Response ID ANON-URZ4-5F83-U

Submitted to Fast-track approval applications Submitted on 2024-05-01 15:02:46

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name: Manawa Energy Limited

2 Contact person

Contact person name: Lisa Mead

3 What is your job title

Job title: Environmental Consenting 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:

Manawa Energy Limited Private Bag 12055 Tauranga Mail Centre Tauranga 3143

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:

The Kaimai Hydro-Electric Power Scheme is located within the Kaimai Ranges and the Wairoa River Catchment and is approximately 12km southwest of Tauranga and 25km northwest of Rotorua.

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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:

Manawa Energy Limited - SA63B/558, SA63/664, 516237, 516236, SA63B/541, SA63B/531, SA63B/579, SA67A/453, SA63B/545, SA63B/544, SA63B/580, SA65B/513, 516233, SA42B/747, SA65B/515 SA65B/514, 602060, SA69A/805, SA63B/554, SA48A/7, 587135, 125652, SA44D/528, 516238, 516235, 516231, SA63B/560

The Proprietors of Ngamanawa Block - 659217, SA27C/1308, SA67C/902

Department of Conservation

Tauranga City Council - SA477/93, SA476/171, SA6D/1293, 639413, 54220

Randhawa Orchard Limited - 823894

Michelle Louise Palmer, Trevor Brian Palmer - 627849

David Allen Warren, Marcia Alice Warren - 297166

David Ashely Cole, Larne Peter Clifford Edmeades, Susan Elizabeth Cole - 297167

G.I. Finlay Trustees Limited, Graham Alfred Caddie, Olive Seaton Caddie - SA42A/1000

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 Kaimai Hydro-Electric Power Scheme is existing. All current titles associated with the Kaimai Hydro-Electric Power Scheme include operational easements.

Section 2: Project details

What is the project name?

Please write your answer here: Kaimai Hydro-Electric Power Scheme Re-Consenting.

What is the project summary?

Please write your answer here:

The Kaimai Hydro-Electric Power Scheme is located in the Wairoa River Catchment and has been generating renewable electricity since 1915 by taking and diverting water via a series of tributaries and conveying the water through four power stations. The Scheme has an installed capacity of 42 MW and generates approximately 169 GWh per annum.

What are the project details?

Please write your answer here:

The purpose of the Kaimai Hydro-Electric Power Scheme is to maintain the renewable generation of electricity in the Bay of Plenty Region and enhance the energy security of the region and country, while diversifying New Zealand's energy portfolio. The Kaimai Hydro-Electric Power Scheme has been generating electricity in some configuration since 1915 and connects into the local grid providing approximately 25% of peak (morning and evening) electricity directly to the Tauranga electricity distribution network.

Kaimai has an installed capacity of nearly 42MW and generates 169 GWh – this is enough electricity to power nearly 21,000 households. The Kaimai Hydro-Electric Power Scheme makes a significant contribution to the Bay of Plenty's security of supply as well as New Zealand's security of supply, while materially contributing to greenhouse gas emission reductions of approximately 63,000 tCO2-e (for gas) or 160,000 tCO2-e (for coal).

The Kaimai Hydro-Electric Power Scheme has been operating in some configuration since 1915 when the Omanawa Falls power station was built to supply Tauranga, followed by McLaren Falls Station in 1925. The current scheme being reconsented was commissioned between 1972 and 1994 and generates renewable electricity through the conveyance, diversion and discharge of water from nine streams and rivers, three storage lakes and four power stations. The named waterbodies associated with the Scheme include the Opuiaki River, Tauwharawhara Stream, Ngatuhoa Stream, Awakōtuku Stream, Mangaonui Stream, Mangapapa River, Ruakaka Stream, Omanawa River, Mangakarengorengo River, and Lakes Mangaonui, Matariki and McLaren. The Scheme also captures water from several unnamed tributaries. The power stations associated with the Scheme include the K5 (0.3MW), Lloyd Mandeno (16MW), Lower Mangapapa (5.6MW) and Ruahihi (20MW) power stations.

The Scheme is a cascade diversion scheme that draws on a combined catchment area of approximately 341km². The majority of water captured by the Scheme originates from diversions that discharge into Lake Mangaonui storage reservoir, located in the upper reaches of the Scheme. The Kaimai Hydro-Electric Power Scheme relies on diversion weirs, drop pipes, canals, tunnels and water conveyance infrastructure, which largely follows the natural landform.

