

Response ID ANON-URZ4-5FQW-R

Submitted to Fast-track approval applications
Submitted on 2024-05-03 14:18:17

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name:
Contact Energy Limited ("Contact")

2 Contact person

Contact person name:
John Clarke

3 What is your job title

Job title:
Chief Generation Officer

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:

PO Box 10742, Wellington 6143
Level 2, Harbour City Tower, 29 Brandon Street, Wellington

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

Yes

Organisation:
Contact Energy Limited

Contact person:
Brigid Buckley

Phone number:
s 9(2)(a)

Email address:
s 9(2)(a)

Job title:
Resource Management – Senior Specialist, Corporate Affairs

Please enter your service address:

PO Box 10742, Wellington 6143
Level 2, Harbour City Tower, 29 Brandon Street, Wellington

Section 1: Project location

Site address or location

Add the address or describe the location:

Hāwea Dam at the outlet and southern end of Lake Hāwea.
Clyde Dam on the Clutha River approximately 1.5km upstream from Clyde.
Roxburgh Dam on the Clutha River upstream of the Lake Roxburgh Village.

File upload:

Project Site Map.pdf was uploaded

Upload file here:

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

Yes

upload file:

Project Record of Titles.pdf was uploaded

Who are the registered legal land owner(s)?

Please write your answer here:

Contact Energy Limited, and
The Crown – (through the Commissioner of Crown Lands)

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:

Contact Energy has all the legal interests (either freehold land it owns or in the form of easements over land subject to its operations) required to undertake the activities being proposed as part of this application. Therefore, Contact Energy has no land interests that would impede its ability to implement the Project immediately.

Section 2: Project details

What is the project name?

Please write your answer here:

Clutha Hydro Scheme – increasing operational flexibility and efficiency ("the Project")

What is the project summary?

Please write your answer here:

The Project delivers a quick win for the security and flexibility of New Zealand's electricity system by changing existing consent conditions to enable greater flexibility and storage for, and more efficient renewable generation from, Contact's existing Clutha / Mata-Au Hydro Scheme ("CHS").

What are the project details?

Please write your answer here:

The Project is intended to unlock and grow the operational effectiveness and efficiency of Contact's hydro portfolio within the Clutha Mata-Au catchment to best deliver for, and support, New Zealand's future electricity system (including its decarbonisation) and our country's economic growth.

This Project seeks to amend the existing operational consent conditions that were put in place in 2007, in an electricity market that has since changed significantly. Since the issuing of the CHS consents in 2007, New Zealand has decommissioned over 1000MW of carbon emitting thermal baseload generation capacity and constructed over 1000MW of renewable, but intermittent generation capacity. This has without question delivered real benefits to New Zealand's goal of becoming carbon neutral by 2050 but has also presented significant challenges to the security of its electricity system that is essential for its wellbeing and prosperity. This challenge has been well signalled in both 2023 and 2024 by Transpower in their role as the system operator.

For the remaining term of the CHS consents (2042), even greater changes and challenges will occur in our electricity system and a significant operating response will be required from New Zealand's existing renewable forms of electricity generation, but in particular its existing hydro generation.

The Clutha/Mata Au natural character has been modified by the renewable generation derived from the CHS and this is in effect irreversible. Therefore, every opportunity to improve its operational efficiency and flexibility needs to be considered in light of that modified state.

Presently Contact's Clutha Mata-Au hydro scheme delivers up to 10% of New Zealand's total electricity supply and up to 12% of New Zealand's renewable electricity generation. With more flexible and efficient operation, management and storage approaches, Contact's existing hydro portfolio within the catchment could provide, from the same amount of water, a significantly greater contribution towards increased security of supply and aiding New

Zealand to achieve decarbonisation.

The Project's objective is to deliver greater operational and management flexibility of the water storage and flow through, and the efficient generation from, the existing Clutha Mata-Au hydro scheme to respond to the future role of hydro generation in New Zealand's electricity system. To not do so will hinder both New Zealand's climate change goals and the security of its electricity system.

While the existing consented activities (dam, divert, take, use and discharge water) remain unchanged, in summary, the Project involves; removal of minimum flow from Clyde Dam, reduced minimum flow from Roxburgh Dam, reduced minimum flow from Hawea Dam (under particular conditions) and alteration to operating levels at Lake Hawea, Lake Dunstan and Lake Roxburgh. Presently it is unclear if the Bill enables a fast track for consent variations, however, Contact and the Electricity Sector Environment Group (reflecting all of New Zealand's major generators) have sought amendments to the Bill to enable projects that rely on amending existing consent conditions to deliver significant national benefits.

