BEFORE AN INDEPENDENT HEARINGS COMMISSIONER FOR THE WAITOMO DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991 ("Act")

AND

IN THE MATTER of an application to vary resource consent RM050019 by Taumatatotara Wind Farm Limited under s127 of the Act

EVIDENCE OF CRAIG SHEARER ON BEHALF OF TAUMATATOTARA WIND FARM LIMITED

[PLANNING] 26 OCTOBER 2023

Counsel: G K Chappell

1. INTRODUCTION

- 1.1 My full name is Craig McGregor Shearer. I hold the qualification of Master's Degree in Geography from University of Canterbury (1978). I have worked as an environmental and planning professional for over 40 years.
- 1.2 I have been an environmental and planning consultant for eighteen years working for a variety of private and public sector clients on a range of projects, including preparing resource consent applications and providing evidence for council and Environment Court hearings. Most of my work involves working on large multidisciplinary projects. I am currently providing environmental and planning advice on three wind farm projects including the Taumatatotara Wind Farm Limited (T4) project.
- 1.3 I am well versed in environmental issues surrounding wind farms, as apart from the other wind farms I am involved with, I have visited many of New Zealand's wind farms and undertaken tours of wind farms accompanied by developers in Europe.
- 1.4 Up until 2021 I was a hearings commissioner with chairing endorsement, and regularly sat on hearing panels for councils across New Zealand.
- 1.5 Prior to becoming a consultant, I was the Director of Policy and Planning at the Auckland Regional Council for thirteen years and led the development of a range of regional planning documents. I was also accountable for the Council's input into district planning processes and national policy initiatives.
- 1.6 I have been providing planning advice on the T4 project since July 2019, and prepared the AEE for this section 127 application. I have been retained by Taumatatotara Wind Farm Limited to provide planning evidence in respect of the application.
- 1.7 I have relied on the following information in preparing this evidence:
 - The AEE and attached application material lodged in 2020;
 - The assessments carried out by consultants working on behalf of Council in preparing section 92 requests;
 - The section 92 information provided to Council by the applicant, including the two additional rounds of section 92 clarification requested by Council;

- The evidence of:
 - o Glenn Starr (Corporate)
 - o Michael Smith (Acoustics)
 - o Michael Moore (Landscape)
 - o James Daly (Transportation)
 - o Simon Chapman (Ecology)
- Consultation efforts with Ngaati Mahuta ki te Hauāuru and other lwi submitters
- The section 42A report prepared by Chris Dawson, including the technical assessments;
- 1.8 I have visited the site on numerous occasions over the past four years, have met with many of the surrounding landowners including some of the submitters, and have been actively involved in meetings with lwi during this time.
- 1.9 I have also read and am in general agreement with the considerations and conclusions in the Council's Section 42A Report prepared by Chris Dawson.

Code of conduct

1.10 I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and will continue to comply with it while giving oral evidence. I confirm that my employment on a conditional fee arrangement basis, contingent on the outcome of the application has not altered my evidence. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

Scope of evidence

1.11 I was retained on behalf of the Applicant for the project in July 2019 to advise on the aspects of the proposal relevant to my areas of expertise. I prepared an Assessment of Effects ("AEE") in support of the application.

- 1.12 Since completing the AEE, I have read the Section 42A Report and supporting material prepared by the Council's consultants and advisors. Subject to the matters and amendments addressed later in this evidence, my opinion regarding the application is generally as addressed in the AEE.
- 1.13 My planning evidence comprises the following Parts and Appendices:
 - (a) Background and description of the site description of the proposal
 - (b) Reasons for consent
 - (c) Public notification
 - (d) Submissions
 - (e) Updated Variation Proposal
 - (f) Statutory requirements
 - (g) Assessment of effects
 - (h) Assessment of relevant planning provisions
 - (i) Section 42A report
 - (j) Part 2 matters

2. EXECUTIVE SUMMARY

- 2.1 Ventus Energy (NZ) Ltd was granted resource consent to construct 22 turbines with tip heights of 110m at Taumatatotara West Road in 2008. Ventus subsequently applied for a s127 variation to increase the turbine height of the northern 11 turbines to 121.5 in 2011 which was approved. Ownership of the resource consent has now been transferred to Taumatatotara Wind Farm Limited ("T4"), which is the entity pursuing the project completion.
- 2.2 For various reasons the wind farm has not yet been constructed and in July 2020, T4 applied to further vary the consent by reducing the number of turbines to 11, deleting the southern 11 turbines. The tip height of the turbines was to be 172.5m. In recent times the applicant has advised it wishes to update the variation, and has reduced the number of turbines to 8, with a slight increase in tip height to 180.5m.

- 2.3 The application was publicly notified and a total of 15 submission received, 14 opposed and 1 in support. A number of issues were raised with the predominant concerns being potential cultural effects, ecology, landscape, transport and noise.
- 2.4 Detailed evidence on potential effects has been provided for the hearing by the applicant. Overall, the physical effects of the proposal have been found to be positive. This is attributable to the significant reduction in the number of turbines from 22 to 8, even though the turbines will be higher. Landscape effects overall will be positive, although from some viewpoints there will be low negative effects. Transport effects are found to be less due to the more limited number of turbine componentry that must transported, and noise effects will be less due to third party dwellings now being further from the wind farm.
- 2.5 Of significance to these proceedings relating to biodiversity is the recent release of National Policy Statement for Indigenous Biodiversity (NPSIB). The NPSIB states at 1.3(3) that nothing in this National Policy Statement applies to the development, operation, maintenance or upgrade of renewable electricity generation assets and activities. In other words, the NPSIB does not apply to T4. This is significant given concerns expressed by DOC and Council reporting staff re ecology effects, and the requirements for plans to give effect to the NPSIB.
- 2.6 Nevertheless, the evidence is that the ecology effects of the variation would be less than the consented environment.
- 2.7 Consultation with Ngaati Mahuta ki te Tai Hauāuru to resolve cultural concerns with the project have proven to be fruitful. Ngaati Mahuta has prepared a cultural impact assessment or Effects Assessment Report, in which they have commissioned an assessment of the potential and actual effects of the wind farm variation and ways to manage (avoid, minimise, mitigate) the effects of the proposal. A letter in support of the application has been provided
- 2.8 Ngaati Mahuta support the transfer of a number of the existing consent conditions to any varied consent granted, and propose some new conditions that would be appropriate to offset effects Ngaati Mahuta is concerned about. Sitting alongside the Effects Assessment Report, the parties have agreed a Memorandum of Understanding which would define the relationship between Ngaati Mahuta ki te Hauāuru and Taumatatotara Wind Farm Limited and set the terms for a long-term commitment to work together on the project. Both documents should be signed before the hearing, thus resolving Ngaati Mahuta ki te Tai Hauāuru's cultural issues.

- 2.9 Finally, the varied project has been found to be consistent with the relevant national and local policy documents.
- 2.10 A number of changes to consent conditions have been agreed with Council officers, although there are still some differences which hopefully will be resolved before the hearing commences.

3. PROJECT BACKGROUND AND DESCRIPTION OF THE SITE

- 3.1 The background to the project and a description of the site was included in the AEE so is summarised in this evidence.
- 3.2 The site is 10km south of Taharoa Village and above the Taumatatotara Gorge in the Waitomo District. It is located on farms owned by three separate landowners, all of whom have given their approval to the project. The site and the adjacent hills generally have very defined but level ridgelines with steep slopes on the flanks. The highest part of the site has an elevation of 340m. The gradient of the construction site is moderate to steep with slopes generally between 1 in 20 and 1 in 5. The site is currently used for grazing cattle and sheep.
- 3.3 Ventus Energy was granted consent to construct a 22-turbine wind farm at Taumatatotara West Rd, Te Anga in 2008 (after an appeal to the Environment Court was withdrawn). All turbines were to be 110m high. Regional consents for earthworks have been granted by Waikato Regional Council in August 2020 (see Appendix 1).
- 3.4 In 2011 Ventus Energy applied for a change to the conditions of the 2008 consent to increase the turbine height of the northern 11 turbines to 121.5m. This was approved by the Council. A lapse date extension was applied for in 2016 for a further 8 years until June 2024. This was also approved. A copy of the existing resource consent conditions is provided as supplementary information (see Appendix 2).
- 3.5 To date the wind farm has not been constructed, for a variety of reasons, as explained by Mr Starr in section 3 of his evidence.

4. **PROJECT OVERVIEW**

4.1 In 2020 T4 applied to increase the tip height and other dimensions of the 11 northern turbines. The 11 southern turbines were to be deleted from the project, leaving a total of 11 turbines remaining. The proposed turbine dimensions were

172.5m tip height, 95m hub height and 155m rotor diameter. The bottom of the rotor sweep would be 17.5m above ground level.

