

21/03/2023

Attention: _ Madeleine Berry

Fast-track Consenting Team for the Ministry for the Environment 95 Commerce Street Whakatane 3120 New Zealand Tel 07 308 2574 eastland.nz

Dear Ms Berry

Taheke Geothermal - Request for Further Information - Response.

The following information is provided in response to the further information request received from Madeleine Berry, Acting Manager, Fast-track Consenting Team for the Ministry for the Environment on the 7^{th} of March 2023.

 Information on whether any additional resource consents are required under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

The National Environmental Standards for Freshwater (NES-F) came into effect on the 3rd of September 2020, and were amended on the 5th of December 2022. The NES-F sets requirements for certain activities that present risks to freshwater and freshwater ecosystems. In this regard, as we understand it the construction of the Taheke Project, which is defined as 'specified infrastructure', ¹ requires resource consent if:

- vegetation clearance occurs within, or within a 10m setback of a natural inland wetland;
- earthworks or land disturbance occurs within, or within a 10m setback from a natural inland wetland;
- earthworks or land disturbance outside a 10m but within a 100m setback results in complete or partial drainage of the natural inland wetland;
- water is taken, used, dammed or diverted within or within a 100m setback from a natural
 inland wetland and there is a hydrological connection as a result of the activity that will
 change or is likely to change the water level range or hydrological function of the wetland;
 and
- there is a discharge of water into water within, or within a 100m setback from a natural inland wetland where there is a hydrological connection between the discharge and the wetland, and the discharge will enter the wetland, and the discharge will change or is likely to change the water level range or hydrological function of the wetland.

¹ Defined in the National Policy Statement for Freshwater Management 2020 as including (b) regionally significant infrastructure identified as such in a regional policy statement or regional plan, and noting that the Bay of Plenty Regional Policy Statement defines regionally significant infrastructure to include facilities for the generation and/or transmission of electricity where it is supplied to the national electricity grid and/or the local distribution network.

Dr Vaughan Keesing of Boffa Miskell has been retained by ROOPU Whakarite Mahi Limited Partnership to assess the ecological effects associated with the Taheke Proposal. As part of his assessment, Dr Keesing has undertaken a combination of desktop and fieldwork to inform the same. Dr Keesing conducted an extensive site visit from the 5th - 7th of September 2022 (inclusive), during which the entire Site was investigated to identify the presence of natural inland wetlands, forest, shrub and geothermal biodiversity values. All ecological features of interest were recorded on a georeferenced map during the site visit.

Following the gathering of ecological information on the site, Dr Keesing utilised the respective ecological criteria outlined in the following statutory documents to assess the relevant habitats identified during the September 2022 site visit:

Significant indigenous biodiversity - Rotorua and Bay of Plenty Regional plan sources; and Natural wetlands - National Policy Statement for Freshwater Management (NPS-FM).²

Dr Keesing identified six natural inland wetlands following the NPS (2020) protocol during the site visit (as highlighted on Site Layout Plan, Figure 1, Revision 2, dated 9th of March 2023 which is included together with this information).

Having identified both the proposed Taheke Geothermal Scheme and the natural inland wetlands (on Site Layout Plan, Figure 1, Revision 2, dated 9th of March 2023) it is noted that the nearest proposed structure to any of the natural inland wetlands (being the Proposed Well Pad) is some 134m from the same. Given this, Dr Keesing records that based on the indicative positions of the proposed infrastructure within the Site Layout Plan, he can confirm that no natural inland wetland looks to be affected at all by the Proposal, and that there are no issues with either the 10 or 100m distance aspect of the NES-F regulations.³ As such, based on Dr Keesing's finding and the associated plan (Site Layout Plan Figure 1), no additional resource consents are required under the NES-F.

Should any of the indicative locations of the proposed infrastructure change, ROOPU Whakarite Mahi Limited Partnership records that it will not construct any structures or undertake any earthworks within 100m of any natural inland wetland and will therefore continue to avoid the need for resource consents under the NES-F.

Information on the instruments on the records of title in the project site, and whether you anticipate that any of these instruments will affect your ability to deliver the project.

The following table (**Table 1**) sets out the instruments on the records of title in the Taheke Project site area. As highlighted in the table it is not considered that any of these instruments will affect the ability of the ROOPU Whakarite Mahi Limited Partnership to deliver the project. It is noted that a number of the Records of Title listed in Table 1 below are subject to a Forestry Right Instrument in favour of Red Stag Limited. As highlighted in the Fast Track Application Form, this Forestry Right Instrument provides that the Forestry Right is subject to a Geothermal Use Right in favour of the landowner being Taheke 8C. In this regard, if Taheke 8C wishes to develop the geothermal resource under the land, then there is a stipulated process for providing notice to Red Stag Limited, allowing the landowner to use the land and potentially remove part of the forestry right. Further the other instruments registered on the titles will not affect deliverability of the project as they only record the matters as set out briefly in the table below.