Each condition change sought by the Project builds towards a cumulative increase in flexibility in managing the hydro resource, allowing:

- Increased peaking capacity (and therefore system security), offsetting the need for thermal generation in NZ. Cumulatively the changes will allow Contact to have a larger ability to adjust its generation capacity to the most critical times for New Zealand's needs, helping to use hydro generation to backfill the space left by thermal plant as it retires from generation. Further, as more intermittent (and less predictable) renewable generation systems (solar and wind) are built, the need to have flexible hydro generation continues to increase. In response, generators need to be able to shift as much water usage around on both an intra-day and longer term basis to fit the intermittent generation systems, ensuring this precious fuel source is utilised as efficiently as possible.
- Increased energy generation from more efficient management of the hydro resource (especially when flood/spilling conditions are indicated).
- Increased energy storage to better manage dry year risks, which will increase as baseload thermal exits the market. MBIE estimates that there will be a shortfall of 3-5TWh, which can be partially met by this Project.

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

Please write your answer here:

The Clutha Mata-Au Hydro Scheme is existing nationally significant infrastructure. The Project, once approved, can immediately deliver its benefits as the changes are operational and management related only, no new infrastructure is required. For management purposes, staging of use of the added flexibility may occur to ensure its efficient and effective implementation. The critical matter though is that the Project will enable Contact to manage the resource in a responsive manner from day one. This means that its nationally significant benefits are immediately available, including to support the growth of solar and wind generation and enable economic growth for New Zealand.

This Project would accelerate Contact's contribution to decarbonising New Zealand and ensure Contact is using its current fuel source (water) as efficiently as possible.

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

Please write your answer here:

Resource Management 1991 (RMA)

Approval is required from the Otago Regional Council to vary the existing discharge permits (under s. 127 of the RMA) held by Contact that enable the operation of the Clutha Hydro Scheme (Consent No. 2001.392.V5, 2001.393, 2001.385.V4, 2001.386.V5, 2001.393 and 2001.394.V1).

All of the changes sought will contribute to increasing the electricity generation of the CHS, provide increased security of supply and enhance operational flexibility. The Project seeks to amend the following consent conditions (and any necessary consequential amendments to the conditions of the consents held by Contact to provide for the below changes):

- Lake Hāwea Water Permit to Dam – Consent No 2001.383:

Vary Conditions 9(a), and consequential amendments to 9(b), 9(c) and 9(d), to amend the maximum operating level range from 338.00msl to 336.00msl and amend the emergency operating level from 336.0msl to 330.00msl.

- Hāwea Dam Discharge Permit – Consent No 2001.392.V5:

Vary Conditions 8(a), and consequential amendments to Conditions 8(d) and 9(a), to amend the minimum discharge from 10m³/s to 6m³/s.

Vary Condition 8(b) to amend the measurement point from Camphill Bridge (Site No 75287) to Hāwea Dam Gates.

Delete Condition 8(d) to remove the seasonal discharge limit.

Vary Condition 8(f) (and consequential amendments to Condition 9) to amend the wording to provide for permitted activities to enable a wider range of maintenance works to be undertaken.

Vary Condition 9(a) and 9(b) to amend the rate of change in discharge requirements to provide for operational efficiency.

Delete Condition 12(a) to remove the requirement to provide recreational flows of 30m³/s on the first Saturday of November, December, January and February.

- Clyde Dam Water Permit to Dam – Consent No 2001.385.V4:

Vary Condition 9(b) to amend the minimum operating level of Lake Dunstan from 193.50msl to 192.50msl.

- Clyde Dam Discharge Permit – Consent No 2001.393:

Vary Condition 8(a) to delete the minimum flow requirement of 120m³/s during the daytime.

- Roxburgh Dam Water Permit to Dam – Consent No 2001.386.V5:

Vary Condition 9(b), and consequential amendments to 9(e) and 9(f), to amend the minimum operating level of Lake Roxburgh from 130.15msl to

125.75msl.

- Roxburgh Dam Discharge Permit – Consent No 2001.394.V1:

Vary Condition 8(a) to amend the minimum discharge from 250m³/s to be measured as a generation output of 40MW.

Delete Condition 8(b) to remove the requirement to maintain a stable minimum flow regime between 300 and 400m³/s from Roxburgh Dam between September to mid-October.

Review Conditions 15-17 to better provide for the protection and enhancement of native fish species in the Clutha Mata-au and the re-balancing of priorities and resourcing associated with the on-going fisheries management in the Clutha Mata-au catchment.

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

Please write your answer here:

Otago Regional Council

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

Please write your answer here:

No resource consent applications have been lodged by Contact Energy for approvals for this Project.

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

No

Please explain your answer here:

The scheme is existing, and Contact holds all necessary approvals. No additional approval is required to enable the benefits of the Project to be delivered.

