

Response ID ANON-URZ4-5FRC-5

Submitted to Fast-track approval applications
Submitted on 2024-05-02 15:46:28

Submitter details

Is this application for section 2a or 2b?

2B

1 Submitter name

Individual or organisation name:
King Country 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 Kuratau Hydro-Electric Power Station is located in the Kuratau River Catchment approximately 36km south-west of Taupō and approximately 2.5km north-west of Kuratau Village.

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Kuratau HEPS Map.png was uploaded

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

Yes

upload file:

Kuratau HEPS - Records of Title.pdf was uploaded

Who are the registered legal land owner(s)?

Please write your answer here:

King Country Energy 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 registered proprietor of the land on which the project occurs.

Section 2: Project details

What is the project name?

Please write your answer here:

Kuratau Hydro-Electric Power Scheme Re-Consenting

What is the project summary?

Please write your answer here:

The Kuratau Hydro-Electric Power Scheme generates renewable electricity by taking, damming, and diverting water from the Kuratau River and Lake Kuratau to the Kuratau power station. It has an installed generation capacity of 6 MW and generates on average 28 GWh per annum.

What are the project details?

Please write your answer here:

The purpose of the Kuratau Hydro-Electric Power Scheme is to maintain the renewable generation of electricity in the Greater Kuratau/Taumarunui/Tūrangi area and enhance the energy security of the region and country, while diversifying New Zealand's energy portfolio.

The Kuratau Hydro-Electric Power Scheme is owned by King Country Energy Limited and operated by Manawa Energy Limited. The Scheme is located within the Kuratau River catchment, approximately 36 km south-west of Taupō and approximately 2.5 km north-west of Kuratau Village. The scheme has been in operation since 1962 and currently generates renewable electricity by:

- Damming of the Kuratau River with an earth dam to form Lake Kuratau;
- The discharge of water from the Kuratau spillway to the Kuratau River;
- The take and use of water and contaminants from the canal to land; and
- The discharge of water from the Kuratau power station turbines to the Kuratau River by means of a tailrace.

The Scheme has an installed generation capacity of 6 MW and generates on average 28 GWh per annum (which is the equivalent of the annual electricity needs of approximately 3,670 households). The Kuratau HEPS also materially contributes to greenhouse gas reductions, with non-renewable methods requiring approximately 10,000 tCO₂-e (for gas) or 26,000 tCO₂-e (for coal) to produce the same amount of electricity through other methods

The Scheme connects to the electricity generation network owned by the Lines Company, and all power generated is distributed into their local network servicing Taumarunui, National Park and Tūrangi including their wider rural communities. The Kuratau HEPS makes a significant contribution to the security of power supply for the region.

The operating regime for the Kuratau Hydro-Electric Power Scheme will remain the same as currently authorised. This includes an application to re-consent the existing maximum consented discharge rate of 16m³/s from the Kuratau Power Station.

The application involves the following activities which require resource consent as a controlled activity pursuant to the Waikato Regional Plan:

- The damming of water;

- The diversion, taking, and discharging of water related to the passage of water through, past, or over the dam; and
- The use or alteration of any associated structure.

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

Please write your answer here:

N/A – the Kuratau Hydro-Electric Power 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:

Waikato 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 Waikato Regional Council for the reconsenting of the Kuratau 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:

King Country Energy is the 100% owner of the Kuratau Hydro-Electric Power Scheme and the KCE Board has committed to the reconsenting of the scheme.

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

Please write your answer here:

The Kuratau Hydro-Electric Power 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:

Waikato Regional Council
Taupō District Council
Ngāti Tūwharetoa/Tūwharetoa Māori Trust Board
Ngāti Manunui
Ngāti Parekaawa
Waihi Pukawa Land Trust
Waituhi Kuratau Land Trust
Department of Conservation
Fish & Game

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:

King Country Energy has undertaken consultation with iwi and hapū and other key stakeholders in the preparation of the resource consent application for the continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme.

Ngāti Tūwharetoa and Tūwharetoa Māori Trust Board – King Country Energy holds regular interested party meetings with representatives from Tūwharetoa Māori Trust Board and Ngāti Tūwharetoa invited to attend, and attending where topics are relevant to their interests. King Country Energy

began consultation regarding this specific re consenting project in October 2022. A Working Party of all the iwi entities identified in the previous question has been established specifically for re consent consultation. KCE is coordinating and funding the Working Party and a Relationship Agreement is close to being agreed and signed.