4.2 I note that the proposal was described in the public notification as:

Reducing the number of turbines from 22 to 11 (Conditions 1 and 2), including reducing the on-site roading proposed. The proposal is to retain the northern 11 turbines (in the same locations as turbines 1-11 in the original consent).

Increase the tip height of the remaining 11 turbines from 121.5 m to 172.5m, with rotor diameter increasing from 110m to 155m.

4.3 The positioning of the 11 turbines in the 2020 application would not change from that already consented - see Site Plan, Figure 1, below. An A3 version of the site plan, for easier reading, is included as Appendix 3. The locations of the proposed 11 turbines are shown by a pink dot. There was to be consequential changes to other components of the turbines, such as the tower dimensions and height and nacelle size. I note here that the site plan, for completeness, shows the location of all 22 consented turbines sites plus the location of many of the adjacent landowners.



- 4.4 T4 sought to change existing consent conditions 3 and 11, relating to turbine height, and general condition, condition 1, as it relates to the number of turbines. Conditions 3 and 11 are as follows:
 - 3. The turbines shall have a maximum height of 110 metres measured from the ground to the top of the vertically extended blade tip.
 - 11. The wind turbines shall not exceed a rotor tip height of 110 metres above ground level and a sound power of 107.2dBA unless it can be demonstrated by a person specialising in acoustics and accepted by the Manager, Policy and Planning, Waitomo District Council that higher turbine heights or sound power will still comply with the requirements of NZS6808: 1998.
- 4.5 As a consequence, Condition 5 would also be deleted as it relates to turbines 19
 22, to be removed from the project as part of the proposal.
- 4.6 The nominal turbine in the 2008 consented wind farm had a 100m rotor with a 60m Hub Height 110m tip height. The bottom of the rotor sweep would be 10m above ground level.
- 4.7 With the changes approved in 2011, the 11 northern turbines would have a tip height of 121.5m, a hub height of 65.75m and a 111.5m rotor diameter. The bottom of the rotor sweep would be 10m above ground level. The southern 11 turbines would remain unchanged.
- 4.8 As explained by Mr Starr the design of wind turbines has continued to evolve and develop since the consent was granted. We now see taller towers to capture higher wind speeds and avoid areas of wind turbulence closer to the ground.
- 4.9 Other consequential changes to the proposal resulting from the increase in the height, size and weight of the turbines are changes to the turbine foundations with the turbines requiring a 18m x 18m concrete foundation, up from the 14m x 14m in the consented application.
- 4.10 In respect of transportation of the turbine componentry, since the first consent was granted transportation methods have changed to allow for components to be more easily moved. Nacelles can now be easily split into components to reduce size and weight. Tower Sections are made with thicker steel and shorter lengths to keep the diameter low and the weight manageable, and blades can be transported with a specialist cantilevered transporter system to allow the blades to negotiate

tight corners - see photograph in below. This modern trailer unit will therefore avoid the need for some roadside cuts.

Figure 2: Specialist blade lifting unit.



5. REASONS FOR CONSENT

- 5.1 The application is for a change of consent conditions under section 127 of the RMA. Under section 127(3) of the Act the application is for a discretionary activity.
- 5.2 As discussed fully in the Section 42A Report, there was discussion about whether the application is to be considered as a s127 application or as a new application under s88.
- 5.3 Commissioner Daysh on this matter found the activity being sought by way of the application remains the same as that provided for in the existing consent. He recommended the application be assessed as a variation under s127 although he did say he may reconsider his conclusion should evidence compel him to do so.

6. PUBLIC NOTIFICATION

6.1 As set out in section 4 of the Section 42A Report, the application was publicly notified on 6 April 2023, with 15 submissions received, 14 opposed and one in support.

7. SUBMISSIONS

7.1 The names and details of the issues raised by the submitters are set out in the Section 42A Report so I do not repeat them here although I do discuss the issues raised by submitters later in my evidence.

8. UPDATED VARIATION PROPOSAL

- 8.1 The proposal has been recently refined so that the number of turbines will be further reduced to 8, with turbines 2, 4 and 9 to be removed. The maximum diameter of the rotor areas will increase from 155m to 163m, and in order to maintain the 17.5m ground clearance for the rotors the tip height of the turbines will be increased from 172.5m to 180.5m.
- 8.2 The reason for the reduced number of turbines is to increase the distance between turbines and thus reduce the influence of turbulence between the rotors. As pointed out in Mr Starr's evidence, the updated proposal will lead to a slight increase in diameter of rotor area (5%) and a small increase in tip height (also 5%). The table below shows the comparison between the application and update, but for completeness I have also included the 110m and 121.m options as well.

	Variation application	Updated variation application	121.5m Turbines	110m Turbines
Number of turbines	11	8	11	11
Rotor tip height	172.5m	180.5m	121.5	110m
Rotor diameter	155m	163m	111.5	100m
Hub height	95m	99m	65.75	60m
Blade chord (widest)	4m	4.4m	4.4m	4m
Rotational movement	11.1 rpm	10.0 rpm	12 rpm	13 rpm

Table 1: Showing changes in variation application and update

8.3 I note the direction provided by Commissioner Daysh (Minute 3) in reference to the 8 turbine increased height option, "The reduction in the number of turbines proposed is clearly within scope as this will reduce the overall effects in contention, and my preliminary view is that the slight increase in the height of the proposed wind turbines is in the "de minimis" category in relation to actual and potential effects".

9. STATUTORY REQUIREMENTS

- 9.1 The application is for a discretionary activity under Section 127 of the RMA, and sections 88 to 121 of the Act apply. The relevant matters are those that apply to the change of conditions and the effects of the change.
- 9.2 Section 104 of the Resource Management Act 1991 (**RMA**) sets out a number of matters that a consent authority must, subject to Part 2, have regard to when considering an application for resource consent. The following matters are relevant to the consideration of this application:
 - Any actual and potential effects on the environment of allowing the activity (s104(1)(a));
 - Any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity (s104(1)(ab));
 - Any relevant provisions of a national policy statement, a regional policy statement or proposed regional policy statement, a plan or proposed plan; (s104(1)(b)(i)-(vi));
 - Any other matter the consent authority considers relevant and reasonably necessary to determine the application (s104(1)(c));
- 9.3 Section 104B states that:

After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority—

- (a) may grant or refuse the application; and
- (b) if it grants the application, may impose conditions under section 108.

10. ASSESSMENT OF EFFECTS

10.1 Because the application is to vary the conditions of the existing wind farm consent, the following assessment of effects is an assessment of the difference between those effects that have been approved by the existing consent and the effect of the updated variation proposal. In other words, the difference between the consented 22 turbine, 110m/121.5m tip height wind farm, and the 8 turbine 180.5m tip height turbine proposal.

Cultural Effects

- 10.2 Seven submitters raised cultural effects in their submissions. The predominant issue raised was that no cultural impact assessment had been completed for the project. Several submitters wanted Ngaati Mahuta ki te Tai Hauāuru to be consulted and wondered why this had not been undertaken already. Te Nehenehenui Trust in addition, expressed concern that an assessment of the project against the Ko Tā Maniapoto Mahere Taiao (Maniapoto's Environmental Management Plan) had not been undertaken.
- 10.3 In addition, some of these submitters raised technical issues (eg wildlife, noise levels). These matters are assessed elsewhere in my assessment of effects.
- 10.4 By way of background, initially T4 chose to consult with Ngā Tai o Kāwhia Regional Management Committee as they were involved historically in the application for the wind farm in 2008. They were the only lwi involved in the appeal proceedings.
- 10.5 On 7 September 2020 Waitomo DC provided guidance via their s92 request and advised that T4 needed to consult with Te Hauāuru Regional Management Committee (Te Hauāuru RMC) in relation to the wind farm proposal. T4 acknowledged this and in late 2020, engaged the services of a specialist Iwi/Mana Whenua facilitator, beginning consultation with Te Hauāuru RMC as advised.
- 10.6 Several hui, and site visits were held along with correspondence via email in 2021 in an effort for T4 to understand any issues lwi had with the proposal. Consultation was made difficult due to the impacts of Covid 19 during this time, preventing face to face contact but also visits to the site. T4 requested a Cultural Impact Assessment from Te Hauāuru RMC.
- 10.7 On 27 July 2021 T4 and Council received a response from Ngaati Mahuta ki te Hauāuru (representing Te Hauāuru RMC), saying they could not support the

change of wind turbine size. The response is attached to this evidence as Appendix 4.