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

Please write your answer here:

There are no physical works required to complete this Project as all infrastructure is already in place. These changes could be operationalised immediately and begin providing national benefits from day one.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

Otago Regional Council

Central Otago District Council

Queenstown-Lakes District Council

Aukaha on behalf of Otago Papatipu Runaka

Te Ao Marama Inc on behalf of Southland Papatipu Runaka

Land Information New Zealand

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:

Contact has existing relationships with the above listed parties and will continue to use existing forums to discuss the Project.

Contact Energy is and will continue to engage with the community, stakeholders and mana whenua and has existing processes and forums in place to continue these conversations.

Contact Energy is committed to best practice engagement through the development of the consent application (including technical assessments) and will continue to do this irrespective of the consent processing pathway being used to assess and determine the application(s).

To enable and ensure this, a community and stakeholder engagement plan will be developed to guide how and when engagement occurs to ensure that these people and groups have a good understanding about the nature and rationale for the proposed work programme, and access to technical information and expertise to help inform their feedback on the various changes being proposed. Contact uses IAP2 principles and methods to design and implement its engagement activities with external parties.

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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:

No processes under the Public Works Act 1981 have been undertaken, or are proposed to be undertaken, in order to facilitate the Project. In this regard, the CHS is existing, and Contact Energy holds all necessary approvals to enable the operation and maintenance of the CHS, including access.

Section 4: Iwi authorities and Treaty settlements

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

Please write your answer here:

There is one relevant treaty settlement that applies to the geographical location of the Project, being the Ngāi Tahu Claims Settlement Act 1998. This Act reflects the deed of settlement in which the Crown acknowledged that Ngāi Tahu suffered grave injustices which significantly impaired Ngāi Tahu's economic, social and cultural development and which recorded the matters required to give effect to a settlement of all of Ngāi Tahu's historical claims.

A key component of the Ngāi Tahu Settlement is the cultural redress which seeks to restore the ability of Ngāi Tahu to give practical effect to its kaitiaki responsibilities. This includes recognition of Statutory Acknowledgement Areas. Of relevance to the Project, the Clutha River / Mata-au, of which the CHS is located on, is a statutory acknowledgement area. In addition, Lake Hāwea, Te Wairere/Lake Dunstan, upstream of the Clyde Dam and Kā Moana Haehae/Lake Roxburgh, upstream of the Roxburgh Dam are statutory acknowledgment areas.

Contact is committed to building a lasting relationship with Te Rūnanga o Ngāi Tahu, including Ngāi Tahu Holdings and Ka Papatipu Runaka that have a direct relationship with the Mata-au catchment. In doing so Contact acknowledges the principles that underpin that relationship including "Ki Uta Ki Tai" and "Mana o te Wai"

Contact also acknowledge the recognition of the South Island Landless Natives Act 1906 (SILNA) within the 1998 Settlement Act, and the establishment of Manuhaea Ahu Whenua land trust that administers the land holding.

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?

Yes

If yes, what are they?:

Contact acknowledge Ka Papatipu Runaka relationship with the landscape and the enshrined concept of kaitiakitaka. With this, Ka Papatipu Runakas' connection to landscape is not bound only to discrete "Wahi Tapu" but to the landscape in its entirety as "Wahi Tupuna". This is articulated in Chapter 39 of QLDC District Plan.

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:

Contact Energy has commissioned technical assessments to inform a comprehensive assessment of environmental effects of the Project. While these assessments have not been completed in full, the below describes the potential effects of the Project that have been identified. As the Clutha Mata-au Hydro Scheme is existing, there are no construction activities required for the Project, as such, the effects are limited to the proposed changes to the operation and maintenance of the CHS. These primarily relate to landscape and visual amenity effects, freshwater ecology effects, cultural values and recreation effects.

Cultural Values

As noted above, the Project is located within the tribal rohe of Kāi Tahu and the Clutha River/Mata-au, Lake Hāwea, Lake Dunstan and Lake Roxburgh are statutory acknowledgement areas. Contact acknowledges the relationship between Kāi Tahu Papatipu Runaka and these waterbodies and is committed to continuing to engage with Aukaha and Te Ao Marama Inc (on behalf of Kāi Tahu Papatipu Runaka) in regard to the Project to ensure effects of the Project on cultural values are appropriately addressed.

Landscape and Visual Amenity

The Project will have varying levels of landscape and visual amenity effects. Given the CHS is existing, no construction is required for the Project so there will be no change to the existing built environment. The potential effects of each of the proposed changes are summarised as follows:

- Clyde Dam minimum flow and lake level operating range:

The requirement of a daytime minimum flow of 120m³/s at the Clyde Dam was established to maintain the appearance of a 'big river'. Therefore, the primary potential effect that will result from the proposed condition change will be on landscape and visual amenity values. It is considered the effect of this change will be minor. It is noted the proposed change will ensure there will still be a 'natural' flow in the river, this flow will just be reduced when suitable conditions are met.