Ngāti Manunui – King Country Energy's understanding is that Ngāti Manunui is one of two mana whenua hapū of the Kuratau Hydro-Electric Power Scheme area. An initial hui was held with Ngāti Manunui in April 2023 at their Tūrangi offices to introduce the project for re consenting of the Kuratau Hydro-Electric Power Scheme. Following the hui, King Country Energy organised a site visit of the Kuratau Hydro-Electric Power Scheme and a marae wānanga with Ngāti Manunui and senior leaders of King Country Energy that occurred in early June 2023. Engagement is ongoing through the joint Working Party noted above.

Ngāti Parekaawa – Ngāti Parekaawa is the other mana whenua hapū and KCE have been engaging with Ngāti Parekaawa since early 2023 and is continuing to do so through the joint Working Party.

Land Trusts – Two land trusts, Waihi Pukawa Land Trust and Waituhi Kuratau Land Trust have property interests around the Kuratau scheme and their members are generally made up of the local iwi and hapū. They are part of the joint Working Party and KCE are engaging with them on the re consents.

Department of Conservation (DOC) - DOC have been involved in the Kuratau Hydro-Electric Power Scheme through different projects and routine compliance activities as part of the existing consents, including the Kuratau wetland restoration project. King Country Energy first reached out to DOC regarding the re consenting in February 2023, and a meeting followed thereafter in March 2023. DOC raised concerns regarding fish strandings and King Country Energy confirmed it would investigate. Further meetings have since been held.

Fish & Game – Fish & Game have also been involved in the Kuratau Hydro-Electric Power Scheme through different projects and routine compliance activities as part of the existing conditions of consent. King County Energy first approached Fish & Game in February 2023 regarding the re consenting. Fish & Game made it clear that their statutory mandate did not cover trout, and only related to game birds and their habitat within Lake Kuratau. Their only other concern at the time was regarding the legal access to Lake Kuratau for recreational activities. Once King Country Energy clarified the access and that there were no proposed changes to that access or the consent, Fish & Game stated that in principle they would not be opposed to the consent, however, could not comment further until they had assessed the entire application.

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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 Kuratau 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:

Pursuant to the deed of settlement between the Crown and Tūwharetoa Māori Trust Board (the Board) dated 10 September 2007, the Board is the legal owner of the bed of: Lake Taupō, some parts of its tributaries (including Kuratau River) and parts of the Waikato river (Taupō Waters). The deed of settlement acknowledges that Taupō Waters is the taonga of Ngāti Tūwharetoa and embodies its mana and rangatiratanga. Taupō Waters is managed by Taupō-nui-a-Tia Management Board comprising of 8 members, 4 of which are appointed by the Board to represent Ngāti Tūwharetoa's interests.

There are no interests registered on the records of title associated with the Scheme that would suggest any of these titles are to revert to the ownership of Tūwharetoa Māori Trust Board or that they are encompassed within the 2007 deed. In addition, none of the titles provide notice indicating they are subject to a claim or could be acquired by the Crown by way of resumption.

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:

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Section 5: Adverse effects

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

Please describe:

King Country 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 - Mitchell Daysh
- Statutory Planning Assessment – Mitchell Daysh
- Hydrology Assessment – Tonkin & Taylor
- Sediment Assessment – Tonkin & Taylor
- Aquatic Ecology Assessment – Tonkin & Taylor
- Terrestrial and Wetland 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 – Tonkin & Taylor (2023) considers that the proposed hydrological operation of the Scheme will remain unchanged compared to the consented operating regime.

Sedimentation and River Hydraulic Effects – The sediment assessment prepared by Tonkin & Taylor (2023) assesses the effects of the Kuratau Hydro-Electric Power Scheme on sediment and erosion processes within the Kuratau River Catchment. Whilst Tonkin & Taylor consider that the current operations of the Scheme have no adverse effects on Lake Kuratau from a sedimentation perspective, the maximum proposed discharge rate of 16 m³/s may result in an increase in median lake levels and the duration of higher lake levels and a reduced frequency of spill events. The continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme will have negligible effects on the morphological condition of the Kuratau River residual beach. With respect to the downstream Kuratau River, the operation of the Kuratau Hydro-Electric Power Station is only one of many factors affecting geomorphic processes throughout the downstream Kuratau River (including geology/soil type, channel morphology, Lake Taupō base levels and channel forming flows).