The operating regime for the Kaimai Hydro-Electric Power Scheme will remain largely the same as currently authorised under Manawa Energy's current resource consents, with the following exceptions:

• The implementation of a residual flow in the Mangapapa River, Omanawa River and downstream of McLaren Falls Dam;

• The provision of upstream and downstream tuna passage within the key waterbodies associated

with the Scheme; and

• The implementation of a Sediment Management plan to manage the conveyance of sediment throughout the Scheme.

The project involves the following activities which require resource consent as a controlled activity pursuant to the Bay of Plenty Regional Natural Resources Plan:

• The discharge of water to water;

- Discharges of contaminants to water;
- The take and use of water (including non-consumptive use);
- The damming and diversion of water; and
- The use of structures in the bed of a stream or river.

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

Please write your answer here:

N/A - the Kaimai Hydro-Electric Scheme is existing infrastructure.

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

Please write your answer here:

Resource Management Act 1991.

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

Please write your answer here:

Bay of Plenty Regional 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 to the Bay of Plenty Regional Council for the reconsenting of the Kaimai Hydro-Electric Power Scheme was lodged in June 2023. The application is currently being reviewed by the Council – no further information requests have been received, and notification of the application has not yet occurred. A decision on the application is yet to be made.

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

No

Please explain your answer here:

N/A

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

Please write your answer here:

The Kaimai Hydro-Electric Scheme consists of existing infrastructure. No construction activities are anticipated to occur if the consent is granted.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

Bay of Plenty Regional Council Western Bay of Plenty District Council Tauranga City Council Ngāti Ranginui Ngāti Hangarau Ngamanawa Incorporation Te Wairoa Hapū (Ngāti Kahu, Ngāti Pango and Ngāti Rangi) Pirirākau Ngāti Tamarāwhao Ngāti Ruakawa Ngāti Hinerangi Ngāi Te Ahi Ngāi Te Rangi Ngāti Pūkenga Department of Conservation Fish & Game Commercial white water rafting operators on the Wairoa River e.g. Raftabout and River Rats Local Kaimai landowners

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:

It is Manawa Energy's understanding that the Wairoa River Catchment has been occupied by multiple hapū throughout history. The hapū that Manawa Energy have engaged with have varying degrees of association with certain areas of the Wairoa Catchment. Manawa Energy has engaged with mana whenua on previous consenting projects and other activities at the Kaimai Hydro-Electric Power Scheme in the past.

Manawa Energy commenced engagement with mana whenua and other iwi authorities specifically for the reconsenting of the Kaimai HEPS in 2020 and have a good understanding of the key issues of concern to many of the hapu and iwi. This engagement has included hui, wānanga, fish passage work at the Scheme and various site visits. The key issues raised by mana whenua through consultation relate to fish passage, residual flows and loss of mauri of the river.

Manawa Energy also engaged with the Department of Conservation (DOC) in May 2022. DOC's main concern was that Manawa Energy ensures that it engages with the correct mana whenua. No concerns were raised over the technical assessments. Manawa Energy met with DOC again in May 2023 in which updates were provided regarding mana whenua engagement and fish passage passive trials progress as well as trap and transfer initiatives.

Fish & Game participated in an online stakeholder meeting in March 2022 where Manawa Energy provided an overview of the public access available within the Wairoa River Catchment and the existing operation of the Kaimai Hydro-Electric Power Scheme. Key interests raised by Fish & Game were access to water bodies and the health of the fish.

Engagement with whitewater recreation stakeholders occurred by way of an online meeting in March 2022. Key interests raised were access to water bodies and the timing of release dates to be in line with the kayaking, canoeing and rafting seasons. Manawa Energy currently provides 26 recreational releases per year as per consent conditions.

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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:

The Kaimai Hydro-Electric Power Scheme is existing and therefore no processes under the Public Works Act 1981 are necessary for the project.

Section 4: Iwi authorities and Treaty settlements

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

Please write your answer here:

There are no statutory acknowledgements within the vicinity of the Kaimai Hydro-Electric Power Scheme.

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?

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?

