Response ID ANON-URZ4-5FR9-U

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| Submitted to Fast-track approval applications Submitted on 2024-05-03 08:49:06 |
| Submitter details |
| Is this application for section 2a or 2b? |
| 2B |
| 1 Submitter name |
| Individual or organisation name: A D Harwood Limited/NZ Energy Ltd JV |
| 2 Contact person |
| Contact person name: David Inch |
| 3 What is your job title |
| Job title: Operations Manager |
| 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: |
| Upper Takaka Golden Bay |

refer to location plans attached as its spread across a wide area of Upper Takaka

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Harwood NZE JV Renewable Energy Project Location Plan v1 .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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Harwood NZE JV Renewable Energy Land Parcels and Titles v1.pdf was uploaded

Who are the registered legal land owner(s)?

Please write your answer here:

A D Harwood Limited

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:

The applicant is the legal owner of the land required for the entire project.

Section 2: Project details

What is the project name?

Please write your answer here: Upper Takaka Renewable Energy Project

What is the project summary?

Please write your answer here:

The proposal is to construct several renewable energy power generation stations which will integrate into the existing embedded network and operate in conjunction with the existing hydro power station and the almost to be built solar farm. The entire project will also supply essential support to the connected distribution network which is at full capacity when operating at N-1. The project involves large grid scale Photo Voltaic, small-scale hydro and pump hydro storage all of which will be located on private farmland which already operates a small hydro plant and has consent to build a 15MW PV array.

What are the project details?

Please write your answer here:

The proposed upgrade to the existing power scheme will increase renewable power generation in the region which is forecast to have capacity constraints in the near future. The location is ideally suited as there is a double 66 Kv circuit crossing the property which is perfectly suited to interconnect the new generation to. There is also the existing embedded on farm network that the existing hydro station and farm buildings and irrigation connects which will be used to interconnect the new generation sites. Captured all on one site is hydro, pumped hydro storage and land ideally suited for solar. This is an excellent site that captures everything needed to produce and deliver renewable electricity.

The region has significant growth and unless new renewable generation is brought on then there will be the need for very expensive and lumpy transmission upgrades. ComCom requires that transmission alternatives must be considered, and this is the most logical solution to build it in the region. The proposal uses natural and renewable resources, and it will also improve the security of electricity supply and resilience for the region.

The initial stage of this project is to construct the solar farms. The hydro and pumped hydro storage facilities will then be constructed and integrated into the operation of the entire power scheme.

Pumped hydro storage where it is possible to build is by far the most environmentally friendly means of storing energy versus deploying huge Lithium battery facilities. (BESS)

Although it has not been considered yet, wind generation could possibly be added to the mix in later years.

Including the existing consented 15MW of solar, the proposal is a significant capital works project that is budgeted at \$\frac{s\(\text{9}\(\text{2}\)\(\text{10}\)\(\text{10}}{\text{0}}\$ it will have an estimated annual output of 80Gwh.

this is a significant regional investment whilst at the same time increasing renewal generation supply.

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

Please write your answer here:

The first stage will be constructing the already consented 15MW solar farm. This is likely within the next 12 months.

Refining of the conceptual Engerineering will occur during the consenting process.

Once approval is granted for the entire project detailed engineering will begin which is envisaged to take between 3-6 months.

The next stage is likely to be the second part (20MW) solar farm as these are a relatively quick procurement and build time.

The second hydro and pumped hydro will be built either at the same time or immediately after this followed by the last hydro.

The planning of the whole development will want to make the best use of resources.

This means labour and resources involved will be fully employed for a period of up to 5 years to complete the proposal. We will want to work in with other energy developments in the region.

This will be a very good stimulus for the Tasman district economy and the more local Golden Bay and Motueka economies.

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

Please write your answer here:

Approval under the Resource Management Act 1991 is being sought.

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

Please write your answer here:

Tasman District Council

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

Please write your answer here:

An existing 15MW solar farm has been approved for this property. a consent is held for that only.

However, this proposal is to expand the development to a much large and complex renewal energy power scheme.

There are no other applications lodged.

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

No

Please explain your answer here:

The proposal is on privately owned land with the landowner being a joint venture partner in this development.

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

Please write your answer here:

Once approval is granted for the entire project detailed engineering will begin which is envisaged to take between 3-6 months.

Design and Procurement for solar equipment is a straightforward process and typically has a delivery time of 3-6 months.

