Response ID ANON-URZ4-5FRE-7

Submitted to Fast-track approval applications
Submitted on 2024-05-02 18:38:53

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name:
Tararua Wind Power Limited (a wholly owned subsidiary of Mercury Wind Limited, which itself is a wholly owned subsidiary of Mercury NZ Limited)

2 Contact person

Contact person name:
Ryan Piddington

3 What is your job title

Job title:
Strategic Consents 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:

Private Bag 12023, Tauranga 3143

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

Yes

Organisation:
Mercury NZ Limited

Contact person:
Howard Thomas

Phone number:
s 9(2)(a)

Email address:
s 9(2)(a)

Job title:
General Counsel

Please enter your service address:

The Mercury Building, 33 Broadway, Newmarket, Auckland

Section 1: Project location

Site address or location

Add the address or describe the location:

The Mahinerangi Wind Farm is located approximately 50 km west of Dunedin, and approximately 5 km north of Lake Mahinerangi, in the Otago Region.

The wind farm is located off Eldorado Track, which connects to Mahinerangi Road.

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

Yes

upload file:
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Who are the registered legal land owner(s)?

Please write your answer here:

Manawa Energy Limited

Landcorp Farming Limited

Beattie Family

Hall Family

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:

Mercury NZ Limited holds a mix of option agreements for development, easements and lease agreements with all the landowners listed above that give permissions to construct, own and operate the wind farm and associated infrastructure.

Section 2: Project details

What is the project name?

Please write your answer here:
Mahinerangi Wind Farm

What is the project summary?

Please write your answer here:

The Mahinerangi Wind Farm will have a generation capacity of up to 164 MW and will connect into the 110kV Halfway Bush-Roxburgh transmission lines via a new approximately 8 km 110 kV transmission line.

Due to outdated consent conditions, lapsed regional council consents and changes to the permitted activity rules in the Otago Region, the Mahinerangi Wind Farm requires variations to existing resource consents, and new resource consents, to enable this nationally significant development to be fully developed.

What are the project details?

Please write your answer here:

The primary purpose of the Mahinerangi Wind Farm is to deliver reliable low carbon renewable electricity for Aotearoa New Zealand. The Mahinerangi Wind Farm project is for (up to) 44 additional wind turbines with a maximum installed capacity of those additional turbines being 164MW.

The activity to which this application relates:

The installation of up to 44 turbines for the generation of renewable electricity;

The construction of an electricity substation / switchyard compound within the project site;

The establishment of a permanent operations / maintenance facility within the project site;

The installation of new underground 33kV electrical and fiber optic cable network between the turbines;

The establishment of an internal access road network and earthworks;

The widening of existing local roads approaching the site from the State Highway;

The construction of an 8km 110kV transmission line from the wind farm site to Transpower's Halfway Bush-Roxburgh 110kV line; and

The connection infrastructure where the new 110kV line connects into the 110kV Halfway Bush-Roxburgh line.

Resource consent for the Mahinerangi Wind Farm was granted by the Environment Court in 2008 for a maximum capacity of 200 MW and up to 100 turbines. Stage one of the project was constructed in 2011, consisting of 12 turbines and an installed capacity of 36 MW.

In order to enable the construction of the remaining 164 MW the following consents are required:

Variations to the existing land use consent from the Clutha District Council to address outdated conditions and enable the adoption of new turbine technology;

A new resource consent from the Clutha District Council for the construction of a 110 kV transmission line. (Note that this activity was permitted at the time the original consent was granted, however the rules in the Clutha District Plan have since changed and a consent is now required to construct this line); New resource consents from the Otago Regional Council for construction activities (earthworks, stormwater discharges etc) as the existing consents for the wind farm from the Otago Regional Council have expired; and

New resource consents from the Otago Regional Council related to construction activities (earthworks, stormwater discharges) for the 110kV transmission line.

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

Please write your answer here:

No further staging of the project is proposed. Stage 1 of Mahinerangi Wind Farm utilised existing capacity in the local 33 kV transmission network and there is no additional capacity in this network. This project needs to connect into a new 110 kV line and would need the full project scale to enable the investment in the transmission line infrastructure.

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

Please write your answer here:

The construction, operation and maintenance of the Mahinerangi Wind Farm project will require consents and authorisations under the Resource Management Act 1991 and Wildlife Act 1953 respectively, and will also require authorisations under the Heritage New Zealand Pouhere Taonga Act 2014.

