Response ID ANON-URZ4-5F99-2

Submitted to Fast-track approval applications
Submitted on 2024-05-03 11:49:15

Submitter details

Is this application for section 2a or 2b?

2B

1 Submitter name

Individual or organisation name:
New Zealand Energy Limited

2 Contact person

Contact person name:
David Inch

3 What is your job title

Job title:
Managing Director

4 What is your contact email address?

Email:
s 9(2)(a)

5 What is your phone number?

Phone number:
s 9(2)(a)

6 What is your postal address?

Postal address:

s 9(2)(a)

7 Is your address for service different from your postal address?

No

Organisation:

Contact person:

Phone number:

Email address:

Job title:

Please enter your service address:

Section 1: Project location

Site address or location

Add the address or describe the location:

Takaka Hill
Tasman District

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Otuwhero Renewable Energy project Property Boundaries & Location Plans.pdf was uploaded

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Do you have a current copy of the relevant Record(s) of Title?

Yes

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Who are the registered legal land owner(s)?

Please write your answer here:

David Lex Henderson and Gwenda Elizabeth Henderson
Road Reserve

Detail the nature of the applicant's legal interest (if any) in the land on which the project will occur

Please write your answer here:

NZ Energy has an agreement with the landowner to be granted a legal easement to occupy the land for the purpose of constructing and operating a renewable energy power scheme. The landowner will become a JV owner of the power scheme.

Section 2: Project details

What is the project name?

Please write your answer here:
Otuwhero Renewable Energy Project

What is the project summary?

Please write your answer here:

Otuwhero Renewable Energy Project is a power scheme that will develop a cascaded hydro power scheme involving two power stations located on farmland in the Takaka Hill area near Riwaka in the Tasman District. It will also develop a 5MW solar photo voltaic (solar PV) array and a pumped hydro facility. This project is a Joint Venture with the landowner. The forecast capacity of the entire project is 7.1MW with an annual production of 15GWh. The budget for this project is $15M.

What are the project details?

Please write your answer here:

The Project's primary purpose is the production of renewable electricity that will feed the local electricity distribution network in the Tasman region. To enable this renewable electricity production, it is planned to construct a hydro-electric power scheme by diverting water from the Otuwhero River, through the intake structures, and penstocks, into the hydro turbine generating facilities and discharge this water back to the Otuwhero River. When the PV output is high, water will be pumped back to above the power station to store this energy to be used later by passing this back through the hydro turbines.

Describe the staging of the project, including the nature and timing of the staging

Please write your answer here:

This proposal is to build two hydro power stations over two stages. Water will be extracted at an intake site at approximately the 430metre contour. The water would be conveyed via a buried pipeline around the side of the hill to a point approximately 1,500metres away where it will terminate into a surge tank and bywash. This will be the future site of the stage 2 power station and also where water will be stored and pumped up to a second storage pond. A 1,000metre long penstock will connect in at this point and then run down the ridge to a new power station located immediately adjacent to the Otuwhero River. The tailrace from the new power station will discharge back into the Otuwhero River. Both stages of the entire scheme will be located on the privately owned Kairuru Farm. A solar PV array will be erected on land nearby interconnecting to the embedded network. This will be constructed at the same time as the stage one hydro station.

What are the details of the regime under which approval is being sought?

Please write your answer here:

Approvals for the project are required under the Resource Management Act 1991.

If you seeking approval under the Resource Management Act, who are the relevant local authorities?

Please write your answer here:

The project is located in the Tasman District with the local authority being the Tasman District Council.

What applications have you already made for approvals on the same or a similar project?

Please write your answer here:

A resource consent application for just the staged hydro component of the Project has been submitted to the Tasman District Council. This will be withdrawn if the Otuwhero Renewable Energy Project is fast-tracked.

Is approval required for the project by someone other than the applicant?

Yes

Please explain your answer here:

A formal legal easement document will be approved by the land owner.

If the approval(s) are granted, when do you anticipate construction activities will begin, and be completed?