The design and construction of small hydro is also a straightforward process with an estimated time of 15-18 months from design to commissioning. Funding will be provided by the company's banking facility and new equity partners.

As mentioned above, site works will begin on the existing 15MW farm within 12 months.

Delivery is typically up to 3 months and site works will begin immediately equipment arrives on site.

Completion and Commissioning of the entire project is forecast to take 5 years.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

The project works will be entirely on private land.

To the best of our knowledge there is no other persons affected by this project - as was determined when the existing hydro power scheme on this property was developed in 2011

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:

This Project is an expansion of an existing consented power scheme which is located on private land.

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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:

Not applicable. 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 are no treaty settlements applying to the geographical location of this Project. Are there any Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 principles or provisions that are relevant to the project? Nο 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? Yes 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? Nο If yes, please explain: Upload your assessment if necessary: No file uploaded Section 5: Adverse effects What are the anticipated and known adverse effects of the project on the environment? Please describe: This scheme has recently been granted a 15MW solar farm, so the effects (less than minor) are now well known for this site. Extensive monitoring and

This scheme has recently been granted a 15MW solar farm, so the effects (less than minor) are now well known for this site. Extensive monitoring and ecological studies were also undertaken for the existing hydro power scheme on the property, so this is relevant for the new hydro and pumped hydro. Large scale PV solar is also now very well understood. There are now well-established assessments on the visual impact of solar panels. The effects will be less than minor. Measures to avoid, minimise and mitigate any adverse effects from this activity can be drawn on from other similar scale developments already consented in New Zealand and having been already undertaken and the existing consented site at this location.

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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:

To the best of our knowledge three is just the National Environmental Standard for water monitoring that is relevant to the proposals. 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.

In relation to Policy A on the benefits of renewable electricity anticipated in the NPS-REG, the Harwood NZ Energy JV Project will:

- increase New Zealand's renewable electricity supply by 85GWh, thus avoiding, reducing or displacing the greenhouse gas emissions;
- increase security of supply of electricity to people and businesses in the local area of the Takaka District by increasing the diversity of the type and location of electricity generation. At the moment if a nearby distribution line goes out, these people either lose electricity supply or have to run their own diesel generation plant;
- 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 will be co-located with existing structures and infrastructure including the distribution network; and
- Policy F by supplying electricity to the surrounding local community via its connection to the distribution network.

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 no long-term impacts on water quality. The hydro projects are non-consumptive water takes.

Ecological studies in the original scheme's application indicated that field studies, found no fish, native or introduced species and or eel life in Watson Creek. This is likely due to the ephemeral nature of the lower reach of the stream before it flows into the Matakitaki River.

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 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 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 predominately 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. The first stage is the 15MW already consented solar farm. The second stage 20MW will be a mirror of that. The same effects are present and conditions to monitor the activity are already in place with the existing approval.

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.

Pumped Hydro is a variation of hydro but will not have the same effects on river inflows to consider. its more just a land disturbance consideration. 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.

The region will be increasingly supplied by its own renewable energy.

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.

Will the project deliver regionally or nationally significant infrastructure?

Regional significant infrastructure

Please explain your answer here:

The entire Project will deliver 85GWh of electricity each year - the annual usage of electricity of 12,000 average households (7033kWh av. Consumption in March 23 year; 2.7 people per household). It has a forecast budget of square, 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.

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 20 staff for up to a 5-year period. The total project build is budgeted at \$80M. 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.

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

Yes - This Project is embedded in the local rural economy and will support primary industries. This includes dairying and primary processing facilities. As technologies develop this will lead to carbon reduction on farm through the future development 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 in the future 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:

Yes. The project will have a significant impact on climate change mitigation. The total output of 85GWh per annum of renewable electricity will displace 17,000T/yr greenhouse gas emissions from burning fossil fuels to generate electricity. This will typically come from reducing the need to run utility-scale fossil-fueled generation plant in the North Island.

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

Ves

Please explain your answer here:

Yes. The Project improves resilience for the surrounding community – on a daily basis and during recovery from natural hazards. The completed scheme will have the generation capacity and will be designed to run to support an islanded network which in this case will be controlled from Cobb generation so that it can be generating when the area is disconnected from the national transmission network thereby improving the security of supply.

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.

District Plans have not yet caught up with the need for renewable generation as outlined in the NPS-REG.

Anything else?

Please write your answer here:

This Project with make use of existing 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 one of the JV applicants relating mainly to fulfilling conditions monitoring reporting at one hydro power station in the North

Island.

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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