With respect to the Resource Management Act 1991, the project will require the following resource consents pursuant to the identified sections of the Act:

Variations to the existing land use consent under s9 of the Act from the Clutha District Council to address outdated conditions and enable the adoption of new turbine technology;

A new resource consent under s9 of the Act from the Clutha District Council for the construction of a 110 kV transmission line (noting, as set out above, that this activity was permitted at the time the original consent was granted, however the rules in the Clutha District Plan have since changed and a consent is now required to construct this line);

New resource consents under s9, 13, 14 and 15 of the Act from the Otago Regional Council for construction activities (earthworks, stormwater discharges etc), as the existing consents for the wind farm from the Otago Regional Council have expired;

New resource consents under s9, 14 and 15 of the Act from the Otago Regional Council related to construction activities (earthworks, stormwater discharges) for the 110kV transmission line.

The Mahinerangi Wind Farm project will also require wildlife permits pursuant to the Wildlife Act 1953 in relation to the monitoring and management of avifauna mortalities on the project site, as well as the potential relocation of lizards that may be present on the project site.

The project will also likely require an archaeological authority under the Heritage New Zealand Pouhere Taonga Act in relation to the potential discovery of previously unidentified heritage sites within the project site.

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

Please write your answer here:

Otago Regional Council

Clutha District Council

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

Please write your answer here:

Resource consents issued by the Clutha District Council and Otago Regional Council were approved by the Environment Court in 2008. These consents were given effect to with the construction of Stage 1 of the Mahinerangi Wind Farm.

Whilst the land use consent from the Clutha District Council does not expire, as has been given effect to, the resource consents from the Otago Regional Council for various construction activities have expired – such that new resource consents will be required to enable the completion of construction of the Mahinerangi Wind Farm.

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

No

Please explain your answer here:

No, no approvals other than those listed above are required for the project.

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

Please write your answer here:

Assuming consents are granted for the project by July 2025, the indicative timeline for the project is as follows:

Detailed Design - 2025;

Procurement - 2026;

Funding/Business Case Approval - 2026;

Commence preparatory construction works after funding - 2026;

First generation - 2027;

Length of entire site works to completion - 24 months (complete 2028.)

Overall, construction of the project could commence 16 months post receipt of fast-track approval.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

Local Authorities:

Otago Regional Council

Dunedin City Council

Environment Southland

Iwi Authorities:

Te Rūnanga o Ngāi Tahu

Te Runanaga o Otakou

Treaty Settlement Entities:

Te Rūnanga o Ngāi Tahu

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:

Consultation with all of these groups in relation to the full project of 200 MW was undertaken prior to and during the consenting phase, and prior to Stage 1 of the Mahinerangi Wind Farm being constructed. As a result of that consultation, relationships with all of these groups have been established. Mercury NZ Limited has continued to foster relationships whilst operating Stage 1 of the wind farm.

We have also commenced consultation with Te Runanaga o Otakou via Aukaha (the consultancy arm of Te Runanga o Otakou) in relation to Stage 2 of the project. Consultation with these groups is expected to continue during the coming months as we move through the detailed design, procurement and business case phases.

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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 Mahinerangi Wind Farm. Mercury NZ Limited already holds all property approvals necessary to enable access to the site for construction and operation of the wind farm.

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 – including cultural, financial and commercial redress.

Deeds to amend the Settlement Deed have subsequently been signed in 1998 and 1999.

There are no statutory acknowledgement areas included in the wider catchment of the Mahinerangi Wind Farm.

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:

N/A – as there are no groups with protected customary rights in and around the project site.

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:

BACKGROUND

The Mahinerangi Wind Farm is located approximately 50 km directly west, or 70 km by road, from Dunedin. It is located approximately 5 km to the north of Lake Mahinerangi. Resource consents to construct, operate and maintain the Mahinerangi Wind Farm were approved by the Environment Court in 2008. The consent authorised the establishment of up to 100 turbines. Stage 1 was constructed and commissioned in 2011. Stage 1 of the wind farm consists of 12 Vestas V90 3 MW turbines, with a maximum capacity of 36 MW and an annual output of approximately 245 GWh.

The decision to build a smaller stage 1 came in the face of flattening electricity demand and it was one of the last wind farms built before the recent uplift in renewable electricity generation investment. Stage 1 was sized to utilise the existing available capacity in the lines built for the nearby hydro scheme.

There is no additional available capacity in the existing 33kV network, therefore the remaining stage of the project would be built in its entirety to provide the economies of scale required to invest in the construction of a new 110kV transmission line.

In order to be able to develop the remaining authorised 164 MW, changes to the existing land use consent from the Clutha District Council are required to allow larger and more efficient turbines to be utilised. In addition, new resource consents from the Otago Regional Council are required for the project's construction and new resource consents are required for the transmission line from the Clutha District Council and Otago Regional Council.