Aquatic Ecology Effects –Overall, the aquatic ecology report prepared by Tonkin & Taylor (2023) considers that any effects on aquatic ecology values from continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme will be less than minor. With respect to Lake Kuratau, effects on water quality will be negligible and any effects on macrophyte communities will be less than minor. Potential fish mortality or stranding effects on trout and indigenous fish species (associated with the dewatering of the Kuratau Canal) will be appropriately mitigated by the implementation of a fish salvage management plan (include offering mana whenua the opportunity to participate in and monitor any indigenous fish salvage activities). Furthermore, any potential entrainment or impingement effects on trout will be suitably mitigated by the continued adherence with the existing consent conditions related to intake velocities at the canal and penstock intake screens. There is no need to introduce a residual flow in the Kuratau River residual reach from an ecological perspective.

With regards to fish passage, the only indigenous species are kōaro and Common Bully. There are no tuna. The Kuratau dam and spillway structures are considered to have a negligible effect on upstream fish passage due to the complete barrier imposed by the Kuratau waterfall. In relation to downstream fish passage, the Scheme is likely to only have minor effects on the wider trout stocks in Lake Kuratau, and healthy trout populations are present within Lake Kuratau and the downstream Kuratau River.

Terrestrial and Wetland Ecology Effects - Tonkin & Taylor (2023) considered that the continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme will have less than minor effects on terrestrial and wetland values and conclude that:

- Any effects on the wetland and riparian vegetation communities along the margins of Lake Kuratau, including the fauna utilising these habitats, will be negligible;
- Whilst lake lowering activities (associated with the maintenance of the Kuratau power station) will

have moderate adverse effects on parts of the very high value wetland areas, a range of measures have been proposed that will adequately address any potential adverse effects; and

- Any effects on the riparian vegetation and associated fauna, including under the maximum proposed discharge rate of 16 m³/s, will be less than minor.

Natural Character and Visual Amenity Effects – As detailed in the natural character, landscape and visual amenity report prepared by Boffa Miskell (2023) the various components of the Kuratau Hydro-Electric Power Scheme have been in place for over 60 years and have become a recognised part of the local landscape. The landscape effects currently associated with the physical structures as part of the Scheme will not change. Taking into account the scale and form of the various structures and components of the Kuratau Hydro-Electric Power Scheme (relative to the surrounding landform) and their limited public viewing audience, Boffa Miskell (2023) conclude that the ongoing landscape and visual amenity effects of the Scheme are considered to be low.

Cultural Effects - the continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme has potential adverse effects on the:

- Wāhi tapu or other taonga that may be in the areas surrounding the Scheme;
- The relationship of tangata whenua and their cultural and traditions with the site and any wāhi tapu or other taonga that may be in the areas surrounding the Scheme and 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 and that are affected by the activity.

Recreational Effects - Rob Greenaway & Associates (2023) has prepared a recreation report that considers how the continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme potentially impacts on existing recreation values in the Kuratau River Catchment. Overall, Rob Greenway & Associates (2023) considers the continued operation, use and maintenance of the Kuratau Hydro-Electric Power Scheme will have minor or less adverse effects on recreational values.

Dam Safety Effects - Dam safety reports were prepared by Riley Consultants in 2019, 2020 and 2021. The 2021 report concludes that various structures comprising the Kuratau 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:

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 King Country Energy have confirmed that all adverse effects associated with the Kuratau

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, and the engagement with mana whenua to date, 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 3-4 years and millions of dollars in administrative and professional services costs from expanded council processing, regional council hearings and Environment Court appeals for consents that cannot be declined. Additionally, a decision 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. The experience of King Country Energy is that the normal RMA process for re-consenting is lengthy and difficult. Reconsenting processes are taking upwards of three 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, KCE and Manawa’s experience includes the following re-consenting examples:

- Patea Hydro-Electric Power Scheme – application lodged in early 2007 and consents granted in 2010 following an Environment Court mediation process.
- Matahina Hydro-Electric Power Scheme – 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 Hydro-Electric Power Scheme – 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 Hydro-Electric Power Scheme – application lodged in November 2021. As at May 2024, Manawa awaits a final response from Council on the second round of further information.

With respect to the costs of the process, KCE’s experience is that the processes costs are historically, in excess of \$2M - \$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 costs and delays are particularly frustrating in the case of the Kuratau Hydro-Electric Power Scheme, which is a controlled activity. This means that consent cannot be declined. However, interested parties often seek to limit the 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 under the RMA of 35 years) is a significant concern for King Country Energy. The Kuratau 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 manner with more certainty of outcome.