No

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:

The Regional Natural Resources Plan sets out the matters of control relating to the project, which guide the decision maker. Manawa Energy has obtained full expert assessments relating to the matters of control, with the full list of those assessments as follows:

- Assessment of Environmental Effects Manawa Energy
- Statutory Planning Assessment Mitchell Daysh
- Hydrology Assessment Tonkin & Taylor
- Sediment Assessment Tonkin & Taylor
- Aquatic Ecology and Water Quality Assessment 4Sight
- Fish Assessment Dr Greg Ryder
- Terrestrial Ecology Assessment Tonkin & Taylor
- Natural Character, Landscape and Visual Amenity Assessment Boffa Miskell
- Recreation Assessment Rob Greenaway and Associates
- Dam Safety Report Riley Consultants

The following descriptions are high level summaries of the effects assessed.

Hydrological Effects – The hydrological operation of the Kaimai Hydro-Electric Power Scheme has been assessed by Tonkin & Taylor (2023). The hydrology of the catchment has been altered with a series of diversion and damming activities, and will remain largely unchanged as a result of the re-consenting of the Scheme. However, Manawa Energy is proposing new permanent residual flows of 150L/s in the Omanawa River, 100L/s in the Mangapapa River, and 150L/s in the Wairoa River below the McLarens Falls Dam.

Sedimentation and River Hydraulic Effects – A Sediment Assessment prepared by Tonkin & Taylor (2023) assesses the effects of the Scheme on sediment and erosion processes. At a high level, the structures within the Scheme affect the movement of sediment through the catchment. The proposed residual flows referred to in the hydrological effects above, provide the potential for the movement of sediment in all of the sub catchments. In addition, Manawa Energy is proposing the development and implementation of a Sediment Management Plan to identify appropriate measures for managing the movement of sediment within the Scheme.

Aquatic Ecology and Water Quality Effects - 4Sight has prepared an Aquatic Ecology Assessment which considers the effects of the Scheme on aquatic

ecology and the water quality of the waterbodies affected by the Scheme. Key conclusions include that:

The continued operation of the Kaimai Hydro-Electric Power Scheme will not exacerbate algal accrual to nuisance levels, with any adverse effects considered to be no more than minor.
With respect to the rivers and streams of the Wairoa River Catchment, the primary potential effects from the operation of the Kaimai Hydro-Electric Power Scheme are increased temperatures and decreased dissolved oxygen concentrations resulting from the take and diversion of water at the various structures of the Scheme.

• With respect to the lakes within the Kaimai Hydro-Electric Power Scheme, Lake Mangaonui and Lake McLaren and have low phytoplankton biomass which indicates that the operation of the Scheme is not leading to adverse growth effects in these two lakes. On the other hand, Lake Matariki has a longer residence time and therefore there are high levels of algal growth and phytoplankton biomass.

Fish Habitat and Fish Passage Effects - A Fish Assessment has been prepared by Ryder Consulting Limited with respect to fish habitat and fish passage. A number of structures and features associated with the Kaimai Hydro-Electric Power Scheme have the potential to impede upstream and downstream fish passage. Where there are residual flows (Opuiaki Weir, Ngatuhoa Weir), there is good fish habitat. The additional residual flows proposed by Manawa Energy will assist fish passage, and in addition Manawa Energy is proposing the development and implementation of a Fish Management Plan to improve the passage of indigenous fish within the catchment and minimise the possibility of fish mortality.

Terrestrial Ecology Effects – Tonkin & Taylor have assessed the effects of the Kaimai Hydro-Electric Power Scheme on terrestrial ecology. The Scheme is located within, and surrounded by, a number of areas that are recognised as having high terrestrial ecological value. That said, Manawa Energy are not proposing any changes to the footprint of the Kaimai Hydro-Electric Power Scheme, such that there will be no physical disturbance to any areas of significant indigenous vegetation or significant habitats of indigenous (terrestrial) fauna. Accordingly, no measures are considered necessary to avoid, remedy or mitigate adverse effects on areas of significant indigenous vegetation or significant habitats.

Natural Character, Landscape and Visual Amenity Effects – Boffa Miskell have prepared a Natural Character, Landscape and Visual Amenity Assessment. Taking into account the scale and form of the various structures and components of the Kaimai Hydro-Electric Power Scheme, and the natural landscape character of much of the surrounding area, the ongoing landscape and visual amenity effects of the Scheme when considered as a whole are considered to be low.