EXISTING ENVIRONMENT

The Mahinerangi Wind Farm is located to the west of the Taieri Plains. The broader area is characterised by wide open spaces with evidence of multiple erosional phases which have created a topography consisting of ridges, valleys and gullies. Stage 1 has been operational since 2011.

The site is located within a rural area approximately 50 km west of Dunedin. It is located to the north of Lake Mahinerangi and adjacent to the Deep Stream Hydro-Electricity Scheme. To the west and north of the site, at a higher elevation, are the Lammerlaw and Lammermoor Ranges, and also the Te Papanui Conservation Park.

The Mahinerangi Wind Farm site covers an area of 1,723 ha, and is at an elevation of around 600 m to 730 m. The majority of the land within the development envelope, is grazed by cattle and sheep and has therefore been converted to exotic pastoral farmland.

The Mahinerangi Wind Farm wind resource is prevailing westerlies with wind speeds around 8.5 m/s to 9.5 m/s. Rainfall can vary from 500 to 1,200 mm per annum, and snow can blanket the area for many days at a time.

EFFECTS OF THE PROJECT

POSTIVE EFFECTS

The construction and operation of the Mahinerangi Wind Farm Project will generate a number of positive effects for the local and regional community, as well as New Zealand. These include:

Providing new and geographically diverse renewable generation to New Zealand;

Continuing the diversification and increase of New Zealand's electricity supply. In this regard, wind generation currently only contributes 8.4% to the national supply in an average year;

Increasing wind generation in New Zealand by 13%;

Generating enough electricity to power over 60,000 homes or 230,000 electric vehicles each year;

Displacing over 400,000 tonnes of CO2e per year if the equivalent power was generated from coal and over 200,000 tonnes of CO2e per year if generated from gas;

The employment of approximately 200 FTE workers during the peak of construction;

Increasing the proportion of electricity generated in New Zealand from renewable energy sources, supporting our country's decarbonisation and climate policy ambitions;

Once the wind farm is commissioned, a community fund will be established to support local initiatives and clubs in the regions.

VISUAL AND LANDSCAPE

The existing land use consent specifies the following key parameters:

A maximum installed generation capacity of 200MW;

That the number of turbines shall not exceed 100;

A maximum tip height not exceeding 145 m.

The proposed variation to the consent would seek to:

Maintain the maximum installed capacity of 200MW;

Reduce the total number of turbines to not exceed 56;

Increase the maximum tip height to 200m;

Modify the approved turbine areas to allow the larger turbines to fit.

It is considered that while the difference in height of the larger wind turbines will be perceptible compared to the consented height from some locations, the effect of the change will have minor adverse effects on landscape values - including such aspects as visual dominance, scale relationship to the landscape, aesthetic coherence, and rural character and amenity values.

In addition, there will be positive effects from 44% fewer wind turbines than provided for under the existing resource consent – the result of which is a more spacious and less cluttered appearance of the wind farm. Modifying the consent to allow for new technology allows the same amount of generation to be generated from nearly half the number of turbines, allowing for a more efficient use of the site.

The 110kV transmission line was considered in the original Visual and Landscape Assessment (2006) prepared by Boffa Miskell. It was found that given the nature and scale of the transmission lines in comparison with the turbines, the visual effects will be minor from most viewpoints beyond the site.

ECOLOGICAL EFFECTS

TERRESTRIAL VEGETATION & HABITATS

Kingett Mitchell Ltd undertook an ecological assessment at the time of the original consent. They found that most of the proposed wind farm envelope comprises pastoral farmland on easy, rolling terrain and covers an area of 1723 ha, with 981 ha (57%) in pasture and 742 ha (43%) in snow tussock (18% high quality and 25.1% low quality snow tussock respectively). Natural features within the proposed wind farm site envelope are characteristic of the Waipori Ecological District, and the Environment Court has previously confirmed the area as appropriate for development. The construction area was carefully shaped to minimise ecological impacts.

The individual development areas for each turbine will be increased, however, the number of turbines will be reduced by 44% decreasing the overall footprint of the project. The variation is unlikely to result in more than minor adverse impacts, and will potentially result in an improved ecological outcome.

HERPETOFAUNA

The proposed changes to the consent will not increase the impacts to lizards already authorised by the existing resource consent.

AVIFAUNA

Post construction monitoring was undertaken after the construction of stage 1 and no mortality to any avifaunal species of conservation interest was detected, despite some of those species having been observed within the stage 1 site area.