While the proposed changes to the lake level operating range may result in changes to the visual amenity of the lake, the assessments that have been commissioned by Contact will determine the extent of these effects. It is considered these effects will be able to be appropriately addressed through mitigation measures such as restoration planting and will not be significant in the context of the existing environment which is highly modified.

- Roxburgh Dam minimum flow and lake level operating range:

The primary visual effect associated with the proposed change to the Roxburgh Dam minimum flow requirement will relate to the change in the wetted width of the river when the flow is reduced. It is considered the effects associated with this change on landscape and visual amenity will not be more than minor. Mitigation measures which may include planting and habitat enhancement will be implemented by Contact to provide for any potential effects.

As above, the proposed change to the lake level operating range will result in potential effects on landscape and visual amenity values due to the changes in the lake level. The level of this effect will be minimised through the implementation of the mitigation measures in accordance with the advice from technical experts Contact has engaged to undertake the effects assessment.

- Hāwea Dam minimum flow and lake level operating range:

The proposed change to the Hāwea Dam minimum flow requirement to provide for maintenance works will not result in adverse landscape and visual amenity effects.

It is considered the proposed change to the lake level operating range of Lake Hāwea will generate considerable changes to existing landscape and visual amenity values. The change to the lake level by a maximum of an additional 6m will create a noticeable change to the natural character of the lake and the surrounding landscape. Contact is in the process of working with the technical experts it has engaged to complete a more detailed assessment on the proposed activity to determine the extent of the effects of the proposed activity on landscape and visual amenity values and this will inform any mitigation measures that Contact will implement. It is noted the maximum proposed change to the lake level (6m) will only enable an increase in electricity supply during emergencies, when electricity supply is desperately needed to 'keep the lights on', therefore, the lowest level of the lake that will result from the proposed change will only occur when the emergency conditions are triggered. This will minimise the extent of the effects of the proposed change on the landscape.

Freshwater Ecology

Contact has engaged a technical expert to complete an assessment of the Project on freshwater ecology and this assessment is underway. The anticipated potential effects of the Project are summarised as follows:

- Changes to the minimum flow at the Clyde Dam, Roxburgh Dam and Hāwea Dam

The existing discharge regime of the Clyde Dam is such that the environment is already subject to occasions of little or no flow (i.e. the discharge is permitted to be zero during night time). Therefore, the proposed change to the minimum flow at the Clyde Dam is unlikely to alter the make-up or ecological function of the biological community. Further, the physical hydrological and water quality characteristics that shape the downstream biological community will not be materially affected by the proposed change to the discharge of water from the Clyde Dam.

It is anticipated the proposed change to the Roxburgh Dam minimum flow requirement will result in a reduction in habitat for freshwater species. The increase in flow fluctuations will create a 'varial' zone that is wetted and dried as water levels rise and fall. Therefore, this zone will not sustain immobile plant and invertebrate species, however, mobile species such as fish and some invertebrate species will make some use of this zone.

The extent and scale of the severity of the effects of the proposed change are being further investigated and this will inform the mitigation measures that Contact will develop to appropriately manage the effects of the Project.

Reducing the Hāwea River flow to 3 cumecs will result in a reduction in the wetted width, leading to an increase in exposed riverbed relative to what occurs under the current minimum flow. There will also be changes to water depth and water velocity, which will vary throughout the river, depending on the physical character of the river at points along and across the channel. It is noted this will only have a temporary effect on the benthic macroinvertebrate and fish communities in the river. River macroinvertebrates are capable of quickly recolonising habitat (2-4 weeks) and fish are mobile species and will move with water as it recedes.

• Changes to the lake level operating range:

The proposed change to the operating levels at Lake Hāwea, Lake Dunstan and Lake Roxburgh will also result in changes to the habitat of freshwater species in the lake. Similar to the changes noted above, when the lake is drained to a lower level, this will result in a reduction in habitat for freshwater species. The lake fluctuations will again create a 'varial' zone that is wetted and dried as water levels rise and fall. Therefore, this zone will not sustain immobile plant and invertebrate species, however, mobile species such as fish and some invertebrate species will make some use of this zone.

As above, Contact is working with the technical experts it has engaged to determine the extent of the effects and potential loss of habitat that will result from the Project to inform the proposed management of the effects of the Project on freshwater ecology. Contact is committed to enhancing habitat for indigenous species within this catchment and will continue to further the existing work that it currently carries out in this area.