- 10.8 A number of Iwi/Mana Whenua related submissions were received by Council from a number of parties to the public notification of the wind farm variation application. T4 acknowledged that the process with Ngaati Mahuta ki te Hauāuru in particular had not been ideal, had been complicated by the presence of Covid 19, and that it needed to reinstate consultation after the submission period. The attached consultation summary (Appendix 5) shows concerted efforts began after submissions were received in an effort to understand and try and resolve concerns registered by submitters who have mana whenua status in the area of the wind farm.
- 10.9 Continuing efforts have been made to determine which of these are individuals and which represent relevant Iwi/ Hapū with mana whenua interests in the area. In particular new rounds of consultation, beginning with a hui between T4 representatives and Ngaati Mahuta ki te Hauāuru and other submitters at Te Kooraha Marae at Tahaaroa on 29 July this year. Ngaati Mahuta ki te Hauāuru ("Ngaati Mahuta") are the recognised mana whenua for the wind farm area. The hui resolved to appoint a person to undertake a Cultural Impact Assessment (CIA) of the project and to act as the main contact with T4.
- 10.10 Since that time there has been a significant amount of engagement and consultation between Ngaati Mahuta and T4 representatives and good progress has been made in resolving issues between the two parties. Ngaati Mahuta prepared a cultural impact assessment or Effects Assessment Report, which is a Ngaati Mahuta commissioned assessment of the potential and actual effects of the wind farm variation and ways to manage (avoid, minimise, mitigate) the effects of the proposal.
- 10.11 The assessment proposes mitigation measures to manage those effects on the whenua and the surrounding environment. The draft report is an extremely helpful document in that it highlights issues Ngaati Mahuta have with the project, proposes a number of the existing consent conditions that should be transferred to any varied consent granted, and proposes some new conditions that would be appropriate to offset effects Ngaati Mahuta is concerned about.
- 10.12 Sitting alongside the Effects Assessment Report, the parties have been in discussion over an appropriate Memorandum of Understanding which would define the relationship between Ngaati Mahuta ki te Hauāuru and Taumatatotara

Wind Farm Limited and set the terms for a long-term commitment to work together on the project.

- 10.13 On 26 October 2023, Te Runanga O Ngaati Mahuta ki te Hauāuru and Taumatatotara Wind Farm Limited signed the Memorandum of Understanding. As a result, the Effects Assessment Report prepared by Ngaati Mahuta has been sent to the Council so that it can be forwarded to the Commissioner. Ngaati Mahuta has agreed to now support the project, and anticipates the contents of The Effects Assessment Report will be accepted by the Commissioner and the conditions contained within it included if the consent is granted. Appendix 7 contains the proposed Ngati Mahuta ki te Hauāuru conditions. I note that some further work needs to be undertaken by the parties to refine the conditions so they are in an appropriate form for resource consent conditions. This is a very satisfactory outcome to the engagement process that has occurred over the past few months.
- 10.14 Although T4 is consulting with other submitters with cultural concerns, the mana whenua standing of those parties as Iwi is difficult to determine. These submitters will receive a copy of the Ngaati Mahuta ki te Hauāuru Effects Assessment Report that is provided to the Commissioner.
 - (a) The Marokopa Paa Environmental Team submitter has been copied in to email discussions with Ngaati Mahuta and noted in their submission that they "would like to support Ngati Mahuita [sic.] and also hear the views of the land owners before any decision is made by council."
 - (b) Roimata Harmon has also emailed saying that she has been in touch with Ngaati Mahuta and supports the process. We understand that Ms Harmon is not available for the hearing and will support the outcome of the hearing.
 - (c) Mr Keepa/Kupa Whaanau Trust noted concerns about the analysis of the Environmental Management Plan, engagement with Ngaati Mahuta, and the production of a Cultural Impact Assessment. We submit that the concerns of this submitter have been addressed in the above discussions with Ngaati Mahuta.
 - (d) Yvonne Armstrong was initially contacted for her Ngaati Mahuta whakapapa and has been part of discussions with Ngaati Mahuta.

Construction Effects

- 10.15 The Section 42A Report prepared by Mr Dawson addresses construction effects. I agree with his summation that the extent of construction effects from the development of an eight-turbine windfarm will be significantly reduced compared to the consented level of construction from the 2011 approved wind farm.
- 10.16 The construction related conditions in the existing consent relate to traffic, roading and general construction. These still apply and have been maintained for inclusion in this new varied consent application, although their applicability will be restricted to effects relating to only 8 turbines and associated facilities being constructed compared to 22.

Landscape and Visual Amenity Effects

- 10.17 The landscape and visual amenity effects are often contentious for projects based around the construction of large structures within the landscape. Mike Moore has provided landscape and visual amenity evidence on behalf of T4. The starting point for considering the effects of the change of conditions application is the existing consented environment the 22 consented turbines being 110m and 121.5m high. The relevant effects to be assessed relate to the difference between what is consented and what is now proposed.
- 10.18 Turning first to visual landscape effects, Mr Moore assesses several viewpoints. From the south, the 11 turbine variation application will result in positive effects in relation to what is currently consented due to the significantly reduced length of ridgeline impacted and the greater distance to turbines this helps to mitigate the apparent scale of the larger turbines. Turbine rotation will also have a modest positive aesthetic effect as the larger turbines give the appearance of slower rotation. These factors will all assist to reduce the adverse effects of the structures on the rural character landscape values. The 8 turbine updated variation application, will further reduce adverse effects. He has rated the visual effects of both the variation application and the updated variation application as ranging from positive / moderate positive / moderate-high.
- 10.19 Viewpoints to the north and north-east were also considered. Taharoa Village is 7km distant, located on slopes orientating away from the wind farm site and at times screened by hill forms. Although the larger turbines will be more noticeable, because of the distance, he rates the visual impact against the consented baseline as adverse/low.

- 10.20 Taharoa Road is located to the north-east of the site. From the public viewpoint on Taharoa Road, the variation application will result in the same number of turbines being visible as the consented scheme although these will be greater in scale and more dominant. However, the 8 turbine option will mean that only 4 turbines will be visible. Compared with the consented wind farm, Mr Moore says the positive effect of the reduction in the number of turbines will outweigh the adverse effect of increased scale and dominance on the rural character landscape values. Overall, he rates the comparative effects as positive / low.
- 10.21 Mr Moore addressed parts of Te Waitere Road as well as some dwellings adjacent to the Road. Two of the submitters reside in Te Waitere Road. The northern turbines will have the most impact. Greater dominance of turbines from the variation option will have adverse effects when compared against the consented windfarm, but the primary adverse effects are the presence and visibility of the wind turbines at all. He rates the adverse effects of the variation application as up to low-moderate.
- 10.22 In conclusion, Mr Moore's evidence is the sensitivity of this landscape to the effects of the proposed variation is low, primarily because a wind farm is already part of the consented environment. Overall, in relation to this consented environment, he considers physical landscape effects will be positive. The main reason for this is that reduction in the number of turbines and the spread of the wind farm will be more visually significant in terms of effects on rural character landscape values than an increase in turbine scale.
- 10.23 Mr Moore also assessed some specific viewpoints from individual dwellings. Some of these dwellings are owned by submitters opposed to the application in part because of visual landscape reasons. The results of that assessment are included in the table following. The effects of the variation proposal are either adverse-low/moderate, neutral or positive.
- 10.24 Overall, Mr Moore's assessment is that the landscape effects of the proposed variation will be positive. Where there are adverse effects, these are no greater than low-moderate (minor) in those places assessed. I agree with his assessment.
- 10.25 Mr Dawson has invited Mr Moore to provide further information on matters raised by Mr Mansergh in his technical assessment of T4's landscape assessments. Specifically, these were:

- The way in which the landscape architect has reached the effects conclusions and assessment ratings through his report.
- The extent to which Mr Moore has relied on the original WSP LVA and the extent to which he has undertaken his own independent assessment in sufficient detail to be verified and reviewed by Council'.

Loc¦ality	Effects on landscape values of the variation application (baseline – consented wind farm)	Effects on landscape values of the updated variation application (baseline – consented wind farm)	
Taharoa Village	Adverse / low	Adverse / low	
158 Coutts Road	Positive / moderate	Positive / moderate	
223 Coutts Road	Positive / moderate-high	Positive / moderate-high	
11 Taumatatotara West Road	Neutral	Neutral	
83 Te Waitere Road	Neutral	Neutral	
84 Te Waitere Road	Adverse / low-moderate	Adverse / low	
176 Te Waitere Road	Adverse / low-moderate	Adverse / low-moderate	

Table 2: Assessment of Visual landscape effect against specific dwellings

- 10.26 The methodology employed by Mr Moore to undertake his assessment follows the concepts and principles outlined in the New Zealand Institute of Landscape Architects (NZILA) Landscape Assessment Guidelines and are based *inter alia,* on his visit to the site on 15 August 2023 and ZTV maps and simulations. He stresses in his evidence that the assessment is his own.
- 10.27 Mr Moore has provided extensive evidence on how he has reached his effects conclusions and assessment ratings as I have summarised above. He has also undertaken his own assessment, including visiting the site and commissioning additional graphics to assist him in carrying out his own assessments. In my

view Mr Moore has succeeded in satisfying the concerns expressed by Mr Mansergh and Mr Dawson.