Cultural Effects - The continued operation, use and maintenance of the Kaimai Hydro-Electric Power Scheme has actual and/or potential adverse effects on:

• The relationship of mana whenua, and their culture and traditions with the site and any wāhi tapu or other taonga that may be in the areas surrounding the Scheme that are affected by the activity; and

• The ability of tangata whenua to exercise their kaitiaki role in respect of any wāhi tapu or other taonga that may be in the areas surrounding the Scheme that are affected by the activity.

Recreation Effects – Rob Greenaway & Associates have prepared a Recreation Assessment with respect to the effects of the Scheme on recreation. Whilst the Kaimai Hydro-Electric Power Scheme has heavily modified what was a natural setting, the Scheme has created and maintains a high level of recreation amenity, including the provision of access to new recreation opportunities and the whitewater recreational flow releases. The continued operation of the Scheme supports the maintenance of these recreational benefits.

Dam Safety Effects – A Dam Safety Report has been prepared by Riley Consultants. The report concludes various structures comprising the Kaimai Hydro-Electric Power Scheme are being appropriately managed with a long-term approach to ensure that the risk of dam failure, land stability and flooding is minimised.

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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:

Mitchell Daysh has carried out a comprehensive planning assessment for Manawa Energy.

The New Zealand Coastal Policy Statement is not considered relevant as the Scheme is not located in the coastal environment. The relevant national policy statements and national environmental standards are:

- National Policy Statement for Renewable Electricity Generation (NPSREG)
- National Policy Statement for Freshwater Management (NPSFM)
- National Environmental Standards for Freshwater (NESF)

NPSREG – the NPSREG seeks to enable the sustainable management of renewable energy generation under the RMA. As such the project is entirely consistent with the objectives and policies of the NPSREG, with the following noted in particular:

• The objective to provide for the development and operation of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to levels that meet or exceed the Government's national target for renewable electricity generation.

• Policy A of the NPSREG recognises the benefits associated with renewable electricity generation activities, with the listed benefits in the policy being non-exclusive.

Policy B requiring decision-makers to have particular regard to the practical implications of achieving the national target for electricity generated from renewable energy sources.
Policies C1 and C2 requiring decision makers to have particular regard to the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable energy generation activities.

NPSFM – the fundamental concept of the NPSFM encompasses Te Mana o Te Wai which refers to the fundamental importance of water and recognises that protecting the health of freshwater will protect the health and wellbeing of the wider environment. The use of water for electricity generation is considered to fall within the second priority articulated in the objective of the NPSFM - being managing natural and physical resources for the health needs of people.

The NPSFM includes an effects management hierarchy which requires all adverse effects of a proposal to be analysed and addressed through a number of different actions. Expert assessments obtained by Manawa Energy have confirmed that all adverse effects associated with the Kaimai Hydro-Electric Power Scheme re-consenting have been remedied and mitigated, without the need to propose any offsetting and compensation, meaning the hierarchy has been complied with.

More broadly, the NPSFM is relevant to fish passage, residual flows, water quality, the management of adverse effects on aquatic ecosystems, and the management of the effects of the Scheme on the relationship of tangata whenua with the site and waterbodies. Based on the expert assessments obtained, it is considered that the continued operation, use and maintenance of the Scheme can occur in a manner that is consistent with the NPSFM.

NESF – the NESF does not impose any additional consent requirements in relation to the re-consenting of the Scheme, as it does not apply to existing structures (nor are relevant structures classified as 'weirs' for the purpose of the NESF), and the take, use, damming, diversion or discharge of water for the operation or maintenance of specified infrastructure is provided for as a permitted activity.

NPSIB - The National Policy Statement on Indigenous Biodiversity does not apply to the Kaimai Hydro-Electric Power Scheme as clause 1.3(3) of the NPS states that "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 Fast-track process allows for time savings of up to three to four years and millions of dollars in administrative/RMA costs from expanded council processing, regional council hearings and Environment Court appeals for consents that cannot be declined. Additionally, decisions often seeks to create a 'compromise' whereby shorter term durations, higher minimum flows and expensive mitigation are set to appease interested parties. These types of restrictions have the potential to result in a significant loss of energy production. Manawa's experience is that the normal RMA process for re-consenting is lengthy and difficult. Re-consenting processes are taking 3+ years and resulting in more complex conditions. This has a cost in terms of process costs, compliance costs, and in extreme cases the risk of lost generation.

