental investment unlocks renewables resources and utilises existing network investments.

<p>decision-making process for REZ in New Zealand?</p>	<ul style="list-style-type: none"> • We support a socio-economic lens being applied across decision making – looking at the broader costs and benefits to a region for the REZ development. • A REZ should support and deliver broader community benefits – increased competition in wholesale markets to lower energy costs for local consumers, and stimulate jobs off the back off infrastructure investment. • The economic benefits that could flow from a REZ – including increased jobs, regional economic development and job creation. • Increased resiliency and diversity of the electricity system – reducing the distance between load and generation.
<p>Q5: Do you agree with the proposed guiding principles? Are there any that you would change or add?</p>	<p>Yes, we agree with the guiding principles and make the following comments.</p> <ul style="list-style-type: none"> • Future focused - support New Zealand's long-term decarbonisation and energy needs. Northland wants to be a part of the solution, through unlocking our untapped renewables potential. Development in Northland provides a diverse flow of energy into New Zealand's largest demand centre. It also provides an opportunity for Northland businesses to build new skills, training and apprenticeships in the region. • Customer driven - where there is demand from generation or load developers. For a REZ to be successful it must be in areas of high developer interest, like Northland. Otherwise, we run the risk of creating a REZ mismatched to investor appetite. Northland already has strong developer interest. • Local consumers will be no worse off as a result of developing a REZ - costs associated with developing a REZ will be recovered from the generation or load developers that are participating in the REZ, and not from local consumers. This principle could describe the positive economic outcomes with lower delivered cost of electricity and lowering energy hardship in the region. With lower energy costs the region will become more attractive for industry, distributing the network costs over more users lowering the cost for everyone. This principle is very important in the context of Northland, when considering the socio-economic factors at play. Our communities, while they can be part of the solution, are already struggling with high unemployment, energy poverty, social challenges, lack of economic growth and infrastructure development. It is important that the REZ is not a burden on our local communities.

	<ul style="list-style-type: none"> • <i>Developed in partnership and collaboration - with iwi and community</i> <p>We consider it is critical that communities and iwi have a voice, and that any projects go through the normal planning and consenting processes.</p> <p>The REZ could also provide a significant opportunity for iwi to participate in renewable generation either utilising iwi resources or for iwi investment for the prosperity of their people. The REZ should provide a framework to support and encourage iwi economic involvement.</p>
<p>Q6: Do you agree with the proposed criteria (below) for selecting suitable regions for REZ development? Are there any that you would change or add?</p> <ul style="list-style-type: none"> • Generation developer demand • Economically efficient network investment • Network capacity in the region • Access to good renewable resource • Potential added benefits to the grid • Additional economic and social benefits 	<p>We agree with the proposed criteria.</p>
<p>Q7: Do you agree with using a tender process for committing projects in a REZ? Are alternative processes that could be considered?</p>	<p>Tendering us seems to be a sensible 'core for the pilot stage' with a need to design in flexibility.</p> <p>A tendering process is a useful way to test both near term commercial appetite (who can pay to connect now) and longer term commercial aspiration (who has aspiration or assets that could be connected later). An expression of interest process would provide flexibility to explore both aspects.</p> <p>We also note that successful projects must be delivered with strong collaboration between asset owners, generators, developers, significant load customers and the local community. It's ultimately about creating a process that minimises costs, and maximises benefits to key stakeholders in the process. Any tender process should build in flexibility to design the best possible solution.</p> <p>There is a need for post tendering surety on project success and developer funding for the REZ to ensure the costs borne by any project which doesn't proceed and drops out of the</p>