10.28 No additional landscape and visual conditions are proposed noting that the existing conditions 29-32 cover landscaping and visual conditions.

Shadow Flicker

- 10.29 Mr Moore has also assessed the effects of shadow flicker. The zone of likely effect is discussed in the Australian National Wind Farm Development Guidelines Draft dated July 2010, and Table E-2 in that document uses modelling parameters for the zone of influence of shadows as the maximum blade chord (widest part of the blade) multiplied by a factor of 265.
- 10.30 The proposed turbines have maximum blade chords of 4.0m (155m diameter rotor variation application) and 4.4m (163m diameter rotor updated variation application) respectively less than or similar to the consented turbines. This will result in a zone of influence that is no greater than that of the consented wind farm (1166m). He has assessed any potential shadow flicker effects as being be less than the proposed variation because there are fewer turbines and none within 1060m of third-party dwellings.
- 10.31 I accept his technical advice and agree there will be no adverse shadow flicker effects.

Ecology

- 10.32 Before assessing ecological effects, it is important to highlight the relevance to the assessment of two National Policy Statements the NPS for Indigenous Biodiversity 2023 (NPSIB), and the NPS for Renewable Energy 2011 (NPSREG). The NPSREG has been in place since April 2011, but the NPSIB was published in July 2023 and only came into force in August 2023, after most conversations between Council and applicant had been completed.
- 10.33 I refer back to Section 9.2 above Section 104 of the Act requires the consent authority when considering and application, subject to Part 2, to have regard to any relevant provisions of a national policy statement. Both the above NPS's contain provisions relevant to the ecological assessment. The provisions relevant to this application in the NPSIB have been missed in the Section 42A Report. Mr Dawson states the NPSIB came into effect after this application was lodged, so he has not assessed the application against it. This confusion is understandable

with respect to the NPSIB as the hearing notice was issued on 8 August 2023, barely one month after the NPSIB was published. I also note under s75(3)(a) of the RMA district plans must give effect to any NPS.

- 10.34 Firstly, the NPSIB, applies to indigenous biodiversity in the terrestrial environment throughout Aotearoa New Zealand. The NPSIB states at 1.3(3) as follows:
 - (3) 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.
- 10.35 In other words, the NPSIB does not apply to T4, or for that matter to any renewable electricity generation project.
- 10.36 The NPSIB has a number of objectives and policies relevant to indigenous biodiversity, including protecting, restoring and maintaining biodiversity when undertaking development, including outside Significant Natural Areas, and also including monitoring of indigenous biodiversity. These are generally all matters which have to date been given consideration in the effects assessment conversations the applicant has been undertaking with Council officers since the change of conditions application was lodged on 20 July 2020.
- 10.37 Further, the indigenous biodiversity provisions of the Operative District Plan and the Proposed District Plan are also not relevant in considerations as these plans must "give effect" to the NPSIB. For the avoidance of doubt, with reference to Mr Dawson's report, there is just one biodiversity policy in the Operative District Plan.
- 10.38 As the NPSIB is clear that it does not apply to renewable energy, in my view many of the past conversations on biodiversity are not necessarily relevant. This has relevance particularly to the evidence of Dr Bull in the proceedings in particular, and also to her view that the effects management hierarchy a key directive in the NPSIB when managing effects on SNAs of new development needs to be applied.
- 10.39 This brings me to my second point the NPSREG. Although I deal with the policy directions of the NPSREG more fully later in my evidence, Section C "acknowledges the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity

generation activities", and recognises the need to locate renewable electricity generation where the renewable energy resource is available. Policy C2 says:

POLICY C2

When considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated, decisionmakers shall have regard to offsetting measures or environmental compensation including measures or compensation which benefit the local environment and community affected.

- 10.40 In my opinion this policy does provide general direction to decision-makers on environmental matters, including ecology, but only to the extent that consideration be given to offsetting or compensation for residual effects. Policy C2 must be considered in the wider context of the Objective of the NPSREG, which recognises the national significance of renewable energy generation activities.
- 10.41 Finally, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna is a matter of national importance under the Section 6(c) of the RMA. I note that the word "significant" is used in reference to indigenous vegetation and habitats. Of course, Part 2 considerations are one of balance and individual considerations are not absolutes in considering whether the purpose of the Act is achieved. As stated above, the NPSREG states that the development of renewable energy generation is also of national importance.
- 10.42 Where does this leave us in our consideration of ecology matters? In my opinion the discussion above leads to the weighting to be given to ecology effects being significantly less than the weighting to be given to the development of wind farm. This is particularly the case as the application is not a section 88 application but one to vary the conditions of an already consented wind farm. It is in this context that one must consider the ecology effects of the application.
- 10.43 In preparing the AEE and associated technical supporting information, the ecology effects of the proposal were assessed by Simon Chapman and Professor John Craig. As pointed out in Mr Chapman's evidence, their advice was the significant reduction in the number of turbines meant that the ecological effects of the variation proposal are likely to be less than under the existing consented environment. This position would be more certain with the further reduction in the number of turbines are now proposed to have a 5% increase in tip height, and the decrease in the combined rotor sweep area.

- 10.44 Reference to the WDC's section 92 requests for further information shows that the Council's ecologist on several occasions requested further information to support the application, including survey and monitoring work to better understand the presence of bats along the entirety of the consented 22 turbine wind farm. To comply with Council's request, as pointed out by Mr Chapman in his evidence further bird counts were undertaken along turbines 1-11 and in 2021 an acoustic bat survey was carried out over 20 days to determine levels of bat activity along the 22 turbine site in the late summer through to early autumn.
- 10.45 The bat survey confirmed that there were long-tailed bats present in the landscape. The bat passes recorded are presented in Mr Chapman's evidence. In his experience, relative to other areas, the results illustrate that there were low levels of bat activity across the currently consented 22 turbine site.
- 10.46 In undertaking the ecology effects assessment, Mr Chapman considers the significant decrease in the number of turbines proposed to 8 is a significant factor, with a reduction in linear space of the wind farm from approximately 6.5 kilometres to approximately 3.5 kilometres across the landscape, and the overall rotor swept area being reduced by 14%. This will lead to significantly reducing the impact on the flight paths of avifauna and long tailed bats that occupy the area relative to that currently consented wind farm.
- 10.47 The removal of turbines 12-22 in the southern part of the wind farm also avoids any potential effects on freshwater environments located there, including streams and wetlands and the fauna located within them.
- 10.48 Mr Chapman concludes that the effects on bat and bird activity from the variation proposal will be less than under the existing consented environment. I accept Mr Chapman's reasoned viewpoints and agree with his conclusion on effects.
- 10.49 Resulting from the discussion above, the obvious question is why is T4 proposing the amendment of any ecology conditions at all? The effects of the proposal are considered to be less than the consented environment and the NPSIB favours the development and operation of renewable electricity generation over consideration of indigenous biodiversity.
- 10.50 The answer to the above question is three-fold:
 - Much of the discussion regarding effects and appropriate conditions was undertaken and generally agreed during the period preceding the release of the NPSIB;

- The NPSREG still requires that offsetting measures or environmental compensation be considered, including measures or compensation which benefit the local environment and community affected, when considering any residual environmental effects of renewable electricity generation; and
- As recognised by Mr Chapman in his evidence, there have been changes to best practices since the original consent was granted and ideally, this should be incorporated into the existing consent conditions.
- 10.51 I will not reiterate in detail the conditions discussed in the evidence of Mr Chapman, but he agrees the "Effects of Wildlife" conditions (37 – 46) of the existing consent should address a number of matters, as set out in section 9.3 of his evidence. The draft amended conditions attached to this evidence (see Appendix 6) cover off all these matters and are generally consistent with those recommended in the Section 42A Report. From my comparison of the conditions appended to the Section 42A Report, there is a high degree on commonality between T4's condition and those recommended by Mr Dawson in his report. The main differences seem to relate to timing, administration and other minor matters.

Noise Effects

- 10.52 The original assessment was undertaken in accordance with NZS 6808:1998, which has since been superseded by NZS 6808:2010.
- 10.53 Noise effects have been assessed for the applicant by Michael Smith of Altissimo Consulting. Mr Smith modelled noise from both the original 22 x 60m (hub height) turbine layout and the initially applied for revised 11 x 95m (hub height) turbine layout using current best practices to compare the noise profiles of each option. This showed a reduction in sound level at all dwellings, particularly in the southern group, where the string of turbines 12 -22 has been removed. All predicted sound levels are below 30 dB which is more than 10 dB below the consented noise limit of 35dB L0. The one exception is the Martin dwelling at 32.4dB, still well below the consented noise limit. I note the Martins are not submitters to the application. Mr Smith's modelling results are as Table 3 below.
- 10.54 Mr Smith considers the scale of effects of the 8-turbine layout recently modified proposal with larger turbines to be the same as the 11-turbine layout so he has not undertaken additional modelling work.
- 10.55 The evidence of Mr Smith is that the variation proposal (11 or 8 turbines) will lead to noise effects that are less than the consented 22 turbine proposal. I note that

Council's noise specialist, Ms Wilkening agrees with Mr Smith's assessment, and both have agreed to the amended conditions recommended which are an updated suite of existing consented conditions to use the more 'modern' framework of NZS 6808:2010 which provide more certainty than the original conditions. T4 does not consider these changed conditions are required by the variation application but offers some changes as a basis of good practice (eg using the 2010 NZS instead of the 1991 standard), and using the Augier approach.