In regards to a variation to the tip height of the Mahinerangi Wind Farm, the only species of concern is the NZ Falcon which was observed in the project area.

Currently, in New Zealand, post construction collision studies have been carried out at four wind farms (including stage 1 of the Mahinerangi Wind Farm), with a fifth underway. Falcon were observed at two and were likely present in low numbers or rarely, at several of the others. No mortalities of falcon have been recorded to date during post construction studies at these sites. Internationally, it is generally recognised that larger, more widely spaced modern turbines have a lower collision risk for most species of avifauna than older turbines which are smaller, more closely spaced, and which have blades with higher rotation speeds.

In light of the above, it is considered that the proposed changes will not be detrimental to existing native bird populations on, and around, the project site.

WETLANDS

Wetlands were identified within the site area in the original Kingett Mitchell Ltd assessment. A recent updated wetland survey by SLR has confirmed the presence of wetlands and has provide updated mapping of the extents. The wetlands are found within the gullies within the site. There are no regionally significant wetlands identified under the Otago Regional Plan: Water. Potential risks from the project are significantly reduced as the majority of the construction activity will be undertaken away from water courses (i.e., along ridgelines and side spurs), and where fill disposal areas are located at the head of gullies.

Wetlands within the site will be avoided as far as practicable (although it is also recognised that the technical design of the wind farm means that it may not be practicable to avoid all such effects and the National Environmental Standard – Freshwater regulates specified infrastructure activity within and near wetlands). Effects on wetlands effects will be further managed through an effects management hierarchy including the implementation of stormwater, erosion and sediment control measures. In addition, potential adverse effects will be remedied by regressing exposed areas as soon as

possible following construction work.

Appropriate culvert design and construction methodologies will be employed to ensure no impediments to fish passage are created by the proposal; and potential sediment runoff associated with the proposed construction works will be appropriately managed by way of an Erosion and Sediment Control Plan which will include measures such as minimising soil disturbance and diverting clean water. Such measures will also avoid or mitigate effects on any aquatic values within the MWF.

SHADOW FLICKER

No change to any of the shadow flicker requirements under the current land use consent is proposed. Shadow flicker is not considered an issue at this site.

It is also noted that the existing Stage 1 of the wind farm has not been subject to any shadow flicker or blade glint complaints since it was commissioned.

CONSTRUCTION

All construction activities associated with the establishment of the Mahinerangi Wind Farm Project will be undertaken in accordance with an Environmental Construction Management Plan ("ECMP"). The intent of the ECMP will be to ensure that all construction related activities are undertaken in a manner that ensures that potential adverse effects are avoided, remedied or mitigated, and that sediment control is undertaken in accordance with the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region 2016 (GD05).

The construction of turbine hard stand areas will require the importing of structural concrete, reinforcing steel and aggregates to the site. Aggregates will be delivered to the site and stockpiled within the concrete batching plant confines, which will incorporate measures to contain dust and sediment laden run-off. There is some potential for aggregate to be sourced on site, predominantly for use in the construction of access roads.

Access to each turbine is necessary and new internal roads will be required. During construction, these tracks must be capable of accommodating 'oversized' vehicles and associated loads.

Fill from earthworks will be disposed of onsite in areas that are:

Outside ecological protection areas and sensitive environment areas identified

Typically located in small depressions near ridgelines and / or on broad ridgeline features with limited surface water catchment above;

Situated in an area of stable ground; and

Located near an area of surplus cut materials.

The key measures for minimising the potential environmental effects or working in or near watercourses include installing temporary diversion measures and ensuring machinery is not stored in or near watercourses. The necessary design and construction controls for structures within watercourses to ensure that appropriate fish passage, erosion control, and pest management occurs will be employed whilst ensuring that all instream works are kept to a minimum to avoid as far as practicable any discolouration of the waterways.

A temporary concrete batching plant will also be established within the project boundaries and situated to minimise the potential adverse impacts for the nearest neighbours. A standby batching plant will also be available as a backup. It is envisaged these batching plants will be located next to each other. This will provide a concrete supply source close to the construction work.

The concrete batching plant will receive raw materials from offsite. Raw materials will be stored in separate bays or storage tanks in relation to the preparation of concrete on site.

NOISE EFFECTS

No changes to noise requirements under the current land use consent is proposed. Noise is not considered an issue at this site.

CULTURAL EFFECTS

Engagement with Aukaha (the consultancy arm for Te Runanga o Otakou) is ongoing and Mercury will continue to engage to understand the potential cultural effects of modifications to the consent.