	<p>process, does not fall to the local consumers. This is of key importance to our communities.</p>
<p>Q8: Who should be involved with co-ordinating and undertaking the various steps within a REZ development process?</p>	<p>The network asset owners need to be involved in a collaborative fashion with the demand and supply parties.</p>
<p>Q9: Do you agree with the proposed project criteria (below)? Are there any that you would change or add?</p> <ul style="list-style-type: none"> • Land secured (not started, in negotiation, secured) • Stage in financing (none, in process, secured) • Stage in design (concept, developed, detailed) • Stakeholder engagement (not started, plan in place, in progress) • Consenting (not started, in progress, secured) • Network connection concept assessment (not started, in progress, complete) 	<p>We consider the following are also relevant considerations to project criteria:</p> <ul style="list-style-type: none"> • The economics of each connection. • The socio-economics of each project. • Iwi and hāpu participation.
<p>Q10: Do you agree with the challenges we have identified?</p>	<p>Two key challenges have come up during our consultation.</p> <p>1. Catering for different investment horizons. Developers with scale could easily lock up new capacity created by the REZ with one major project.</p> <p>The process should encourage developers with smaller projects, for example community groups, or iwi and hāpu groups who wish to participate.</p> <p>2. Planning</p> <p>The current RMA is under review and it is uncertain how this will impact projects going forward. A specific planning approach for renewables projects should be encouraged between central and local government and maybe special consideration given for fast tracking these projects. The risk is we can't decarbonise because we can't get projects built in time.</p>
<p>Q11: What are some of the ways to overcome these challenges and who should be involved?</p>	<p>Avoiding single renewables projects using all new REZ capacity in one area and encouraging smaller developments including iwi and hāpu involvement. This could involve</p>

	<p>reserved capacity or staged release of capacity to enable multiple parties to be involved in REZ upgrades.</p> <p>This will also help financially de-risk the project costs being met by consumers.</p> <p>Consideration of a co-ordinated approach to planning.</p>
<p>Q12: Do you see any other potential challenges that need to be considered?</p>	<p>REZ projects in other countries have been hugely successful. There are learnings that can be taken from these.</p> <p>Key differences with these projects seem to be Central and State government support with dedicated regulations and project financial underwriting. New Zealand REZ projects would be more certain with these types of models.</p> <p>Time is also a major challenge. If New Zealand is to meet its carbon challenges and obligations we need to move more swiftly and aggressively. We need to build capacity now to realise projects and we need shorten the project delivery time from inception to generation.</p> <p>It seems likely to us that the economics of renewables will underwrite economically prudent renewable generation investment over time. We should therefore be bold in moving to enable supporting distribution and transmission infrastructure and avoid this becoming the constraining element.</p>

Northland Pilot Concept Submission

<p>Q1: Do you support the development of a REZ in Northland?</p>	<p>A very strong YES from both Northpower and Top Energy.</p> <p>Parts of our local Northland networks essential to unlocking more renewables from our region are now constrained or at capacity, so can no longer connect any new renewable generation development.</p> <p>With the need to decarbonise to meet New Zealand's climate change obligations and the extensive renewables resource in the North this will be a significant lost opportunity.</p>
<p>Q2: What potential benefits of a REZ are important to you? Consider economic, social, cultural and environmental.</p>	<p>Economic</p> <ul style="list-style-type: none"> • Lower energy costs, encourages new load growth (e.g. energy intensive businesses). • Local regional economic development - through infrastructure investment, attracting industry, supporting jobs and skills development. • Development of renewable energy skills, training and capability. Northland is well placed to be a centre of excellence.