House ID	Owner	11x 95m turbines	22x 60m turbines	Difference
		NZS 6808:2010	NZS 6808:2010	
Northern dwellings				
22	Martin*	32.4 dB	32.5 dB	-0.1 dB
23	Froggat / Walsh	27.7 dB	29.4 dB	-1.6 dB
24	Stokes & Co	26.6 dB	29.3 dB	-2.7 dB
25	Stokes & Co	26.6 dB	29.4 dB	-2.8 dB
Southern dwellings				
13	Galbraith and Panapa	20.9 dB	29.6 dB	-8.8 dB
14	Knight	23.6 dB	30.8 dB	-7.2 dB
15	Mitchell	21.9 dB	29.4 dB	-7.5 dB
16	Mitchell, McMahon, Williams	21.1 dB	28.5 dB	-7.4 dB
17	Mitchell, McMahon, Williams	20.5 dB	27.9 dB	-7.5 dB
18	Gilbert S	18.4 dB	30.7 dB	-12.3 dB
19	Gilbert C&D	16.7 dB	30.9 dB	-14.2 dB
20	Gilbert C&D	16.9 dB	31.7 dB	-14.8 dB
21	Awamarino	18.1 dB	36.6 dB	-18.5 dB

10.56 For best practice reasons modified conditions apply limits on operational noise (condition 7), and require wind farm noise levels not exceed 40dB LA90(10 min) (condition 8). Prior to installation (condition 9) background noise level measurements need to be taken within the 30dBA noise contour. As wind farm noise levels are likely to be at a similar level to the existing background noise levels, measuring these before the wind farm is operational will assist in determining what is 'new' noise from the wind farm. This condition varies slightly from that suggested by Council reporting officers, who believe the background noise monitoring should be conducted prior to "development" of the wind farm. I agree with Mr Smith that background noise monitoring, to be a baseline for measuring turbine noise, need only occur prior to construction of those turbines.

- 10.57 A noise prediction report, based on the highest sound level, is to be provided to Council (condition 10). Also, the wind turbines are not permitted to have a sound power level of greater than 107.2 dB Lwa (condition 11). This condition anticipates changes to the turbine type and minor changes to their location, and provides the appropriate checks and balances that effects will remain as stated.
- 10.58 The other changed condition is condition 16 which gives greater specificity than the existing condition by requiring wind farm noise levels to be measured at all Assessment Positions where predicted noise levels were greater than 30 dB L_{A90}, with a compliance assessment report to be submitted to the Waitomo District Council.
- 10.59 Mr Dawson in the Section 42A Report has commented on the four submissions that raise noise as an issue. I concur with his assessment of them. Mr Smith also assessed a number of other noise effects raised including health effects, vibration, and effects on wildlife. He does not believe these effects are significant. In respect of construction traffic effects, the proposed scheme with fewer turbines is likely to result in a reduction in the number of trips per day and the duration and period of transportation thus leading to reduced overall transport noise compared with the existing consented environment.
- 10.60 Finally, submitters Chris Irons, Ray Irons, and the Knight household have expressed noise concerns in their submissions. Mr Smith's evidence is there is no material difference in the predicted sound levels for both Irons households between the application and the existing consented environment. The other submitter concerned about noise, the Knight household, will now, with the varied application, be over 3km from any turbines, and so the effects will be less than the consented windfarm.
- 10.61 I accept the advice of Mr Smith and conclude that the noise effects of the varied application will be less than the previously consented 22 turbine wind farm.

Transport

10.62 James Daly has provided a brief of transport evidence for T4, and Mr Dawson has also considered transport effects after feedback was received from Thato Mariti. Throughout the application and section 92 process many questions have been asked about the possible transport effects of the varied application compared with the existing consented environment.

- 10.63 Although the amended proposal provides for larger, longer, and heavier machines, it is anticipated that transportation will be easier, due firstly to technological advances in fabrication and transportation techniques and secondly because there are now less turbines proposed 8 instead of 22.
- 10.64 Nacelles can now be fabricated and assembled on site; towers, although heavier, can be made shorter to reduce weight when transported; although the blades will be significantly longer, cantilevered transporter vehicles were not available when the consent was first granted in 2006 their benefit to mobility is the ability to lift the blades on an angle to make it possible to navigate narrow corners (see photo of blade lifting unit in Figure 2 above).
- 10.65 It is not anticipated that any road widening over that already approved for the existing consent will be necessary, and this is also the case with the site access roads.
- 10.66 For the purposes of this consent application, the applicant is confident that access is achievable, subject to more detailed assessment and approvals being gained from the relevant Road Controlling Authorities.
- 10.67 I agree with Mr Daly that the variation proposal for the T4 will not increase the effects on the road network relative to the previously approved consent, due to improved transportation methods, the reduced numbers of turbines, and the numbers of component transporters (and concrete and aggregate trucks) being reduced, regardless of the increased size of the transporters.
- 10.68 The Section 42A Report sets out a number of matters that will need to be resolved if consent is granted – I agree these are all matters which can be dealt with by the consent conditions contained in the original consent, and in my opinion these same conditions are still relevant to the varied consent now applied for. I note that any use of public roads to access the wind farm site must first gain prior approval from the relevant Road Controlling Authority – in this proposal NZTA and Waitomo District Council. Over-dimension and over-weight permits will be required from both authorities, and also from Kiwirail and Lines Companies. Accompanying such applications will be detailed assessment of the preferred route, including swept path analysis of track and trailer tracking, road closures necessary, timing etc.
- 10.69 Although I agree that the same conditions are appropriate, the Section 42A Report has highlighted one that needs to be reviewed. This is condition 26 which currently requires a bond of \$86,000 be paid to Council to secure ongoing maintenance of

Waitomo District Council roads and bridges utilised for transportation of materials. Mr Dawson invites the applicant to comment on the quantum of this sum.

10.70 The quantum of the bond has been considered in Mr Starr's evidence:¹

The Section 42A Report has proposed that the bond amount for road maintenance be updated to reflect inflation. The appropriate amount taking into account the Producer Price Index of 3% over 15 years is \$134,000 calculated as follows: $86,000 \times 1.03^{15} = $134,000$. I agree with the inclusion of this revised amount in condition 26.

10.71 A number of the submitters raised concerns about traffic matters, the impacts of trucks on local roads, and general lack of detailed traffic and maintenance plans. As stated above the variation proposal will not increase the effects on the road network relative to the previously approved consent – in fact in my view the effects will decrease. I am confident, apart from updating the bond in condition 26, that all other conditions (18-28) do not need any modification to deal with effects.

Aviation

10.72 I have read Mr Dawson's assessment of aviation effects and agree with his conclusion. In preparing the AEE I am advised the Civil Aviation Authority has instructed that the increased turbine height will require notification to them and a new determination needs to be applied for and issued. Condition 33 has therefore been modified to require a determination from the Civil Aviation Authority authorising the construction of the windfarm to its maximum height, and this is to be supplied to the Council for certification. Condition 34 is slightly modified to identify which turbines need to have lights – 1, 5 and 10. Mr Starr has confirmed that he has applied for this determination and is awaiting the authorisation.²

Geotechnical Stability

10.73 The reduction in the amount of roading now needed on the site and the reduced number of turbine platforms will in my opinion reduce the potential for geotechnical effects. Existing condition 36 will still apply to the project, so subsurface geotechnical investigation and engineering geological mapping for the wind farm to ensure the sites are geotechnically feasible is still required, and the results and detailed design must be approved by the relevant Council manager.

¹ At para 11.6

² At para 12.2

Positive effects

10.74 Mr Starr has set out the many positive effects of construction of the wind farm in his evidence. I accept his advice and agree there will be positive effects of constructing a wind farm at this location. In addition, the reduction of the number of turbines from 22 to 8 will bring increased positive effects compared to the existing consented proposal. Many of these have been discussed in the assessment of effects discussions in the paragraphs above in section 10.

Effects Summary

- 10.75 Overall, the actual and potential effects of the amended proposal will be positive compared to the consented proposal. Although taller structures may have some localised increased effects, the reduced number of structures will lead to less disruption on roads, less tracking required, less visible physical turbine structures than the 22 consented project and reduced effects upon local ecology. This is overall a positive effect.
- 10.76 In addition, in my opinion there are no new or different effects created by the change of conditions application, overall, just less effects. The application is not materially different in nature to the existing consented environment.