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 and planning assessments and Application for Environmental Effects (AEE) has 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 Kuratau Hydro-Electric Power Scheme itself has not been specifically identified as a priority project, 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 Kuratau Hydro-Electric Power Scheme will deliver 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 Waikato, and all New Zealanders. The Kuratau Hydro-Electric Power Scheme will continue to contribute to the security of electricity supply in the Waikato 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 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 Kuratau Hydro-Electric Power Scheme delivers nationally significant infrastructure.

Energy generation facilities, such as the Kuratau Hydro-Electric Power Scheme, have been identified in the Waikato Regional Policy Statement as regionally significant infrastructure. The regional policy statement provides that the definition of regionally significant infrastructure includes "infrastructure for the generation and/or conveyance of electricity that is fed into the national grid or 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.

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 Kuratau Hydro-Electric Power Scheme will deliver significant economic benefits in the form of directly supplying electricity to the Waikato region.

The cost to re-consent a small hydro station through the traditional consenting pathway is approximately \$2-4 million. 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 Kuratau Scheme will help support the regional New Zealand economy.

The Kuratau scheme replacement cost is \$40million and has a regular valuation of \$22m. Past re-consenting processes have resulted in a significant loss in generation due to required residual flows. 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. Losing even 7% of water through a re-consenting process is 8.4GWh of lost generation, and the cost to replace that generation would be \$1.7 million per annum. New generation investment would be required to fill the increasing demand. Additionally, re-consenting means that savings of up to \$4million on extensive council processing, regional council hearing and environment court appeals can be redistributed to the development of new generation.

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 hydroschemes 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.

The Kuratau Hydro-Electric Power Scheme is a hydro peaking station which is crucial to providing energy on the cold still winter nights when solar and wind may not be available. Being embedded these schemes provide electricity into the local network reducing the requirements on the transmission network.

It is critical to maintain the generation output from the Kuratau 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.

The operation of the Kuratau HEPS results in the employment of four full time staff on-site who manage the day to day operation of the scheme. The scheme also results in the employment of numerous support staff and contractors who contribute to the upkeep, maintenance, compliance and operation of the scheme. This contributes over \$1 million annually into the local economy.

It is therefore important to maintain the generation output from the Kuratau Hydro-Electric Power Scheme to avoid the need to replace this 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 Waikato region is dependent on net imports and generally more distant sources of supply.

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;
- avoidance of a slight increase in vulnerability of the Waikato region to the loss of electricity supply through transmission failures;
- some deferment of investment in new generation and any associated transmission connections and upgrades;
- 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 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.

The Kuratau HEPS has an important role in achieving New Zealand's 2050 targets in the Climate Change Response Act 2002. The Kuratau HEPS 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 by NZEIR indicates greenhouse gas emission reductions at the Kuratau HEPS of approximately 10,000 tCO₂-e (for gas) or 26,000 tCO₂-e (for coal). Any reduction in the generation capacity of the Kuratau HEPS would need to be replaced by non-renewable sources or construction of new generation options.

The National Policy Statement for Renewable Electricity Generation, Policy A, provides for as a matter of national significance renewable electricity generation, including its benefit of maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions. The preamble to the National Policy Statement for Renewable Electricity Generation notes "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". The Kuratau HEPS is entirely consistent with that national direction.

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

Yes

Please explain your answer here:

As a generator of electricity, King Country 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 Kuratau Hydro-Electric Power Scheme.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

Although the Kuratau 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.

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:

- Waikato Regional Policy Statement;
- Waikato Regional Plan; and
- Ngāti Tūwharetoa Environmental Iwi Management Plan.

There are no spatial strategies relevant to the project.

Anything else?

Please write your answer here:

King Country Energy would like to emphasise that it is currently incurring significant expenditure on the re-consenting of the Kuratau Hydro-Electric Power Scheme (with multiple schemes needing to be re-consented), on a process that will likely take more than two years from lodgement to obtaining consent (excluding any appeals that may be lodged). That is for a scheme that has been in operation for 60+ years, has effects that are well understood and is a controlled activity, meaning consent cannot be declined for it. The RMA process is extremely inefficient for critical infrastructure such as this scheme, and King Country Energy seeks to be listed in the Fast-track Approvals 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 Kuratau 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 Kuratau 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 Kuratau 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 they are able to perform as intended during natural hazards. Flood risks are mitigated throughout the Kuratau Hydro-Electric Power Scheme by a variety of structures and procedures.

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:

To the best of its knowledge, King Country Energy has not had any enforcement actions taken against it under the Resource Management Act 1991 or the other legislation covered by the Fast-track Approvals Bill. Regular compliance checks are undertaken by the relevant regulatory body for each of King Country Energy's schemes.

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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