³ Personal communication with Dr Vaughan Keesing, 9th of March, 2023.



² NPS-FM, Ministry for the Environment 2020a provides criterial listed in Appendix 2 of this document against which features can be assessed.

TABLE 1: Instruments Registered on Title

Record of Title	Instruments registered on title	Do these registered
	•	instruments affect ability to deliver project?
SA69A/795	Proclamation 9650 defining the middle line of road	No - only defines middle of adjacent road and the taking land for said road.
	Gazette Notice B532272.1	No - declares SH33 is a "Limited Access Road".
	Status Order 8370681.1	No - declares the land is Māori Freehold Land.
	S195(2) Climate Change Response Act 2002 Notice 9111245.1	No - provides notice that the land is pre 1990 land.
	Forestry Right Instrument 11017119.3	No - as above.
509150	Status Order 8380434.4	No - declares the land is Māori Freehold Land.
	S195(2) Climate Change Response Act 2002 Notice 9110084.1	No - provides notice that the land is pre 1990 land.
	Forestry Right Instrument 11017119.3	No - as above.
646099	Proclamation 9650 defining the middle line of road Project	No - only defines middle of adjacent road and the taking land for said road.
	Gazette Notice B532272.1	No - declares SH33 is a "Limited Access Road"
	Status Order 7789801.3	No - declares the land is Māori Freehold Land.
	Forestry Right Instrument 11017119.3	No - as above.
438880	Status Order H469866	No - declares the land is Māori Freehold Land.
	Gazette Notice B532272.1	No - declares SH33 is a "Limited Access Road"
SA1289/79	Certificate H030418.10	No - Māori Land Court order declaring ownership of the property.
	Court Order 7900133.1	No - declares the land is General Land.
	S195(2) Climate Change Response Act 2002 Notice 9110084.1	No - provides notice that the land is pre 1990 land.
	Forestry Right Instrument 11017119.3	No - as above.
SA18B/1385	Land has no frontage to a legal road	No - notice that this property has no immediate access to legal / public road.
	Forestry Right Instrument 11017119.3	No - as above.
SA18B/1383	Certificate H030418.12	No - declares the land is General Land.



	S195(2) Climate Change Response Act 2002 Notice 9109950.1	No - provides notice that the land is pre 1990 land.
	Forestry Right Instrument 11017119.3	No - as above.
SA1289/78	Certificate H030418.10	No - Māori Land Court order declaring ownership of the property.
SA36C/174	N/A	N/A
505759	N/A	N/A

Information on whether the final design of the power station will trigger any additional reasons for resource consent, or whether the current list of rule triggers covers both options.

It is noted that the experts that have been commissioned by the ROOPU Whakarite Mahi Limited Partnership to assess the Taheke Project and the effects of the same have undertaken their technical assessment's taking into account both of the possible conversion technologies under consideration. As such, the structure of the resource consent applications encompasses an assessment of potential effects and the resource consent requirements for both a Conventional Geothermal Steam Turbine and an Organic Rankine Cycle Plant. Put another way, the current list of resource consent requirements is intended to adopt a 'worst case scenario' type approach, providing for both options (i.e., consenting for the greatest height, largest structures, largest volume of earthworks, etc, associated with the two types of plant under consideration.

4. Evidence that you have a legal right to access all of the land within the project site. Table 2 provides evidence of the legal right to access all of the land within the Taheke Project Site area. We attach a copy of a letter from Taheke dated 16th of March 2023 and note that a letter from the Whangamoa Trust is to follow. We also attach a letter from Holland Beckett Law confirming the contents of the Project Agreement for the Taheke Geothermal Development Project dated 17 December 2019 ("Agreement"), Project Participation Agreement dated 5 September 2012 ("Participation Agreement") and Deed of Assignment with respect to the Participation Agreement. For completeness, we also attach Easement Instrument 9603429.1.

TABLE 2: Evidence of Legal Right to Access Land.