11. ASSESSMENT OF RELEVANT PLANNING PROVISIONS

- 11.1 I undertook an assessment of relevant planning provisions in the AEE and so the following repeats some of that assessment.
- 11.2 There are a number of policy documents that must be considered in assessing this variation proposal. I consider each in turn, but the assessment is restricted to objectives and policies relevant to the change of conditions of resource consent.

National Policy Statement for Renewable Electricity Generation 2011

- 11.3 The relevance of the NPSREG to the project has previously been partly discussed in my evidence at 10.33 onwards above in respect of ecology and that is not repeated here but referred to. I carried out an assessment of the NPSREG in the AEE and for ease of reference I have repeated it in this evidence.
- 11.4 The NPSREG has the following Objective:

To recognise the national significance of renewable electricity generation activities 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 generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

11.5 The proposed wind farm, providing renewable energy, gives effect to the Objective. Relevant policies to the proposal include:

POLICY A

Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. These benefits include, but are not limited to:

a) maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;

b) maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;

c) using renewable natural resources rather than finite resources;

d) the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;

e) avoiding reliance on imported fuels for the purposes of generating electricity

11.6 "Recognise and provide" is a high level of obligation for decision-makers under the RMA. Renewable electricity, such as is proposed at Taumatatotara is of national significance. It will help reduce greenhouse emissions, increase national electricity supply, and provides the benefits set out in the Policy.

POLICY B

Decision-makers shall have particular regard to the following matters:

c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.

11.7 The Government's national target is for the renewable electricity target to be 100% renewable electricity by 2030. In 2023, 87% of the electricity generated in New

Zealand came from renewable sources³. The proposal will assist in meeting the Government's target.

POLICY C1 Decision-makers shall have particular regard to the following matters:

a) the need to locate the renewable electricity generation activity where the renewable energy resource is available;

b) logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;

c) the location of existing structures and infrastructure including, but not limited to, roads, navigation and telecommunication structures and facilities, the distribution network and the national grid in relation to the renewable electricity generation activity, and the need to connect renewable electricity generation activity to the national grid;

Again, the proposal has had regard to this policy – wind monitoring indicates the resource is available, it is a reasonably remote site, and supporting infrastructure – connection to the national grid in particular, but also road access is available. Overall, the variation proposal the subject of this application will assist in achieving the policy direction set out in the NPSREG.

E. Incorporating provisions for renewable electricity generation activities into regional policy statements and regional and district plans

E3 Wind resources POLICY E3 Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance and upgrading of new and existing wind energy generation activities to the extent applicable to the region or district.

11.9 The Waikato Regional Policy Statement incorporated the NPSREG 2011 in May 2016.

³ Ministry of Business, Innovation & Employment

National Policy Statement for Indigenous Biodiversity 2023

11.10 As set out in 10.32 onwards above, the NPSIB is relevant for the reason it specifically⁴ does not apply to the proposal. I am not privy to the reasons why this provision was added to the NPSIB, but I assume it is because of the high priority given renewable energy projects to assist the country to achieve renewable energy and climate change targets and the extent to which the NPSREG policy C2 directs management of residual environmental effects.

Waikato Regional Policy Statement

Energy

11.11 With reference to energy, the Waikato RPS reflects the NPSREG.

Objective EIT-01 Energy:

Energy use is managed, and electricity generation and transmission is operated, maintained, developed and upgraded, in a way that:

a) increases efficiency;

b) recognises any increasing demand for energy;

c) seeks opportunities to minimise demand for energy;

d) recognises and provides for the national significance of electricity transmission and renewable electricity generation activities;

e) recognises and provides for the national, regional and local benefits of electricity transmission and renewable electricity generation;

f) reduces reliance on fossil fuels over time;

g) addresses adverse effects on natural and physical resources;

h) recognises the technical and operational constraints of the electricity transmission network and electricity generation activities; and

i) recognises the contribution of existing and future electricity transmission and electricity generation activities to regional and national energy needs and security of supply.

⁴ Section 1.3(3) NPSIB

- 11.12 The T4 varied proposal will lead to increased efficiency by constructing larger, more productive turbines while reducing the environmental effects. The project recognises that demand for electricity energy is increasing, particularly in the top half of the North Island. Provisions of renewable energy is clearly a matter of national significance and the T4 project will provide national, regional, and local benefits – for example increase electricity supply, provide for local employment during construction. The proposal will certainly assist in reducing reliance on fossil fuel, and the assessment of effects above demonstrates the variation will have less effects on natural resources than the consented wind farm. The proposal contributes positively to the achievement of all the components of this objective.
- 11.13 The main direction is provided in the Objective, although the policies are consistent with the direction provided above so an evaluation of them is not needed.

Tangata Whenua

11.14 The relationship of Maori with the environment is also recognised in the RPS:

3.9 Relationship of tangata whenua with the environment

The relationship of tangata whenua with the environment is recognised and provided for, including:

a) the use and enjoyment of natural and physical resources in accordance with tikanga Māori, including mātauranga Māori; and

b) the role of tāngata whenua as kaitiaki.

11.15 As outlined in section 10.3 onwards significant effort has been made to engage with Ngaati Mahuta ki te Tai Hauāuru, and to ensure any cultural concerns they have with the project will be appropriately dealt with.

Landscape, natural character and amenity

11.16 The Waikato RPS also contains objectives and policies for landscape, natural character and amenity. However, landscape seeks to (Objective 3.20) identify and protect outstanding natural features and landscapes from inappropriate subdivision, use and development. The T4 site is not within one of those areas set out as Outstanding Natural Features or Landscapes in the RPS, and thus the policies are also not relevant in this case. Further, on assessing the RPS maps there are no such features within 10km of the site.

- 11.17 Similarly, Objective 3.22, Natural character, seeks to protect the natural character of the coastal environment, wetlands, and lakes and rivers and their margins from the adverse effects of inappropriate subdivision, use and development: the T4 site does not have any adverse effects on the coastal environment, wetlands, and lakes and rivers and their margins.
- 11.18 In respect of Objective 3.21, Amenity, the qualities and characteristics of areas and features, valued for their contribution to amenity, are to be maintained or enhanced. This Objective is to be achieved though Policy 12.3, which requires that areas of amenity value are identified, and those values are maintained and enhanced. These may include:
 - a) areas within the coastal environment and along inland water bodies;
 - b) scenic, scientific, recreational or historic areas;
 - c) areas of spiritual or cultural significance;
 - d) other landscapes or seascapes or natural features; and

e) areas adjacent to outstanding natural landscapes and features that are visible from a road or other public place.

- 11.19 Only d) above could be considered relevant in some way, but the landscape and visual assessment in section above is that any effects are already created by the existing consent approved in 2011.
- 11.20 In summary, the proposal to provide for renewable generating capability at Taumatatotara is consistent with the energy provisions of the Waikato RPS. The other policies of the RPS have been reviewed and the proposal is not inconsistent with them. However, compared with the 22 turbine consented wind farm, the advice from Mr Moore is that the effects of the reduced number of turbines upon landscape, natural character and amenity values will be significantly less.

Operative Waitomo District Plan

11.21 The Waitomo District Plan has not been amended to incorporate objectives, policies and rules to provide for the development, operation, maintenance and upgrading of new and existing wind generation activities as required in Section E3, Policy E3 of the NPSREG. Nor has it been updated to reflect the NPSIB.

11.22 The wind farm is proposed in the Rural Zone. The following Objectives and Policies have been assessed as having relevance to the changes in the height of the wind turbines as applied for in this application.

Objectives

11.3.1 To promote the Rural Zone as a productive working environment where the use and development of its natural resources, consistent with meeting environmental safeguards, is encouraged.

11.23 The changes proposed in this application will not lead to any reduction in the rural working environment. If anything, the project will enhance it by providing improved access to the wind farm area through improved roads, and by providing greater and additional source of productivity to the land without affecting the existing productivity.

11.3.7 To promote efficient and effective management of the District's physical resources of roading, land drainage, and bulk services.

11.24 The Council, as the Road Controlling Authority for its district, will require upgrades to roads, particularly Te Anga Road and Taumatatotara West Roads, to accommodate the longer and heavier towers, turbines and nacelles provided for in this application. This is an efficient means of providing for upgrades, and will contribute to increased and more efficient use of the district's road resource. Note however that there will be significantly less turbine componentry, leading to less disruption on public roads.

11.3.8 To promote use of rural land in a manner which encourages maintenance and enhancement of amenity values of the rural environment, protects outstanding natural features and landscapes from inappropriate use and development, and preserves the natural character of the coastal environment, wetlands, lakes and rivers, and their margins.