Please write your answer here:

Detailed planning and design will also begin immediately upon fast-track approval.
Design of the 5MW Solar Farm is reasonably generic and would be completed within 4 weeks of receiving approval.
Design of the 2.1MW hydro scheme is reasonably generic for NZ Energy and would be completed within 3 months weeks of receiving approval. This will include the pumped hydro component.
Funding will be provided by the company's banking facility, and this will be finalised during the detail design stage.
Procurement would occur immediately upon acceptance of the detailed design.
Delivery is typically up to 3 months and site works will begin immediately equipment arrives on site.
Completion and Commissioning is expected to take just 6 months for the solar farm component.
Completion and Commissioning is expected to take just 18 months for the hydro component.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

As the subjected site is fully within private property (other than the river bed) there are no other parties considered potentially affected by the proposal. To the best of our knowledge there are no treaty settlements, protected customary rights, etc over the land.

Detail all consultation undertaken with the persons referred to above. Include a statement explaining how engagement has informed the project.

Please write your answer here:

The land owners are fully supportive of this Project.

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Describe any processes already undertaken under the Public Works Act 1981 in relation to the land or any part of the land on which the project will occur:

Please write your answer here:

None required.

Section 4: Iwi authorities and Treaty settlements

What treaty settlements apply to the geographical location of the project?

Please write your answer here:

To the best of our knowledge there is no known areas of significance to Māori that the project may intrude upon. As the subjected site is fully within private property (other than the river bed) there are no other parties considered potentially affected by the proposal.

Are there any Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 principles or provisions that are relevant to the project?

No

If yes, what are they?:

Are there any identified parcels of Māori land within the project area, marae, and identified wāhi tapu?

No

If yes, what are they?:

Is the project proposed on any land returned under a Treaty settlement or any identified Māori land described in the ineligibility criteria?

No

Has the applicant has secured the relevant landowners' consent?

No

Is the project proposed in any customary marine title area, protected customary rights area, or aquaculture settlement area declared under s 12 of the Māori Commercial Aquaculture Claims Settlement Act 2004 or identified within an individual iwi settlement?

No

If yes, what are they?:

Has there been an assessment of any effects of the activity on the exercise of a protected customary right?

No

If yes, please explain:

Upload your assessment if necessary:
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Section 5: Adverse effects

What are the anticipated and known adverse effects of the project on the environment?

Please describe:

This scheme has been 10 years in the planning with extensive monitoring and ecological studies having been undertaken. These studies by experts in their field have determined that the effects can be managed adequately.

The very nature of the hydro scheme's infrastructure is that it creates very little effect on the environment. Also relevant is that Hydro power schemes have been in existence in New Zealand for well over 100 years now. The effects on the environment are well and truly understood and measures to avoid, minimise and mitigate these effects are also well and truly known.

No studies have been undertaken for the solar however three recent grid scale solar consents have been granted close to this location and it is envisaged the effects of a solar farm can easily be managed.

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Section 6: National policy statements and national environmental standards

What is the general assessment of the project in relation to any relevant national policy statement (including the New Zealand Coastal Policy Statement) and national environmental standard?

Please write your answer here:

There is a National Environmental Standard relating to water monitoring that is relevant to the proposal. The applicant is very familiar with this standard and operating hydro schemes in compliance with this standard.
The National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG) sets out the objective and policies for renewable electricity generation. The objective and policies within the NPS-REG relate to the development, operation, maintenance and upgrading of existing renewable electricity generation activities to ensure they can operate as effectively and efficiently as possible.
The contribution of renewable electricity generation, regardless of scale, towards addressing the effects of climate change plays a vital role in the wellbeing of New Zealand, its people and the environment. Renewable generation infrastructure must be built at the source of the renewable fuel.