Record of Title	Evidence of Legal Right of Access.
SA69A/795	Registered Proprietor of this title ("Taheke") is a party, together with Eastland Generation Ltd ("Eastland"), to the Agreement. The Agreement provides that a Project SPV (to be formed by Taheke and Eastland) will be granted the following with respect to land described in Schedule 1 (which includes this title): • an Access Licence for 5 years from the date of the Agreement; • a Lease from the date all consents are granted which are necessary for the proposed facility.
509150	The Agreement provides that a Project SPV (to be formed by Taheke and Eastland) will be granted the following with respect to land described in Schedule 1 (which includes this title): • an Access Licence for 5 years from the date of the Agreement; • a Lease from the date all consents are granted which are necessary for the proposed facility.



646099	 The Agreement provides that a Project SPV (to be formed by Taheke and Eastland) will be granted the following with respect to land described in Schedule 1 (which includes this title): an Access Licence for 5 years from the date of the Agreement; a Lease from the date all consents are granted which are necessary for the proposed facility.
438880	The Agreement provides that a Project SPV (to be formed by Taheke and Eastland) will be granted the following with respect to land described in Schedule 1 (which includes this title): • an Access Licence for 5 years from the date of the Agreement; • a Lease from the date all consents are granted which are necessary for the proposed facility.
SA1289/79	The Agreement provides that a Project SPV (to be formed by Taheke and Eastland) will be granted the following with respect to land described in Schedule 1 (which includes this title): • an Access Licence for 5 years from the date of the Agreement; • a Lease from the date all consents are granted which are necessary for the proposed facility.
SA18B/1385	The Agreement provides for non-exclusive easements for transmission lines, substation, steam pipeline and/or water pipeline over this property. The letter from Taheke dated the 16 th of March 2023 confirms that it will also grant any access licence, lease or easements (as appropriate) with respect to this property as is necessary to deliver the Project.
SA18B/1383	The Agreement provides for non-exclusive easements for transmission lines, substation, steam pipeline and/or water pipeline over this property. The letter from Taheke dated the 16 th of March 2023 confirms that it will also grant any access licence, lease or easements (as appropriate) with respect to this property as is necessary to deliver the Project.
SA1289/78	The Agreement provides for non-exclusive easements for transmission lines, substation, steam pipeline and/or water pipeline over this property. However, the letter from Taheke dated the 16 th of March 2023 confirms that it will also grant any access licence, lease or easements (as appropriate) with respect to this property as is necessary to deliver the Project.
SA36C/174	Easement Instrument 9603429.1: Taheke has the benefit of an easement (in gross) to convey geothermal fluids and electricity together with a geothermal exploitation easement and profit a prendre over the areas marked "A" and "E" on DP465688. The letter from Taheke dated the 16 th of March 2023, together with a letter from the Whangamoa Trust (which is to follow) confirm / will confirm that they will both consent to the transfer or assignment of both Easement Instrument 9603429.1 and the Participation Agreement (as required in the easement instrument) to either Taheke and Eastland, or the Project SPV (as appropriate).
505759	Easement Instrument 9603429.1: Taheke has the benefit of an easement (in gross) to convey geothermal fluids and electricity together with a geothermal exploitation easement and profit a prendre over the areas marked "A" and "E" on DP465688. The letter from Taheke dated the 16 th of March 2023 and the letter from the Whangamoa Trust, which is to follow, confirm / will confirm that they will both consent to the transfer or assignment of both Easement Instrument 9603429.1 and the Project Participation Agreement dated 5 September 2022 (as required in the easement instrument) to either Taheke and Eastland, or the Project SPV (as appropriate).



5. Information on whether you anticipate the approval required from Rotorua Airport Limited under section 176 of the Resource Management Act 1991 (RMA) will affect your ability to deliver the project.

Initial consultation with Rotorua Airport regarding the Taheke Project commenced on the 21st of September 2022 and is on-going. During consultation, the Airport has noted an interest in steam plumes associated with the proposed Taheke Plant, and as such, is currently undertaking its own assessment to determine whether the Taheke Project will have any effect on the Airport's operations. It is understood that this report is expected to be completed in draft by the 26th of March 2023, after which time consultation with the Rotorua Airport will be able to be completed.

It is not anticipated that steam plumes from the Taheke Geothermal Scheme (regardless of which of the two options being considered is constructed), would cause visual emissions during normal operations, such that they would impact on the Rotorua Airport's operations. In this regard, the air dispersion report produced by Mr Peter Stacey does not predict issues with steam plumes impacting on the operations of the airport. Based on the location of the geothermal field 9 kilometres from the Rotorua Airport effects on the airport are unlikely. Given this, the ROOPU Whakarite Mahi Limited Partnership do not anticipate the approval required from the Airport will affect its ability to deliver the Project.

6. Additional site layout plans clearing identifying the location of any natural wetlands and land identified as Land Use Capability Classification LUC2.