With respect to timeframes, Manawa's experience includes the following re-consenting examples:

• Patea HEPS, Taranaki – application lodged in early 2007 and consents granted in 2010 following an Environment Court mediation process.

• Matahina HEPS, Bay of Plenty – application lodged 2009 and consents granted in 2014 following four Environment Court mediations.

• Otago Water Races (Beaumont, Crystals, Black Rock, Shepherds) – application lodged in 2020 and granted in 2023 – but for a 6 year duration only – consents expire in 2029.

• Mangorei HEPS – application lodged in November 2020. As at May 2024, Manawa awaits a final response from Council on the second round of further information requests.

• Motukawa HEPS – application lodged in November 2021. As at May 2024, Manawa awaits a final

response from Council on the second round of further information requests.

With respect to the costs of the process, Manawa's experience is that the processes run from \$2M to in excess of \$4M for the more complex processes.

These difficulties are recognised in the National policy document Electrify NZ, which notes that re-consenting for existing generation assets has become unnecessarily difficult.

These delays and costs are particularly frustrating in the case of the Kaimai Hydro-Electric Power Scheme, which is a controlled activity. Controlled activity status means that consent cannot be declined. However, interested parties often seek conditions which would impact on a scheme's operation (e.g. increased minimum flows), or seek to limit consent duration to a short time period such as 10 years, which means that consent will need to be applied for again in less than 10 years' time. Given the time and cost involved to obtain consent in the first place, a short consent duration (i.e. less than the maximum duration of 35 years) is a significant concern for Manawa Energy. The Kaimai HEPS is an inter-generational asset that requires constant investment and maintenance appropriate with long-life assets. A shorter-term consent puts this investment at risk. The fast-track process offers much more certainty that the project will be consented in a timely and cost-efficient manner.

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 ready to be fast-tracked as the necessary expert assessments and an Assessment of Environmental Effects have been prepared. If the project is listed, an application could be lodged with the EPA within one month of the Act becoming law. Therefore, referring this project will demonstrate the efficient operation of the fast-track process.

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

Other

Please explain your answer here:

While the Kaimai Hydro-Electric Power Scheme itself has not been specifically identified, the National policy document Electrify NZ notes that re-consenting for existing generation assets has become unnecessarily difficult. Listing this re-consenting project for fast-tracking would be consistent with that policy.

Will the project deliver regionally or nationally significant infrastructure?

National significant infrastructure

Please explain your answer here:

The Kaimai Hydro-Electric Power Scheme will deliver both nationally and regionally significant infrastructure.

The provision of, and access to, secure and reliable renewable electricity is of critical importance to the social and economic wellbeing of the Bay of Plenty, and all New Zealanders. The Kaimai Hydro-Electric Power Scheme will continue to contribute to the security of electricity supply in the Bay of Plenty Region (given it is embedded into the local electricity network), as well as contribute to the Government's strategic targets for renewable electricity generation and the decarbonisation of the New Zealand economy.

The National Policy Statement for Renewable Energy Generation (NESREG) provides that decision makers shall recognise and provide for the national significance of renewable energy generation activities. It also provides that matters of national significance include the need to develop, operate, maintain and upgrade renewable electricity generation activities. Given that the NPSREG acknowledges the importance of renewable energy infrastructure and the benefits derived from said infrastructure, it follows that the Kaimai Hydro-Electric Power Scheme delivers nationally significant infrastructure

Energy generation facilities, such as the Kaimai Hydro-Electric Power Scheme, have been identified in the Bay of Plenty's Regional Policy Statement as regionally significant infrastructure. The regional policy statement provides that the definition of regionally significant infrastructure includes "facilities for the generation and/or transmission of electricity where it is supplied to the national electricity grid and/or the local distribution network".

Will the project:

Please explain your answer here:

N/A

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The key sources of economic benefit from Fast Tracking for existing hydro are (a) the reduction in consenting costs, (b) the opportunity cost and loss of focus in the business while time and resources are dedicated to navigating the RMA process and (c) the lost value in generation capacity or consent duration that may occur from a traditional consenting process.