SUMMARY

The Mahinerangi Wind Farm is a nationally significant renewable energy project. The project was consented back in 2008 and a stage 1 was built in 2011. In the years since, demand growth has been flat for a long period of time and the Regional Council consents have expired, the permitted activity rules have changed and the land use consent has conditions that are out of date and/or do not allow for new technology to be used on the site.

The site has previously been found suitable for a wind farm and requires a suite of new and modified consents to enable the development of 164MW of renewable energy.

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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:

A general assessment of the activities associated with the construction, operation and maintenance of the Mahinerangi Wind Farm has been completed against the following National Policy Statements:

National Policy Statement for Renewable Electricity Generation ("NPSREG");

National Policy Statement for Freshwater Management ("NPSFM");

Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ("NESF");

National Policy Statement for Highly Productive Land 2022 ("NPSHPL"). and

The National Policy Statement on Indigenous Biodiversity does not apply 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."

National Policy Statement for Renewable Electricity Generation

The NPSREG came into effect on 13 May 2011. It seeks to enable the sustainable management of renewable energy generation under the RMA.

The sole objective of the NPSREG seeks 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.

Policies A, B and C1 of the NPSREG are considered most relevant to the Mahinerangi Stage 2 Wind Farm as they seek to ensure decision makers:

Recognise the benefits of renewable electricity generation activities;

Acknowledge the practical implications of achieving an increase in the proportion of electricity generated from renewable sources; and

Acknowledge the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities.

The Mahinerangi Wind Farm will enable the development of additional renewable electricity generation capacity – noting the former Government had set an aspirational goal of 100% renewable electricity by 2030 compared to the strategic target in the NPS-REG that 90% of electricity generated in New Zealand be derived from renewable energy sources by 2025 (based on delivered electricity in an average hydrological year). The construction of Mahinerangi Wind Farm will efficiently contribute to this goal and the decarbonisation of the New Zealand economy.

The development of the Mahinerangi Wind Farm is also considered to be consistent with clause (c) of Policy B, which notes that meeting or exceeding the Government's strategic target for the generation of electricity from renewable resources will require the "significant development" of renewable electricity generation activities.

Policy C1 of the NPSREG recognises the practical implications and locational constraints associated with the development of renewable electricity generation activities. There are various practical constraints regarding how the wind farm can be developed. Notwithstanding these constraints, Mercury has endeavoured to design the Mahinerangi Wind Farm in a manner that appropriately manages the potential adverse effects on the environment.

In light of the assessment above, it is concluded that the construction and operation of the Mahinerangi Wind Farm will be consistent with the stated objective and policy directives of the NPSREG.

National Policy Statement on Freshwater Management

The NPS-FM came into effect on 3 September 2020 and was last amended in February 2023. It replaced the National Policy Statement for Freshwater Management 2014 (amended 2017) that preceded it, and every local authority is required to give effect to the NPS-FM as soon as reasonably practicable.

The fundamental concept of the NPS-FM is Te Mana o te Wai, a concept that refers to the importance of water and recognises that protecting the health of freshwater will protect the health and wellbeing of the wider environment. In effect, the NPS-FM seeks to adopt a water-centric approach to freshwater management.

The sole objective of the NPS-FM follows this concept and seeks to ensure that natural and physical resources are managed in a way that:

Firstly, prioritises the health and wellbeing of water bodies and freshwater ecosystems;

Then, the health and needs of people; and

Then, the ability of people and communities to provide for their social, economic, and cultural wellbeing.

Recently announced reforms to the RMA are intended to make it clear that, while the NPS-FM is being reviewed and replaced, resource consent applicants no longer need to demonstrate their proposed activities follow the Te Mana o te Wai hierarchy of obligations. In the context of the proposal, currently the NPS-FM is relevant to the potential impacts of earthworks within low value natural inland wetlands on site. The key policies and provisions of the NPS-FM of potential relevance to the proposal relate to:

The management of freshwater in a way that gives effect to Te Mana o te Wai,

The health and wellbeing of water bodies and freshwater ecosystems is maintained and / or improved;

No further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted;

The maintenance and / or improvement of the passage of fish; and

Enabling communities to provide for their social, economic, and cultural wellbeing in a way that is consistent with the NPS-FM.

With respect to these matters the following points are noted:

Mercury will engage with the relevant mana whenua groups in relation to this matter as part of our ongoing engagement.