Recreation

It is considered the proposed activity will not result in more than minor adverse effects on the existing recreational values associated with the Clutha River / Mata-au. The recreational use of this section of the river that is the subject of this application includes boating, kayaking and swimming. Contact is proposing to install signage in areas that are commonly used by the public to increase awareness of the operation of the CHS and address any potential effects on the recreational use of this section of the river. Contact has also engaged an expert to determine the effects of the Project on recreation values and this will inform whether any other mitigation measures are required to maintain and enhance public safety and use of the area. Contact will continue to engage with users of the area to ensure any potential effects of the proposed change are addressed.

Summary

Overall, it is considered the adverse effects of the Project can be appropriately managed and mitigated. While the Project will result in effects on landscape and visual amenity values and freshwater ecology, it is noted the CHS is existing and already operational in this area. The proposed activity therefore does not require any construction for the Project to be implemented and will increase the efficiency of the CHS.

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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 national policy statements and national environmental standards of relevance to the Project are as follows:

- National Policy Statement for Renewable Electricity Generation ("NPS-REG"); and
- National Policy Statement for Freshwater Management ("NPS-FM").

The National Policy Statement on Indigenous Biodiversity ("NPS-IB") does not apply to the Project as clause 1.3(3) of the NPS-IB 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."

The CHS is existing, and no part of the Project requires resource consent under the National Environmental Standards for Freshwater 2020. Therefore, these regulations are not relevant to the Project.

A general assessment of each of the relevant national policy statements and national environmental standards that are relevant to the Project is summarised below.

National Policy Statement for Renewable Electricity Generation

The NPS-REG came into effect in 2011 and seeks to enable the sustainable management of renewable electricity generation.

The sole objective of the NPS-REG is:

'To recognise the national significance of renewable electricity generation by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generation from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.'

In accordance with the above objective Policy A of the NPS-REG seeks to ensure that decision-makers recognise and provide for the national significance of renewable electricity generation activities, including by maintaining or increasing electricity generation capacity and the security of electricity supply at local, regional and national levels.

Further, Policy C1 of the NPS-REG addresses the reality that renewable resources must be utilised where they are found. The policy recognises the inevitable 'environmental trade-offs' that must be incurred when achieving the national renewable electricity targets.

The policy direction of the NPS-REG reflects the need for increased renewable electricity generation from available regional resources and schemes. The Project is therefore highly supported by the NPS-REG and aligns with this policy direction. The Project will result in an increase in the supply of renewable electricity generated and therefore contribute positively to New Zealand's decarbonisation goals. The CHS is existing, and as such, the Project will increase the efficiency of the operation of this existing renewable electricity resource. No construction is required for the Project, and therefore, the potential increase in electricity generated can be realised immediately following the granting of this consent.

The Project is therefore considered to be consistent with, and supported by, the policy direction of the NPS-REG.

National Policy Statement for Freshwater Management

The NPS-FM sets out the objectives and policies that direct local authorities to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits.

Central to the NPS-FM is the concept of Te Mana o te Wai, which is defined as:

'a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.'

The objective of the NPS-FM is:

'...to ensure that natural and physical resources are managed in a way that prioritises:

- a) first, the health and well-being of water bodies and freshwater ecosystems
- b) second, the health needs of people (such as drinking water)
- c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.'

Considering the above:

- The proposed changes will ensure the appropriate controls are in place to ensure the health and wellbeing of these waterbodies is maintained.
- The Project is consistent with the second priority as electricity is a fundamental requirement for modern homes and communities, without which public wellbeing would be compromised. The Project is defined as a "lifeline utility" under Part B of Schedule 1 of the Civil Defence Emergency Management Act 2002.
- The Project will enable people and communities to provide for their social, economic and cultural wellbeing, now and in the future.

In addition, of relevance to the Project is Clause 3.31 of the NPS-FM (Large hydro-electric generation schemes) which specifically recognises the 'Big 5' hydro schemes in New Zealand and includes the CHS. NPS-FM clause 3.31(2) states that when implementing any part of the NPS-FM as it applies to a Freshwater Management Unit ("FMU") or part of a FMU affected by a Scheme, a regional council must have regard to the Scheme's national importance in respect of greenhouse gas emission targets, maintaining security of electricity supply and generation capacity, storage, and operational flexibility. The site is located in the Clutha Mata-au FMU, as identified in the Proposed Otago Regional Policy Statement 2021 ("Proposed RPS"), and the Project is consistent with and supported by the policy direction in the Proposed RPS, which provides for and recognises the national significance of the ongoing operation, maintenance and upgrading of the Clutha Hydro Scheme, including that its generation capacity, storage and operational flexibility and its contribution to climate change mitigation, is recognised and protected, and potential further development is provided for within this modified catchment.