11.25 There are no outstanding natural features or landscapes in the wider vicinity of the proposed wind farm. The landscape assessment accompanying this application has demonstrated the changes to the tip heights of the turbines, when compared to the consented existing environment (22 x 121.5m tip height turbines) will have impacts upon landscape character values that overall are positive. Therefore, it is concluded that the amenity values of this rural environment will be maintained by the proposal.

35

11.26 The visual landscape assessment carried out to examine the impact of this amended proposal concludes that the difference between the consented existing environment and the proposed turbines – 180.5m in height – will overall be positive due largely to the reduced number of turbines to 8.

11.3.11 To ensure that rural activities and lawfully established industrial activities in the rural area are not adversely affected by the location of new activities with expectations of high amenity values.

- 11.27 The proposed varied wind turbine proposal, is assessed as having less effects on existing physical resources such as roads. Conditions of consent will also ensure T4 will be required to maintain the standards when using roads that ensure other legally established rural activities are not adversely affected.
- 11.28 There is a Landscape Policy Area which is an "overlay" Policy Area covering land in two parts of the District; the Waitomo Caves locality and the Mokau-Awakino coastal area. The T4 site is not included in this area. So, there are no relevant district landscape objectives, polices or rules that apply to the site.

Section 104(1)(c) - Other matters

- 11.29 In accordance with s104(1)(c) the decision maker must have regard to any other matter it considers relevant and reasonably necessary to determine the applications. Several such matters are highlighted below.
 - (a) New Zealand Energy Strategy 2011–2021
 - (b) Emissions Reductions Plan 2022 which sets a target of 50 per cent of total final energy consumption to come from renewable sources by 2035;
 - (c) Transpower's 2018 long-range planning report called "Te Mauri Hiko, Electricity Futures";
 - (d) The Climate Change Response Act as amended by the Climate Change (Zero Carbon) Amendment Act 2019 to set a domestic greenhouse gas emissions target for NZ to reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050.

- 11.30 These documents outline the higher-level strategic goals identified for New Zealand in achieving its goals for renewable energy.
- 11.31 I consider that the application contributes to giving effect to them by facilitating the development of the site as a wind farm.

12. RESPONSES TO COUNCIL SECTION 42A REPORT

- 12.1 I have read the Section 42A Report prepared by Mr Dawson, and the technical assessments which advise him. Overall, I am in agreement with his recommendation that the application is acceptable, subject to some issues being resolved. I consider Mr Moore in his landscape evidence for the applicant has satisfied the landscape concerns Mr Mansergh has with the assessment. T4 now has an agreement with Ngaati Mahuta ki te Hauāuru which resolves their concerns. Ngaati Mahuta ki te Hauāuru have written to the Council advising that they support the project subject to the inclusion of conditions of consent.
- 12.2 However, I do not agree with some of Mr Dawson's proposed ecology conditions, which I have either significantly modified, or deleted. Although on the basis of best practice I agree that changes to some of the ecology conditions are beneficial and T4 has agreed to change them, some of the Section 42A Report's proposed conditions are not related to any adverse effects. Regardless T4 offers some ecology conditions according to the principle of Augier.
- 12.3 There are two reasons why I am hesitant to accept some of Mr Dawson's proposed ecology conditions which I believe are too onerous firstly the effects of the variation are in my assessment positive, and so more onerous conditions are not warranted. Secondly, he has not factored into his assessments the direction provided by the NPSIB in relation indigenous biodiversity and renewable energy projects. These factors exclude the imposition of more onerous conditions to implement the effects management hierarchy.

13. PART 2 MATTERS

13.1 The Operative Waitomo District Plan was approved in 2008. In terms of the Court of Appeal's Davidson decision it would be inappropriate to not fully assess the application against Part 2 matters, because the District Plan preceded Davidson. Therefore one cannot assume the Plan is consistent with higher order documents as it predates nearly all of them. I have therefore carried out a full Part 2 assessment.
6. Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

(f) the protection of historic heritage from inappropriate subdivision, use, and development:

- (g) the protection of protected customary rights:
- (h) the management of significant risks from natural hazards.
- 13.2 The proposal is not in the coastal environment, and there are no outstanding natural features on or close to the properties where the varied wind farm will be located. Although the NPSIB excludes renewable electricity generation projects from considering biodiversity matters, (c) above has relevance to the project. No indigenous vegetation will be removed as part of the project.
- 13.3 Monitoring plans will be submitted to the Council prior to commissioning of the first turbines in order to better understand if there are significant bird and bat habitats in the areas surrounding the wind farm. However, the variation will have the biggest positive effect on habitat by the removal of 14 turbines completely. Further turbines will be removed from near two streams which are known to attract birds

and bats. Overall, the assessment is that the variation application will have less effects on habitats.

13.4 The relationship with Maori and their culture and traditions has been discussed in the Cultural Effects section above. Public access is not affected; there will be no increase in natural hazards.

7 Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

(a) kaitiakitanga:

(aa) the ethic of stewardship:

- (b) the efficient use and development of natural and physical resources:
- (ba) the efficiency of the end use of energy:
- (c) the maintenance and enhancement of amenity values:
- (d) intrinsic values of ecosystems:
- (f) maintenance and enhancement of the quality of the environment:
- (g) any finite characteristics of natural and physical resources:
- (h) the protection of the habitat of trout and salmon:
- (i) the effects of climate change:

(j) the benefits to be derived from the use and development of renewable energy.

- 13.5 The relevant provisions are firstly (a) Kaitiakianga as the feedback of Mana Whenua is important in achieving this outcome, T4 has now received the support of Ngati Mahuta.
- 13.6 (ba) is relevant the proposal seeks to make more efficient use of the energy resource as the turbines in the proposal will be longer and will more efficiently capture energy from wind, whilst reducing environmental effects. (d) the intrinsic values of ecosystems will not be impacted by the variation proposal and the

assessment in this evidence is that there will be positive effects from the proposal. (i) – the effects of climate change will be lessened by the development of 'clean' energy resource without carbon emissions; (j) – this project is aimed at the development of renewable energy.

8 Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

13.7 There are no known Treaty of Waitangi issues with the proposal. These have not for example been raised in any submission from the various parties, including Mana Whenua.

5 Purpose of the Act

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

13.8 I consider the proposal will promote the sustainable management of natural and physical resources. The reduction in the number and location of turbines will reduce overall effects on the environment – this contributes to sustainable use of resources compared to the consented environment. The proposal will utilise a sustainable resource – the wind – and the proposal will increase the use of this resource. Existing natural and physical resources will still be able to utilise the natural and physical resources - land and soils, roads etc, for farming, and

conditions applied to the consent will safeguard air, land, soil and ecosystems. The effects on the environment of increasing turbine height are low because the number of turbines has been significantly reduced.

13.9 In my opinion the application to vary the existing consent to provide for less, albeit taller turbines is consistent with sections 6 to 8 above. The proposal overall in my opinion meets the purposes and principles of the RMA.

14. STATUTORY CONCLUSION

14.1 Regard has been had to the relevant planning provisions and the proposal has been assessed overall as being consistent with and not contrary to those provisions and in particular to the NPSREG, and also the Waikato Regional Policy Statement and the objectives and policies of the relevant plan – the Waitomo District Plan. Compared with the existing consented environment, overall, the proposal is consistent with the relevant provisions as assessed under section 104 (1)(b) and (c) of the RMA.

15. PROPOSED CONDITIONS

- 15.1 I have attached a set of conditions to this evidence as Appendix 6.
- 15.2 T4 has held discussions with Council over conditions to be varied and applied to the consent. Most of the changes in Appendix 9 of the Section 42A Report have been agreed. Some of these reflect the updated physical presence of turbines -8 turbine instead 22, and higher tip heights. Some reflect best practice, eg the modifications to the noise conditions and some of the ecology conditions, and the Air Safety conditions needs to reflect the new Civil Aviation authority needed.
- 15.3 As I have stated in section 12 above in responding to the Section 42A Report, there are still differences in the ecology conditions which we have not yet had the time to resolve. I anticipate that we will resolve most of these before the hearing. I anticipate forwarding to the Commissioner a revised set of conditions after further discussions with Council staff prior to the hearing. If there are still any differences, they can be highlighted for hearing participants

Appendix One:	WRC earthworks consent
Appendix Two:	Existing resource consent conditions
Appendix Three:	Site Plan
Appendix Four:	Ngaati Mahuta ki te Hauāuru Response 2021
Appendix Five:	Iwi consultation summary
Appendix Six:	Proposed resource consent conditions
Appendix Seven:	Iwi Effects Assessment Conditions

Appendix 1

Combined s95 Non Notification and s42a Planning Report for Resource Consent

Applicant:	Taumatatotara Wind Farm Lin	Taumatatotara Wind Farm Limited		
Address of Site:	Taumatatotara West Road, Te	Taumatatotara West Road, Te Anga		
Application Number:	APP141827	File No.:	61 34 30A	
Project Code:	RC25287	Application document:	16340543	

1 PROPOSAL

Taumatatotara Wind Farm Limited has made an application for resource consent to undertake earthworks totalling approximately 259,000m3 of soil disturbance associated with the construction of roading and platforms for a wind farm at Taumatatotara West Road, Te Anga at or about NZTM 1756000 E 5768000 N as identified on Figure 1 below.