	<p>Social</p> <ul style="list-style-type: none"> • Lower energy costs, which could support lower energy prices to end consumers - this in turn helps reduce energy hardship. • Employment opportunities coming from construction activity and then the operations of both generation and load customers. <p>Cultural</p> <ul style="list-style-type: none"> • Preserving our cultural treasure and identity. • Creating “real” opportunities for iwi and hāpu participation. <p>Environmental</p> <ul style="list-style-type: none"> • Preserving the requirements for community involvement in planning and spatial decisions. • Ensuring projects do not have an adverse environmental impact.
<p>Q3: What potential costs of a REZ are important to you? Consider economic, social, cultural and environmental factors.</p>	<p>The outcomes of the REZ should provide positive economic outcomes for the people and energy consumers in Northland.</p> <p>The cost to develop the network capacity increases should not fall on the consumers of the North and should be borne by the developers or the beneficiaries of the capacity increases.</p> <p>The REZ should enable lower cost of energy in Northland which has one of the highest cost of delivered electricity in New Zealand and many examples of energy poverty.</p> <p>Iwi and hāpu groups should be encouraged and supported to contribute to the REZ success; this could be for land use, investment or skills training. Specific outcomes should be targeted, and consideration made for capacity reservation.</p> <p>Northland businesses have significant experience with renewables development and major electrification projects. These businesses are eager to support the decarbonisation of New Zealand. This regional capability should ensure developments are economic in this region and also advance further skills and trades training.</p> <p>The utilisation of the 220kV into Auckland from Bream Bay also gives this region a significant cost advantage for the REZ. Along with this a net export south under the benefits based system will make areas in Northland, especially Marsden Point far more economically attractive for industrial development, supporting economic development with the recent refinery operations ceasing.</p>

<p>Q4: Do you support enable development through upgrades to existing lines and substations as demand for connections to the networks emerge? If not, what alternatives would you propose?</p>	<p>We believe that upgrading existing infrastructure has the potential to provide a low impact solution.</p> <p>Lines upgrades should be considered along with other options that are more economic and have a lower environmental impact.</p> <p>We note that RMA provisions exist to construct new lines and stations should these be required, including the necessary environmental and community protections.</p>
<p>Q5: If new lines are needed to be built to connect resources, where should they be constructed/not constructed?</p>	<p>New lines should be considered along with other options that are more economic and have a lower environmental impact.</p> <p>Network capacity should be increased where there is either demand or generation potential. The normal RMA protections and processes should apply.</p>
<p>Q6: Are there alternative proposals that you think we should consider?</p>	<p>All technologies (and emerging technologies) should be considered to ensure REZ capacity increases have a low environmental impact, are economically efficient and deliver the lowest overall system cost.</p> <p>This could include but are not limited to wireless transmission, energy storage, industrial demand creation, regional energy hubs and incentivising the electrification of process heat users of gas or coal.</p>
<p>Q7: Do you have development projects that a REZ might assist you to construct and connect?</p>	<p>The REZ could enable distribution upgrades to occur earlier that will provide better supply security and diversity for the users of the Northpower and Top Energy networks.</p> <p>For the Far North with a diverse distribution path to Kaitaia this could mean the current diesel generators that provide outage support could be decommissioned and renewable energy from Ngāwha, or Northland wind or solar could be utilised.</p>

In conclusion, the REZ in Northland is an outstanding opportunity to support New Zealand’s decarbonisation journey. The Northland community has expressed strong support for exploring the opportunity, and Northpower and Top Energy have both the energy and capability to support the Northland Pilot. Top Energy and Northpower have a deep history of collaborative development, and we have been impressed by Transpower’s openness to collaboration in exploring the REZ concept to date. Within this context, Northland is well placed to hit the ground running for the REZ pilot.

Northland is best placed for the REZ Pilot, given the volume of renewables projects under consideration, our proximity to Auckland, the ability to use the Bream Bay to Auckland assets, the opportunity to create positive generational outcomes for our communities and iwi, along with making energy more affordable for our communities. We also understand the wider benefits of REZ

for other regions and for Aotearoa, and are eager to prove up the concept so that it can scaled and applied in other regions.

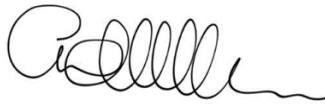
During the consultation process, the level of local community support for the Northland REZ Pilot has been notable – we are aware that submissions will be made by local councils, Northland business groups, community groups and iwi. Northland is tightly connected, and well-structured to enable a comprehensive community focused trial to proceed. Northland has the commitment and capability to make the REZ successful and already has momentum in place to make the pilot a success.

Northland is ready for the REZ!

We are excited to work with Transpower on the next steps to get the REZ in Northland underway.

We would be pleased to be contacted regarding this submission and can provide additional supporting information on request.

Ngā mihi nui



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