Whilst Contact will seek to avoid and mitigate adverse effects of the Project on freshwater values to the greatest extent practicable, it is acknowledged that there may be some residual potential adverse effects on the habitat of indigenous freshwater species associated with the Project, and these will be appropriately addressed in accordance with the advice received from technical experts.

Given the above, the Project is considered to be consistent with the NPS-FM.

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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:

Under the normal statutory tests of the RMA, it is highly likely that the Project would face further information requests and be publicly notified and would involve public submissions and a hearing process. As such, Council processing timeframes for the Project are anticipated to take 18-24 months, and longer if there were any subsequent appeals to the Environment Court. Any such appeal would add further delay (around 1.5 – 3 years) to the consenting timeframe. The removal of the uncertain appeal period from the consenting process provided for by the Act creates the opportunity for the benefits of the Project to be realised more quickly. Therefore, the Project would significantly benefit from being processed under the FTAA compared to the standard process, including reducing both the time and cost associated with processing.

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

Please write your answer here:

Contact has commissioned and is advancing the preparation of the technical assessments that will support a robust resource consent application for the Project. Based on the expert advice that Contact has received on the Project, the potential adverse environmental effects of the Project will be able to be appropriately managed. The Project is not a new activity in itself and the effects of the Project are largely known. It is therefore considered the Project is

appropriate for the Fast-track process and the processing of the application will be relatively straightforward. As such, Contact considers the Project will not negatively affect the efficient operation of the Fast-track process.

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

Central government plan or strategy

Please explain your answer here:

As noted above, the Clutha Hydro Scheme is specifically listed in the NPS-FM as one of the five large hydro schemes in New Zealand. The policy direction provided seeks to ensure regard is given to the importance of the scheme's:

- Contribution to meeting New Zealand's greenhouse gas emission targets; and
- Contribution to maintaining the security of New Zealand's electricity supply; and
- Generation capacity, storage, and operational flexibility.

In addition, the Proposed RPS provides policy direction that recognises the importance of the Clutha Hydro Scheme. Objective LF-VM-O1 outlines the vision for the Clutha Mata-au FMU. This includes ensuring the management of the Clutha Mata-au FMU recognises the national significance of the ongoing operation, maintenance and upgrading of the CHS, including its generation capacity, storage and operational flexibility, and its contribution to climate change mitigation, is recognised and protected, and potential further development is provided for within this modified catchment.

Further, the Project will also contribute to New Zealand achieving its climate change targets and assist the New Zealand Government to meet:

- The emissions reduction target established by the Climate Change Response Act 2002 of reducing New Zealand's greenhouse gas emissions (except biogenic methane) to net zero by 2050;
- The targets for the energy system set out in the Emissions Reduction Plan, including the Government's target of reaching 50% of total final energy consumption from renewable sources by 2035 and the aspiration of transitioning to 100% renewable energy generation by 2030;
- The target of doubling New Zealand's renewable generation capacity as set out in the Electrify NZ policy; and
- Addressing the 'dry year problem' identified by the Ministry of Business, Innovation and Employment's 'NZ Battery Project'. This project estimates that in a fully renewable system there may be an energy deficit of 3 to 5 TWh in the worst dry years.

Will the project deliver regionally or nationally significant infrastructure?

National significant infrastructure

Please explain your answer here:

The CHS is recognised as nationally significant infrastructure in the Otago Regional Policy Statement. The CHS currently generates up to 10% of New Zealand's electricity.

Will the project:

contribute to a well-functioning urban environment

Please explain your answer here:

The provision of electricity contributes to the functioning of urban environments. As noted above the 'energy transition' will require significantly more electricity generation to both reduce emissions and bring down prices for consumers.

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The Project will generate significant economic benefits including:

- A positive impact on wholesale electricity prices - in recent years, wholesale electricity prices have risen sharply, and the future market predicts they will get higher. This is largely due to a significant increase in the cost of fossil fuels. This Project will mean that less coal and gas is burnt and will also contribute to bringing down prices.
- There will be positive direct and indirect economic effects on the employees, contractors and suppliers that will contribute to the future maintenance and operation of the CHS.
- Given the CHS is existing, no construction is required for the Project, however, this will provide increased cost savings to the end consumer faster as the Project can be realised immediately following the granting of the consent, compared to the costs and time associated with the development of new renewable electricity generation infrastructure.
- The increased electricity generation capacity that will result from the Project will lead to enhanced environmental outcomes through reducing the reliance on non-renewable electricity sources, and as such, will contribute to mitigating the effects of climate change which will have longer-term economic benefits through avoiding the associated environmental damage that is caused by climate change.
- Increased peaking capacity (and therefore system security) offsetting the need for thermal generation in NZ. Cumulatively the changes will allow Contact to have a larger ability to adjust its generation capacity to the most critical times for New Zealand's needs, helping to use hydro generation to backfill the

space left by thermal plant as it retires from generation, which will in turn generate benefits to the economy.