This Otuwhero Renewable Energy Project is consistent with Policy A:
• increase New Zealand's renewable electricity capacity by 7.1MW and increase the supply of electricity that uses renewable fuel by 15GWh, enough to

supply electricity to 2,100 households
• avoid, reduce or displace the use of fossil fuels and 3,000 t/annum of Co2e greenhouse gas emissions;
• increase security of supply of electricity to people and businesses in the local Tasman District by increasing the diversity of the type and location of electricity generation;
• reduce the capacity constraints forecast to effect the top of the South island transmission grid (Christchurch and north to Nelson);
• use renewable natural resources of water in a non-consumptive way instead of finite fossil fuels; and
• avoid reliance on imported fuels for the purpose of generating electricity.
This Project is also consistent with:
• Policy C in that this increased generation capacity will contribute to the New Zealand Government's national target for the generation of electricity from renewable resources; and
• Policy F by supplying electricity to the surrounding local community via its connection to the distribution network.
Thus the Otuwhero Renewable Energy Project provides national, regional and local benefits including increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions; increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation; using renewable natural resources rather than finite resources; the reversibility of the adverse effects on the environment of some renewable electricity generation technologies; and avoiding reliance on imported fuels for the purposes of generating electricity.
The National Policy Statement for Freshwater Management 2014 (issued by notice in the Gazette on 4 July 2014) directs Regional Councils to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits.
There are minimal and temporary impacts on water clarity during construction. There are no long term impacts on water quality.
The new National Policy Statement for Indigenous Biodiversity 2023 is clear in its description of what it applies to that – clause 1.3:
"(3) Nothing in this National Policy Statement applies to the development, operation, maintenance or upgrade of renewable electricity generation assets and activities and electricity transmission network assets and activities. For the avoidance of doubt, renewable electricity generation assets and activities, and electricity transmission network assets and activities, are not "specified infrastructure" for the purposes of this National Policy Statement."

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Section 7: Eligibility

Will access to the fast-track process enable the project to be processed in a more timely and cost-efficient way than under normal processes?

Yes

Please explain your answer here:

The project is relying on economies of scale to both construct and deliver the electricity to the market. There are several individual generation plants (solar , pumped hydro and hydro) that would otherwise need to go through individual consenting processes which would take years and would be prohibitively expensive. However, when combined they provide the necessary scale to proceed with the development. This Fast-track approvals process is an essential tool and would allow the development to proceed forthwith once approval is gained. This project would start on the first stage immediately the fast-track approval is received.

What is the impact referring this project will have on the efficient operation of the fast-track process?

Please write your answer here:

This Project is not complicated to approve - construction is to occur on private land and this Project demonstrates a commitment to maximise the use of natural renewable resources to achieve a reliable and resilient supply of electricity to the regional community and economy.
Hydro power schemes have been in existence in New Zealand for well over 100 years now. The effects on the environment are well and truly understood and measures to avoid, minimise and mitigate these effects are also well and truly known.
Large scale PV solar is also now very well understood. Like hydro, the measures to avoid, minimise and mitigate these effects from this activity can be drawn on from other similar scale developments already consented in New Zealand.
Referring this Project for the fast-track process will avoid the current bottleneck in consenting which re-invents the wheel on each and every new application, even when an activity is identical to an existing consented activity at the same location.

Has the project been identified as a priority project in a:

Central government plan or strategy

Please explain your answer here:

Construction of new renewable generation capacity is essentially a central government priority if New Zealand is to meet its international commitments to reducing greenhouse gas emissions. Use of electricity in transport and industrial processes is forecast to increase demand for electricity significantly. Every additional capacity increment contributes to this substantial task. In addition, connecting generation capacity within distribution networks reduces the need for new investment in transmission and distribution infrastructure.

Will the project deliver regionally or nationally significant infrastructure?

Regional significant infrastructure

Please explain your answer here:

The entire Project will deliver ~15GWh of electricity each year - the annual usage of electricity of 2,100 average households in the region – from 100% renewable energy (7,033kWh av. consumption in March 2023 year; 2.7 people per household). It has a forecast budget of $15M, a significant economic boost for the region.
Nelson/Tasman is a region experiencing population and economic growth. The project is also significant as it moves the regional towards 100% supplied by its own renewable energy supply.
Importantly there are capacity constraints forecast to affect the top of the South Island transmission grid (Christchurch and north to Nelson). This project will assist with deferring costly transmission upgrades.
This project is most certainly regionally significant infrastructure.