The proposed location for the construction works will avoid areas of significant ecological value and utilised existing roads as much as practicable. Whilst there are natural wetlands within the site, these have been avoided as far as practicable (although it is also recognised that the technical design of the wind farm (functional and operational need) means that it may not be practicable to avoid all such effects);

Wetland effects will be further minimised through the implementation of stormwater, erosion and sediment control measures. In addition, potential adverse effects will be remedied by regressing exposed areas as soon as possible following construction work;

Appropriate culvert design and construction methodologies will be employed to ensure no impediments to fish passage are created by the proposal; and

Potential sediment runoff associated with the proposed construction works will be appropriately managed by way of an Erosion and Sediment Control Plan which will include measures such as minimising soil disturbance and diverting clean water.

Overall, it is considered that the proposal will be consistent with the objectives and policies of the NPS-FM.

National Environmental Standards for Freshwater

The NESF regulates activities that pose risks to the health of freshwater and freshwater ecosystems. Of particular relevance to the Mahinerangi Wind Farm are the rules in the NESF relating to activities that may affect natural wetlands and streams. Resource consent will be required for activities associated with the wind farm construction, including earthworks, within, or within 100 m of natural wetlands and the establishment of culverts.

Mercury NZ Limited will apply the effects management hierarchy under the NPSFM to the construction activities requiring consent under the NESF to ensure that potential adverse effects on wetlands and streams within the project site are avoided as far as practicable (which will primarily be via the configuration of the wind farm layout and mitigation planting measures in and around other wetlands and streams on the site). These measures will ensure that any adverse effects are no more than minor.

National Policy Statement for Highly Productive Land 2022

The NPS-HPL came into effect on 17 October 2022, with the overall purpose being to improve the way highly-productive land is managed to ensure it is recognised and protected from inappropriate use and development, so that it can be utilised for land-based primary production purposes.

While the Project Site is within a rural zone, it is not classified within LUC 1, 2 or 3 categories. Rather it is predominately classified as Class 6 (Non-Arable: productive hill country) with small areas of Class 4 (Severe Limitations for Arable or Cultivation). As such, the Project is not within an area of Highly Productive Land and is not considered relevant to assess the NPS HPL further.

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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:

Consideration of the Mahinerangi Wind Farm application under the fast-track provisions will likely result in a more timely and cost-efficient way to confirm the authorisations necessary for the proposed wind farm for the following key reasons:

Multi-agency authorisations

Authorisations are required under:

Resource Management Act (resource consents);

Wildlife Act (wildlife authorisations); and

Heritage New Zealand Pouhere Taonga Act 2014 (archaeological authority).

Consideration of the requirements of these various authorisations through one process reduces the risk of delays (applications being considered sequentially), increases certainty and provides greater visibility of process and clarity of outcomes.

Cross-jurisdictional considerations

Mahinerangi Wind Farm is located within the jurisdiction of:

Otago Regional Council; and

Clutha District Council.

Complexity

The project was consented in 2008, with stage 1 of the project giving effect to the Clutha District Council land consents for the wind farm. Stage 1 utilised 33kV connection into the existing network. To enable stage 2 a new 110kV transmission line is required to be constructed.

The current District Council consent for the wind farm is outdated and not enabling of new wind technology and conditions of consent need to be varied. The Fast-track Approvals Bill provides for an application to change or cancel a condition of consent (clause 3(a) to Schedule 4). The changes to the consent conditions are material to the project proceeding. The project also requires new regional consents given the expiry of the original resource consents to facilitate its construction and new consents under the NES-Freshwater.

All of the above makes the Mahinerangi Wind Farm a complex consenting exercise and an ideal candidate to go through the fast track process so a single panel can consider all of the above.

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

Please write your answer here:

Tararua Wind Power Limited is a New Zealand Limited Company that is wholly owned by Mercury Wind Limited and is ultimately wholly owned by Mercury NZ Limited.

Mercury is one of New Zealand's largest electricity generators and retailers, providing energy and other services to homes, businesses and industrial consumers throughout New Zealand. Over the last 20 years, Mercury has invested significantly in geothermal power development, and now operates five geothermal power stations in the Taupō Volcanic Zone. In relation to wind generation, Mercury is the largest owner and operator of wind farms across New Zealand – which includes the Waipipi, Turitea, Tararua, Mahinerangi and Kaiwera Downs Wind Farms.

Mercury has an experienced team with years of wind farm development and consenting experience. Mercury builds assets to own and operate for the long term and as such sees its role as a long term member of the community. Applications from Mercury through the fast track process will be to a high standard, and presented with professionalism and a high level of experience, ensuring the efficient operation of the fast-track process.

In Mercury's experience, consenting renewable electricity generation is a costly, lengthy, and challenging process, and the fast-track process will significantly reduce the consenting timeframe by making material changes to the approval processes.