- This Project will increase the availability of flexible renewable electricity generation, and therefore, enable the development of more intermittent (and less predictable) renewable generation systems such as solar and wind. This is because New Zealand homes and businesses expect consistent electricity supply, so intermittent generation must be complemented with flexible generation to fill in the gaps when it is not windy or sunny. As noted in Transpower's Winter 2024 outlook paper "more flexible supply and demand-side resources are needed in the market to meet the energy and capacity challenge for a reliable and efficient electricity system that supports increased electrification and decarbonisation of the economy".

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

The commercial viability of New Zealand's primary industries is underpinned by having a reliable and efficient supply of electricity, with its long-term sustainability dependent on increasing the security and supply of electricity.

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

Yes

Please explain your answer here:

The Project will increase the efficiency of the operation of the existing Clutha Mata-Au Hydro Scheme which utilises a natural resource (water) to generate electricity.

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

Yes

Please explain your answer here:

The Project will significantly support climate change mitigation and the reduction of greenhouse gas emissions. The Project will result in an increase in the potential electricity generation capacity of the CHS, thus, increasing the supply of renewable electricity to the National Grid. The electricity generated will support the growth of solar and wind generation. This will also result in a more efficient use of the existing hydro scheme and will lead to a reduction in the reliance on thermal electricity sources. As noted above, given the CHS is existing infrastructure, the Project can be realised immediately, thus, reducing reliance on non-renewable electricity generation sources faster than would otherwise occur from the development of new renewable electricity generation activities.

This is consistent with the national policy direction, Electrify NZ, and will contribute to the New Zealand government's target of reducing New Zealand's net carbon emissions to zero by 2050.

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

Yes

Please explain your answer here:

As noted above, the Project will contribute to strengthening resilience as it will provide an increased supply of electricity to the region and the National Grid, increasing the resilience of the electricity network, which will be critical in the recovery from natural hazards (including drought).

Will the project address significant environmental issues?

Yes

Please explain your answer here:

Climate change is a significant environmental issue that New Zealand faces. The Project will contribute to reducing New Zealand's reliance on non-renewable electricity generation sources, and thus, contribute to reducing greenhouse gas emissions in New Zealand and assist in New Zealand's climate change mitigation.

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

Yes

Please explain your answer here:

Otago Regional Policy Statement

The consent variations required for the Project are only required from the Otago Regional Council, thus, the policy direction provided in the regional planning documents is most relevant to the Project.

The Proposed Otago Regional Policy Statement 2021 provides clear policy direction that supports the Clutha Hydro Scheme and increasing renewable

electricity generation in the Otago Region. The Project is consistent with the policy direction of the Proposed RPS as it will:

- Ensure the health and wellbeing of Otago's communities and economy is supported by renewable energy generation within the region that is safe, secure and resilient;
- Support the overall reduction in New Zealand's greenhouse gas emissions and achieving the national target for emissions reduction;
- Result in an increase in the generation capacity of renewable electricity generation activities in Otago, and contributes to meeting New Zealand's national target for renewable electricity generation;
- Provide for the operation, maintenance and upgrade of the existing Clutha Hydro Scheme, including the maintenance of generation output and protection of operational capacity;
- Maintain and improve the security and installed capacity of renewable electricity supply in Otago.

Further, LF-VM-O2 outlines the vision for the Clutha Mata-au FMU, of which the Clutha Hydro Scheme is located in, and includes:

'the national significance of the ongoing operation, maintenance and upgrading of the Clutha hydro-electricity generation scheme, including its generation capacity, storage and operational flexibility and its contribution to climate change mitigation, is recognised and protected, and potential further development is provided for within this modified catchment.'

The above policy direction provides specific provision for the ongoing operation and upgrading of the Clutha Hydro Scheme, including its generation capacity. The Project is therefore consistent with the Proposed RPS.

Local Planning Documents

While resource consent is only required from the Regional Council for the proposed activity, for completeness, consideration is given to the local planning documents below.

Vincent Spatial Plan (Alexandra, Clyde and Omākau/Ophir)

The Vincent Spatial Plan produced by the Central Otago District Council provides the direction for the spatial planning of the Alexandra and Clyde area. The spatial planning principles of the Spatial Plan recognise the past and present history of the area, including the development of the hydro scheme, which has contributed to the spatial development of the area. Given this infrastructure is existing, and thus, has been considered in the spatial planning of the area, it is considered the Project is consistent with the spatial planning strategy.