The cost to reconsent a small- medium hydro station through the traditional consenting pathway is approximately ^{\$9(2)(0)(1)}. Most of the cost are incurred through council processing, hiring consultants, regional council hearing, and any Environment Court appeals – with very little investment into actual environmental benefits. These costs directly slow down investment in new generation assets and increase the cost of electricity for all New Zealanders – a straight up loss for NZ and one of the main arguments for fast-track consenting. Reconsenting the Kaimai Scheme will help support the regional New

Zealand economy.

Reconsenting Kaimai through Fast Track will ensure no signifcant generation loss. This scheme is valued at nearly **s** 9(2)(b)(ii) in replacement costs. Kaimai provides up to 25% of Tauranga's peak electricity into the local grid. Previous reconsenting through the RMA has shown up to 4-6% loss generation and these were prior to the 2020 NPS-FM and NES policies, which now have stricter requirements for river restoration. The loss of generation through the current RMA pathway is expected to be greater than previous reconsents given the current regulatory environment.

New generation investment would otherwise be required to fill the increasing demand. In particular, distributed generation helps to avoid or defer investment in distribution and transmission assets.

The operation of the Kaimai Scheme results in the injection of several million dollars of direct expenditure on wages and supplies in the Bay of Plenty region. Additionally, economic multiplier effects imply that additional indirect and induced expenditure would also result in a further economic benefit of several million dollars to the Bay of Plenty region. Furthermore, the recreational use values from the recreational releases estimated to be in the order of **s** 9(2)(b)(ii) annually.

The economics of hydro are that they require high upfront capital costs and occasionally significant capital refurbishment costs. More importantly, the key point for existing hydro schemes is that losing water doesn't lower the required O&M cost of the hydro station and hence the unit cost/KWh increases. This in turn eventually results in higher electricity costs for all New Zealanders. If this zero-cost hydro-electricity at the margin is reduced and replaced with something else, then, unless that new generation has the same operating and economic characteristics as controlled hydro-electricity, it must increase costs to the electric power supply, and probably prices.

It is critical to maintain the generation output from the Kaimai HEPS to avoid the need to replace this output in both the short and long term, or add to the expansion of capacity required elsewhere. Any loss of output will also add to the extent to which the Bay of Plenty region is dependent on net imports and generally more distant sources of supply.

In the Bay of Plenty Region, annual electricity demand exceeds local generation capacity, necessitating the import of power from elsewhere via the national transmission grid. In order to meet the objectives in the Government's coalition agreements and as detailed in Electrify NZ, New Zealand needs to more than double its existing installed electricity generation capacity over the next 25 years. The Kaimai Hydro-Electric Power Scheme will deliver significant economic benefits in the form of directly supplying electricity to the Bay of Plenty Region.

In summary, the economic benefits of the project include:

 providing a secure supply of renewable energy directly to the Bay of Plenty Region's electricity network;

· contributing to the doubling of renewable electricity generation, and emissions reductions targets;

 $\boldsymbol{\cdot}$ avoidance of a slight increase in vulnerability of the Bay of Plenty region to the loss of electricity

supply through transmission failures;

• provision of hydro capacity in a different climatic region from the main storage lakes in the South Island; this reduces the risk of correlated dry periods across hydro capacity; and

 maintenance of the economic activities associated with operation of the scheme to the benefit of local suppliers of labour, goods and services.

Will the project support primary industries, including aquaculture?

No

Please explain your answer here:

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

No

Please explain your answer here:

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

Yes

Please explain your answer here:

The Kaimai Scheme will have significant climate change mitigation benefits, including supporting the reduction of greenhouse gas emissions. The Kaimai Scheme provides 42 MW with annual generation in the range of 169 GWh which powers up to 21,000 homes.

The Kaimai Scheme has an important role in achieving New Zealand's 2050 targets in the Climate Change Response Act 2002. The Kaimai Scheme will also play a role in substituting fossil fuel energy with renewable energy. That amounts to real emissions reduction, especially as New Zealand's electricity cannot be imported, and therefore it will contribute to reductions in the country's greenhouse gas inventory. Economic analysis indicates greenhouse gas emission reductions of approximately 63,000 tCO2-e (for gas) or 160,000 tCO2-e (for coal).