Obtaining those approvals under the traditional approvals process without the benefit of a 'one-stop shop' approval process would add considerable uncertainty, delay, and additional complexity. Mahinerangi Wind Farm will therefore benefit considerably through the fast-track process.

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

Other

Please explain your answer here:

Not specifically, however accelerated electrification through renewable electricity generation represents New Zealand's best opportunity to meet our international and statutory climate change commitments, including as now set under the Climate Change Response Act 2002.

He Pou a Rangi (the Climate Change Commission) has recommended an economy wide energy target that 50% of all energy consumed, is to come from renewable sources by 2035.

The Commission's demonstration pathway for actions identified as being critical for meeting the 2050 targets, assumes 3.8TWh of currently committed generation projects being built between 2020 and 2024, followed by 1TWh per year of additional wind, solar and geothermal generation from the late 2020s. That, the Commission notes, represents two very large wind farms being commissioned each and every year.

The Commission recommends enabling a "fast paced and sustained build of low emission electricity generation and infrastructure by ensuring resource management processes, other national and local government instruments, and settings for transmission and distribution investment decisions, are aligned to the required pace for build".

To achieve accelerated electrification at the necessary scale and pace, Transpower has estimated that New Zealand will need 20 new grid connected generation projects by 2035, and 30 by 2050. In other words, it would be necessary to build generation greater than New Zealand's largest windfarm every year from the late 2020's to supply an additional 1TWh to meet the 2050 electrification target.

Renewable energy is central to any reduction plan because, unlike other decarbonisation options, the technology is mature, cost-effective and has broad social acceptance, with well understood and mitigable environmental impacts.

Mahinerangi Wind Farm has been listed as part of New Zealand's generation pipeline of consented projects in various government agency plans and documents. As is common with older wind farm consents, the technology has evolved since the consent was granted and modifications are required to enable it to be brought to market and contribute to New Zealand renewable electricity supply.

Will the project deliver regionally or nationally significant infrastructure?

National significant infrastructure

Please explain your answer here:

By generating an estimated 460 GWh of renewable electricity per year, enough to power around 60,000 average New Zealand households, the Mahinerangi Wind Farm will be recognised as significant infrastructure both nationally and regionally.

Will the project:

Please explain your answer here:

To the extent that the site will provide additional reliable and renewable electricity to the National Grid, it will add to the security of electricity supply to New Zealand's urban areas, and in turn, contribute to the overall function and resilience of these areas.

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The New Zealand electricity system needs new generation plant to cater for growth, replace old plant, and reduce use of plant with higher cost characteristics. The Mahinerangi Wind Farm fits the current strategic priorities for renewable plant which reduce reliance on thermal plant that face rising costs for fuel and greenhouse gas emissions. It provides a range of benefits across the electricity system for Mercury and consumers.

The Mahinerangi Wind Farm is a $500 million capital infrastructure project with $200 million going into the New Zealand economy. The construction and operation of the Mahinerangi Wind Farm Project will generate a number of positive economic benefits for the local and regional community, as well as New Zealand. These include:

Providing new and geographically diverse renewable generation to New Zealand;

Continuing the diversification and increase of New Zealand's electricity supply. In this regard, wind generation currently only contributes 8.4% to the national supply in an average year;

Increasing wind generation in New Zealand by 13%

Generating enough electricity to power over 60,000 homes or 230,000 electric vehicles each year;

Displacing over 400,000 tonnes of CO2e per year if the equivalent power was generated from coal and over 200,000 tonnes of CO2e per year if generated from gas;

The employment of approximately 200 FTE workers during peak of construction;

Increasing the proportion of electricity generated in New Zealand from renewable energy sources, supporting our country's decarbonisation and climate policy ambitions;

Enhanced profitability for those connected with the production of electricity, principally Mercury as plant operator but also landowners who receive rental

from the occupation of the windfarm. These are private benefits for the parties concerned, and can be presumed to be beneficial as they are freely entered into.

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

The project will support primary industries via the provision of the additional income stream for those landowners whose properties the turbines will be located on. In effect, the wind farm will co-exist with existing farming on the site.

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

Yes

Please explain your answer here:

The Mahinerangi Wind Farm will utilise the local wind resource to generate electricity. The project will generate up to 460 GWh of energy sufficient to provide electricity for up to 60,000 standard households.