Central Otago District Plan

The CHS is generally provided for in the Central Otago District Plan ("District Plan") as one of the Scheduled Activities Under Section 19.3.5 'Power Generation and Associated Facilities'. The District Plan specifies that scheduled power generation facilities and associated activities falling within the specified definitions of operation, maintenance, refurbishment, and enhancement of those power generation activities can be carried out as permitted activities. This shows the Project is consistent with and supported by the District Plan.

Anything else?

Please write your answer here:

Contact would like to emphasise that the Project would significantly benefit from the FTAA. The processing of this application under the FTAA would significantly reduce the processing timeframes compared to the standard process under the RMA. Given no construction is required for this Project, the Project can commence immediately upon the granting of this consent which will consequently result in an increase in the potential electricity that can be generated from the Clutha Hydro Scheme, which will contribute to increasing the security of electricity supply, as well as reducing reliance on non-renewable electricity sources without delay. In utilising the FTAA Contact would continue to engage with mana whenua, stakeholders and the community and is committed to delivering a robust application supported by technical experts and a set of mitigations to appropriately address adverse environmental effects.

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:

As discussed in the sections above, the Project will positively contribute to climate change mitigation in New Zealand through increasing the potential electricity generation of the CHS.

The CHS is existing, and therefore, the Project will not result in any increased natural hazard risk to what is already existing (i.e. seismic events). As such, the Project is not subject to any risks associated with climate change or natural hazards.

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:

Contact has been a major operator of large power stations since 1996. Contact has an extensive portfolio of electricity generation assets and has a proven track record of environmental compliance in relation to Contact's operation of these sites.

Contact has a strong commitment to the environment and robust processes to ensure compliance with the resource consents it holds. Contact has 11 generation sites located throughout New Zealand. Contact holds approximately 120 resource consents associated with the construction, operation and maintenance of these generation sites. These consents are comprised of 3,500 conditions. Contact has reliable and regularly reviewed and audited systems in place to ensure adherence to these conditions. This includes a regular environmental monitoring programme, effective site management and consultation with key stakeholders.

Since the formation of Contact in 1996 there are only three instances where compliance and/or enforcement actions have been taken against Contact by a local authority under the RMA. All of these have been remedied by Contact.

1. Contact has extensive environmental offset and restoration conditions associated with its Ohaaki Geothermal Power Station, including in relation to wetland areas. In April 2021 it received an abatement notice from Waikato Regional Council in relation to aerial (helicopter) boom spraying of pest plants and weeds in the Torepatutahi Wetland in February 2020. The spraying was conducted in accordance with Contact's consents and permitted activity guidelines, however, it also resulted in kill of non-target species. The abatement notice directed Contact to be more selective in conducting pest control methods. Contact has undertaken a full review of the ecological restoration programme in communication with mana whenua and stakeholders and prepared an Annual Work Plan to inform interested parties and guide activities in and around the wetland.

2. In February 2019, a geothermal reinjection well on Contact's Wairākei geothermal steamfield over-pressurised, causing geothermal water to be discharged into a nearby soakage pond not intended to store such volumes. Consequently, the pond gave way, causing soil and geothermal water to flow into the nearby Waipuwera Stream. Contact was prosecuted and participated in an a kanohi restorative justice process with the affected hapū of Ngāti Tūwharetoa, culminating in a comprehensive cultural impact assessment, formal apology and full suite of long-term mitigations agreed with tangata whenua and the Court. An important outcome was the development of a much stronger and deeper understanding by Contact of Ngāti Tūwharetoa and their relationship to the whenua and awa, and their role as kaitiaki and mana whenua.

3. In July 2022, Otago Regional Council (ORC) issued Contact with an abatement notice directing it to submit to ORC a revised Landscape and Visual Amenity Plan ("LVAMP") for the Kawarau Arm of Lake Dunstan. The LVAMP manages the landscape and visual amenity effects associated with the on-going operation of the Clyde Dam as they occur in the Kawarau Arm (near Cromwell). The condition requires Contact to reassess the LVAMP every five years. The draft of the 2019 to 2024 reassessment was forwarded to the ORC and Central Otago District Council for consultation and mistakenly approved. A further draft of the reassessed LVAMP was submitted in June 2022, however, ORC considered that the new LVAMP did not appropriately cover key matters such as plant pest management and driftwood accumulation and requested further assessment. Contact worked proactively with the Councils and stakeholders to prepare a new LVAMP. This was submitted to ORC for approval, and subsequently the abatement notice was uplifted in March 2023.

Given the extent of Contact's electricity generation assets, it is considered that Contact has a strong track record of environmental compliance associated with the construction, operation and maintenance of these facilities. Contact will ensure it continues to implement best practice management and compliance to adhere to its consent conditions and has the appropriate strategies in place to do so.

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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:

John Clarke

Important notes