Will the project:

contribute to a well-functioning urban environment

Please explain your answer here:

Electricity is essential to a well-functioning society - both urban and rural environments.
It is a forgotten essential service when it comes to district planning for new housing developments.
No consideration is given to where is the energy is going to come from to supply the new housing developments and commercial and industrial activities that have been approved. So, where land is being made available for new housing, equally renewable energy projects need to be incrementally approved to supply the power to these houses.
Additionally, now with the push for EV's, the same consideration needs to be given to "where is the power going to come from to charge the EVs".
Electrification of industry will place high demand on electricity supply. It is now well established that this electricity needs to be generated from renewable sources and it needs to be generated locally

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The economic benefits will be significant for the region during construction - employing up to 10 staff and contractors during the peak of the builds. It is expected the staged approach will take 1-3 years to complete, providing a significant boost to the local economy.
The total project build is budgeted at $15M, also a significant boost to the regional economy.
This Project is also expected to result in a lower cost of electricity for the region - providing economic stimulus to business and improving the cost of living for households. In addition, there is the economic benefit of not losing supply of electricity. The savings in electricity lost through transmission and distribution losses is estimated at greater than 11%.

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

This Project is embedded in the local rural economy and will support primary industries. This includes horticulture and Riwaka’s world famous hop processing facilities. As technologies develop this will lead to on farm carbon reduction through the use of green hydrogen that will be produced at the source by this renewable electricity project.

Will the project support development of natural resources, including minerals and petroleum?

Yes

Please explain your answer here:

This Project supports the use of natural resources that are continuously replenished (renewable) with minimal impact on the environment. It will have the capacity to produce green hydrogen and methanol from the renewable electricity it produces.

Will the project support climate change mitigation, including the reduction or removal of greenhouse gas emissions?

Yes

Please explain your answer here:

The project will have a significant impact on climate change mitigation. The total output of 15GWh per annum of renewable electricity will displace 3,000t/yr greenhouse gas emissions from burning fossil fuels to generate electricity. This may be avoiding members of the community using diesel generation plant as well as reducing the need to run utility-scale fossil-fuelled generation plant in the North Island (and transporting that electricity to this region with associated losses).

Will the project support adaptation, resilience, and recovery from natural hazards?

Yes

Please explain your answer here:

The Project improves resilience for the surrounding community – on a daily basis and during recovery from natural hazards. The generation plant will be designed to run islanded so that it can be generating when the area is disconnected from the national transmission and distribution networks.

Will the project address significant environmental issues?

No

Please explain your answer here:

No but the Project is also not expected to create significant environmental issues.

Is the project consistent with local or regional planning documents, including spatial strategies?

Yes

Please explain your answer here:

The local and regional planning documents are silent on renewable generation.

Anything else?

Please write your answer here:

This Project will support the existing Network Tasman infrastructure and at the same time achieve national objectives of increasing renewable generation and reducing carbon emissions.
It provides significant regional benefits through security of supply, increased renewable generation, lower cost electricity and economic benefits through the construction stage of the project.
It will also provide the opportunity to eventually develop a fully 100% renewable supply to the region.
It is very important to note that energy infrastructure passes the test of time so investment in infrastructure is very important and necessary.

Does the project includes an activity which would make it ineligible?

No

If yes, please explain:

Section 8: Climate change and natural hazards

Will the project be affected by climate change and natural hazards?

Yes

If yes, please explain:

The Project may be affected by climate change to a small effect due to rain fall variations and natural hazards but the design and choice of technologies will take this into account to the extent possible and options for mitigants assessed over time.

Section 9: Track record

Please add a summary of all compliance and/or enforcement actions taken against the applicant by any entity with enforcement powers under the Acts referred to in the Bill, and the outcome of those actions.

Please write your answer here:

There have been a few minor compliance breaches taken against the applicant relating to monitoring reporting at one hydro power station. The applicant can provide further information if required.

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Declaration

Do you acknowledge your submission will be published on environment.govt.nz if required

Yes

By typing your name in the field below you are electronically signing this application form and certifying the information given in this application is true and correct.

Please write your name here:
David Graeme Inch

Important notes