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

Yes

Please explain your answer here:

By generating an estimated 460 GWh of renewable electricity per year, the Mahinerangi Wind Farm will act to displace thermal generation and avoid associated greenhouse gas emissions. If that generation was from coal, the equivalent emissions would be in excess of 400,000 tonnes CO2 per year; if from gas, the equivalent emissions would be in excess of 200,000 tonnes CO2 per year.

A significant expansion in renewable electricity is required for New Zealand to shift key sectors away from fossil fuels in order to meet our domestic and international emissions reduction commitments. Renewable electricity generation is central to that outcome because, unlike other decarbonisation options, the technology is mature, cost-effective and has broad social acceptance, with well understood and mitigable environmental impacts.

For New Zealand to meet its Climate Change Response Act 2002 2050 targets and Paris Agreement commitments, development of renewable generation is crucial to our decarbonisation pathway. The renewable electrification of transport and process heat is expected to be the most significant contributor to New Zealand achieving its 2050 net zero carbon target – delivering an estimated 70% of the gross emissions reductions required to achieve the 2050 target (some 22.2 Mt CO2 -e pa).

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

Yes

Please explain your answer here:

To the extent that electricity generated by the Mahinerangi Wind Farm improves security of supply through fuel diversification, the project will add to local and national resilience and recovery in the event of a major natural hazard event.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

Climate change is a significant environmental issue. The project will help address this issue by contributing to New Zealand's renewable energy targets and its decarbonisation journey.

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

Yes

Please explain your answer here:

The need for new electricity generation infrastructure, and where it should be located, is not addressed in any regional or district wide spatial strategies in the Otago Region. Decisions regarding the location and form of this infrastructure are effectively left to electricity industry participants to consider for themselves, recognising that locating new infrastructure requires consideration of a complex set of factors (including access to, and quality of, the resource, access to transmission, constructability and roading connections). The resource consenting process also provides a framework for considering the appropriateness of a site for new electricity infrastructure.

The project site consists of land zoned for rural purposes in the Clutha District Plan. The site is not subject to any landscape or biodiversity overlays in these plans and is setback a suitable distance from adjacent dwellings. The Clutha District Plan recognises that renewable electricity generation activities

have significant positive effects on the wider environment and that such activities may need to be located in the rural environment.

In light of the above, and on the basis that the potential adverse effects of the project on the surrounding environment are being appropriately managed, it is considered that the Mahinerangi Wind Farm will be consistent with the objectives and policies of the Clutha District Plan.

With respect to the Otago Regional Policy Statements, they provide direction on the management of infrastructure that is of 'regional or national importance'. The Regional Policy Statements directs that decision makers considering infrastructure activities of regional or national importance consider the locational needs of such activities when they need to locate within sensitive environments, as well as functional needs.

The Otago Regional Policy Statements also require an effects management hierarchy be applied to infrastructure activities within sensitive environments, with a focus on avoiding adverse effects as far as practicable. In addition, provision is made for offsetting and compensation of adverse effects in appropriate circumstances.

As noted in the section of the potential effects of the Mahinerangi Wind Farm, Mercury NZ Limited will prepare its application to include ecological mitigation / compensation where necessary in order to satisfy the likes of the Otago Regional Policy Statement.

Anything else?

Please write your answer here:

Mercury's view is that the Mahinerangi Wind Farm project is exactly the type of project that the fast-track process has been designed to enable. Amongst other factors, the project will deliver regionally and nationally significant infrastructure, support the development of natural resources (wind), support climate change mitigation and address significant environmental issues. It is consistent with local and regional planning documents and doesn't include any activity which would make it ineligible.

Mercury requests that the Mahinerangi Wind Farm project is listed under Schedule 2A. If the project is unsuccessful for Schedule 2A, Mercury requests that it is considered for Schedule 2B.

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?

No

If yes, please explain:

The primary risks to the Mahinerangi Wind Farm from climate change and natural hazards are from extreme rainfall events and seismic events. The project site is not subject to any other natural hazard overlays.

Mercury NZ Limited will ensure that any potential risks are managed by:

Undertaking robust design and site management, including permitting, operation management, monitoring and reporting (and the incorporation of contingency in sediment control design etc);

Ensuring turbines and associated infrastructure are appropriately located to ensure they are away from possible estimate zone of tectonic ground surface deformation;

Conducting regular auditing of conformance with internal standard and consent requirements; and

Independent review by third party experts.

With respect to climate change, it is noted that the project site is an excellent wind resource and expected changes in weather patterns over the life of the project are not forecast to impact on the viability or efficiency of the project.

Therefore, it is considered the project is not subject to significant risks associated with climate change and 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:

Nil

Load your file here:
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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:
Ryan Piddington

Important notes