The ongoing operation of the Scheme contributes towards decarbonising New Zealand's economy. It will also contribute to achieving the 90% renewable energy target by 2025 set out in the National Policy Statement for Renewable Electricity Generation and the aspiration to achieve 100% renewable energy

by 2030.

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

Yes

Please explain your answer here:

As a generator of electricity, Manawa Energy Limited is recognised as a lifeline utility under the Civil Defence Emergency Management Act 2002 (Schedule 1, Part B). Lifeline utilities play a vital role in recovery from natural hazards, and have statutory duties such as the need to ensure the ability to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency. This includes the Kaimai Hydro-Electric Power Scheme.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

Although the Kaimai Hydro-Electric Power Scheme has not been assessed as causing any 'significant environmental issues', it is noted that the Scheme has significance as a generator of renewable electricity, supporting the reduction of greenhouse gas emissions. Additionally, Manawa Energy has proposed improved fish passage and new residual flows as part of the project, which address important environmental issues.

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

Yes

Please explain your answer here:

Mitchell Daysh has carried out a full planning assessment of the project against the relevant statutory and non-statutory planning documents, and iwi/hapū resource management plans. Its conclusion is that the project is consistent with those documents, which are the:

· Bay of Plenty Regional Policy Statement;

· Bay of Plenty Regional Natural Resources Plan, pursuant to which the resource consents for the

project are a controlled activity;

• Te Koikoi Karoro – Ngāti Hangarau Hapū Management Plan 2021;

Ngāti Kahu Hapu Environmental Management Plan 2011; and

• Wairoa River Valley Strategy 2013.

There are no spatial strategies relevant to the project.

Anything else?

Please write your answer here:

Manawa Energy would like to emphasise that it is currently spending up to ^{second} on the re-consenting of the Kaimai Hydro-Electric Power Scheme (with multiple schemes needing to be re-consented simultaneously), on a process that will likely take more than three years from lodgement to obtaining consent (including any appeals that may be lodged). That is for a scheme that has been in operation in some configuration for over 50 years, has effects that are well understood, and is a controlled activity, meaning consent cannot be declined. The RMA process is extremely inefficient for critical infrastructure such as this scheme, and Manawa Energy seeks that the project be listed in the Bill to make use of the fast-track process for this reason.

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:

Climate Change – Climate change impacts on the Scheme have been assessed by Tonkin & Taylor as part of its Hydrological Assessment. Natural variability in the climate will impact the behaviour of the Kaimai Hydro-Electric Power Scheme and its effects on the flow regime of the waterbodies associated with the Scheme. The changes in temperatures, rainfall, drought conditions from predicted climate change has the potential to reduce the mean flows of the Wairoa River Catchment. It is anticipated that there will be a reduction in summer and spring flows and an increase in autumn and winter flows. Despite these changes, it is not anticipated that climate change will have any material impact on the way in which the scheme operates.

Natural Hazards – The Kaimai Hydro-Electric Power Scheme could be affected by potential earthquakes and floods. However, key structures of the Scheme are inspected and maintained to ensure that the are able to perform as intended during natural hazards. Flood risks are mitigated throughout the Kaimai Hydro-Electric Power Scheme by a variety of structures such as spillways and weirs and procedures, such as the lowering of certain lakes or closing of tunnels.

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:

Across the country our power schemes operate within the constraints of approximately 500 consents and ~3,500 resource consent conditions that govern operations, monitoring and maintenance, and ensure we operate in an environmentally sustainable and legally compliant way. Trustpower / Manawa Energy has typically had positive record of compliance with our consents, with up to 99 percent compliance across our consent conditions. Most non-compliances received have related to minor technical incidents that have been quickly addressed. In the last 30 years Trustpower / Manawa Energy has also received a handful of abatement or infringement notices. These lower-level enforcement actions have always been promptly addressed to a high standard and no further action has been taken by the regulators.

Trustpower / Manawa Energy has only been prosecuted by a regulator once in 30 years. Otago Regional Council brought a prosecution against Trustpower for a discharge of sediment from Beaumont Race at our Waipori Scheme into the Beaumont River. We plead guilty to the offence and while we are disappointed this occurred, the Judge complimented Trustpower on its response to the incident, particularly the open and collaborative approach to engagement with the investigating council and expression of remorse through a public apology, self-initiated environmental monitoring and participation in restorative justice process.

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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: Cory Lipinski

Important notes