An additional layout plan clearing identifying natural inland wetlands and Land Use Capability Classifications is attached to this response. Please refer to Site Layout Plan, Figure 1, Revision 2, dated 9th of March 2023.

7. An analysis of how the project aligns with the National Policy Statement on Highly Productive Land 2022.

The National Policy Statement on Highly Productive Land 2022 (NPS-HPL) states that Territorial authorities must avoid the inappropriate use or development of highly productive land (Land Use Capability (LUC) 1, 2 and 3) that is not land-based primary production except where a particular exemption, such as the land being 'specified Māori Land'⁴ applies.

There is no Land Use Capability Classification LUC 1 or 2 on, or within the vicinity of the Taheke Project Site, as can be seen when reviewing Site Layout Plan, Figure 1, Revision 2, dated 9th of March 2023.

The Project Site does contain a portion of Land Use Capability Classification LUC 3, and there are two activities proposed to occur on that area. These activities include transmission and a small substation / switchyard. It is not considered that these activities are contrary to the NPS-HPL given that they are small scale activities that will not impact the productive capacity of the land, further it is noted that that land classified as LUC3 is also specified Māori Land' as identified in **Table 3** below.

Given the above, overall, while most of the land associated with the Taheke Project is not covered by the NPS-HPL, there is a small portion that is, however it is specified Māori Land and as such, is exempt from the NPS-HPL avoidance requirements. Consequently, the NPS-HPL is not relevant to

⁴ specified Māori land means land that is any of the following: (a) Māori customary land or Māori freehold land (as defined in Te Ture Whenua Māori Act 1993): (b) land vested in the Māori Trustee that— (i) is constituted as a Māori reserve by or under the Māori Reserved Land Act 1955; and (ii) remains subject to that Act: (c) land set apart as a Māori reservation under Part 17 of Te Ture Whenua Māori Act 1993 or its predecessor, the Māori Affairs Act 1953: (d) land that forms part of a natural feature that has been declared under an Act to be a legal entity or person (including Te Urewera land within the meaning of section 7 of the Te Urewera Act 2014): (e) the maunga listed in section 10 of the Ngā Mana Whenua o Tāmaki Makaurau Collective Redress Act 2014: (f) land held by or on behalf of an iwi or hapū if the land was transferred from the Crown, a Crown body, or a local authority with the intention of returning the land to the holders of the mana whenua over the land



the consideration of the Taheke Project. Regardless of all of this, the Taheke Project anticipates that the balance of land not required to be used for the power station infrastructure will still be available for other productive purposes.

TABLE 3: Specified Maori Land in accordance with the NPS-HPL

Record of Title	Specified Māori Land in accordance with the NPS-HPL
SA69A/795	Yes
509150	Yes
646099	Yes
438880	Yes
SA1289/79	No
SA18B/1385	Yes
SA18B/1383	Yes
SA1289/78	No
SA36C/174	No
505759	Yes

Additional information - Bay of Plenty Regional Council comments on referral

The ROOPU Whakarite Mahi Limited Partnership has received the comments from the Bay of Plenty Regional Council on the application for referral and notes the Council's comment that there are relatively few geothermal experts within New Zealand which may present challenges for technical reviews in the context of a fast track process.

The Council has noted that as such, it does not support the fast-track process for this project unless either:

- the Ministry or panel commissions these technical reviews and any issues are resolved (with the
 processing time suspended), or
- the reviews are completed and any issues resolved prior to the consent application being lodged.

The ROOPU Whakarite Mahi Limited Partnership is aware that the Council seeks early engagement on the technical reports to be provided in support of the resource consent application, and the ROOPU Whakarite Mahi Limited Partnership has confirmed that it is willing to share the technical reports with the Council as soon as they are finalised. This is imminent.

Accordingly, we do not consider that this issue should pose a barrier to use of the fast track process.

In addition, there are the following options available to ensure that matters of a technical nature are appropriately addressed:



- The referral order could require the resource consent application to include a peer review of the geothermal science reports;
- The Expert Consenting Panel must include a person nominated by the relevant local authorities which could comprise a geothermal expert;
- Alternatively (or additionally) geothermal expertise could be appointed to the Expert Consenting Panel to ensure the collective knowledge and experience required for the Panel;
- The Panel may appoint a special adviser to assist it, which could include a geothermal expert.

Should you have any queries about any of the information provided within this response and the associated attachments, please do not hesitate to contact the undersigned.

Yours Sincerely

Stuart McDonnelใ้

Manager - Major Capital Projects. Reservoirs and Wells