The activities to be considered are as follows:

Reference Id	Activity Subtype	Activity Description
AUTH141827.01.01	Land - disturbance	Undertake earthworks totalling approx. 200,000m3 of soil disturbance associated with the construction of tracks

This report assesses the application, the potential environmental effects and the relevant planning provisions in the Resource Management Act 1991 and Waikato Regional Council policies and plans. The report recommends whether to process the consent with or without notification and whether consent(s) should be granted.



Figure 1: Aerial photo of site location & surrounds



2 BACKGROUND

Earthworks associated with the construction and development of 22 windfarm turbines was granted consent in 2008.

"Shortly after the consents were granted, wholesale electricity market slumped, largely due to the economic downturn associated with the global financial crisis, which made the project uneconomic. In recent times the electricity market has improved and, in association with larger turbine rotors which reduce the cost of energy, wind farms are now a viable alternative to other forms of electricity generation. Larger turbines capture greater energy from the wind for a disproportionately small increase in capital cost."

The earthworks consent expired and in 2013 Taumatatotara Wind Farm Limited applied for another similar earthworks consent. This consent application has been on hold since 2013. In 2020 Taumatatotara Wind Farm Limited submitted more information to proceed the application but for a smaller windfarm – 11 wind turbines. The environmental effects of the earthworks have been determined by the applicant to be less than in the original proposal. The most recent information submitted for the smaller scale proposal being assessed in this report is being treated as a new application.

3 SITE AND PROPOSAL

The proposed windfarm site is 10km south of Taharoa Village and above the Taumatatotara Gorge in the Waitomo District. It is located on farms owned by three separate landowners.

Below is a description of the site as described in the application documents:

"The site and the adjacent hills generally have very defined but level ridgelines with steep slopes on the flanks, particularly on the southern side. The local peak to the northern end of the site has an elevation of 340m with the remainder of the site ranging between 300m and 320m at the southern end. The gradient of the construction site is moderate to steep with slopes generally between 1 in 20 and 1 in 5. The site is currently used for grazing cattle and sheep with a very small plantation of radiata pines at the location of turbine 7. Further details on the site's slopes can be seen in Attachment 2."

The proposal is to undertake bulk earthworks associated with the development of 11 turbine sites and associated tracking needed to access those sites.

There are to be two access points into the site, both from Taumatatotara West Road. An access road 2.03 km long will be formed to the north, serving turbines 1-6. Turbine 7 can be accessed via a short track directly off Taumatatotara West Road. Turbines 8-11 are accessed via a 2.1km road heading south. These roads generally follow existing farm tracks. The roads will be 6m wide to allow for large machinery such as mobile cranes and transporters.

The application provides a Road Construction Methodology which can be seen on pages 7 and 8 in section 3.3.

The wind turbines foundations will be constructed from reinforced concrete and will be 2.5m to 3.5m below ground surface. Retaining walls may be required to support cut faces where steep batters are required. The design life of the turbines is based on 50 years.

The method of transportation of the turbines has been amended from the previous application. The new application document proposes:

"In relation to movement of the turbine components, there are three distinct types with each having their own criticality:

- Nacelle heaviest (and bulky)
- Tower Sections bulkiest
- Blades longest

The basic outcome from the analysis on new transportation methods is:

- Nacelles can now be easily split into components to reduce size and weight.
- Tower Sections are made with thicker steel and shorter lengths to keep the diameter low and the weight manageable.
- Blades can be transported with a specialist cantilevered transporter system to allow the blades to negotiate tight corners see photograph in Figure 2 below. This modern trailer unit will therefore minimise roadside cuts such as identified in previously consented proposals.

These improvements will lead to reduced loads on the roading network, thereby reducing potential for instability, and easier movement around tight corners."

An underground cable network will also need to be installed during development of the windfarm. Interconnecting cables will be laid underground following the road alignment. This will be done using a specialised cable laying machine. The cable laying is part of this application and earthworks for the interconnecting cables will be incorporated into the erosion and sediment control plan.

The application documents suggest that the development of the wind farm will be constructed at one time and during one earthworks season.

A final location of the wind turbines has not yet been confirmed. I recommend a requirement to finalise the location of the turbines and submit to WRC before works commence, to be added into the condition set.

Taumatatotara Wind Farm Limited hold a Land Use consent from Waitomo District Council (WDC) which was granted in 2008. A lapse date extension was applied in 2016 for a further 8 years. This consent expires in 2024.

The applicant has also lodged an application with WDC for a change in conditions for the active consent it holds from WDC. At the time of writing this report, the change in conditions application with WDC is still being processed.



Figure 2: Indicative location of turbines

4 STATUS OF ACTIVITIES UNDER THE PLANS

The application has been assessed against the Waikato Regional Plan (WRP) as follows:

• AUTH141827.01.01 is assessed as a Discretionary under Rule 5.1.4.13 of the Waikato Regional Plan

5.1.4.13 Discretionary Activity Rule – Soil Disturbance, Roading and Tracking and Vegetation Clearance

- 1. Any soil disturbance, roading and tracking, and vegetation clearance and any associated deposition of slash into or onto the beds of rivers and any subsequent discharge of contaminants into water or air that does not comply with the conditions of Permitted Activity Rule 5.1.4.11;
- 2. Soil cultivation within two metres of the bed of a river or lake that does not comply with Rule 5.1.4.12;

are discretionary activities (requiring resource consent).

Advisory Notes:

- District plans may have rules, which restrict land disturbance and vegetation clearance in areas outside of high risk erosion areas.
- Information requirements to enable the assessment of any application under this Rule are set out in Section 8.1.4.1 of this Plan. In addition, assessment shall also take into account the matters identified in Policy 1 of Section 5.1.3.

The provisions of section 104B and 105 of the Act which are relevant to the determination of applications for discretionary activities, also apply.

5 PROCESS MATTERS

The resource consent application was accepted on 8/05/2020. The application was put on hold for the following period:

The application was placed on s92(1) request for further information hold from 21 May 2020.

The applicant supplied the further information on the 24th July 2020.

The information was accepted on the 3rd August 2020 and the application was taken off hold on this date and continued to be processed.

The application was placed on hold under s37 of the Act for draft condition review. The timeframe for processing the application was extended from the 7th August 2020 to the 20 August 2020.

6 ASSESSMENT FOR THE PURPOSE OF NOTIFICATION

6.1 Adequacy of information

It is my opinion that the information contained within the application is substantially suitable and reliable for the purpose of making a recommendation of and decision on notification. The information within the application is sufficient to understand the characteristics of the proposed activity as it relates to provisions of the Regional/Coastal Plan, for identifying the scope and extent of any adverse effects on the environment, and to identify persons who may be affected by the activity's adverse effects.

6.2 S95A: Determining whether the application should be publicly notified

Step 1(a): Has the applicant requested public notification? (s95A(3)(a))

The applicant has not requested public notification.

Step 1(b): Is there further information to consider? (s95A(3)(b))

The applicant has not failed to respond as statutorily required to a further information request (s92(1))or to the commissioning of a report (s92(2)) under s95C.

Step 2(a): Is there a Rule or NES that precludes public notification? (s95A(5)(a))

There are no rules in the Regional Plan or national environmental standard relevant to this proposal that preclude public notification.

Step 2(b): Is the activity for one or more <u>controlled activity</u>, or "<u>residential activity</u>" under the Regional Plan? (s95A(5)(b)(i) and (ii))

The activity is not for a controlled activity or "residential activity" which is a discretionary or restricted discretionary activity under the Regional Plan.

Step 3(a): Is there a rule or NES that requires public notification? (s95A(8)(a))

There are no rules in the Regional Plan or national environmental standard relevant to this proposal that require public notification.

Step 3(b): Will the activity have adverse effects on the environment that will be, or are likely to be, more than minor? (s95A(8)(b))

In forming this opinion (a) to (e) are assessed as below.

- (a) There are no persons on which effects can be disregarded. (s95D(a)
- (b) There are no rules in the Regional Plan or national environmental standard relevant to this proposal that permit an activity with this effect. (s95D(b))
- (c) There are no restricted discretionary activities for which effects must be disregarded as the effect does not relate to a rule in the Plan or NES which restricts discretion.(s95D(c))
- (d) There are no trade competition effects to be disregarded (s95D(d))
- (e) There are no persons who have given written approval (s95D(e))

The assessment below considers adverse effects on the environment that are potentially more than minor.

Table 2: Potential Adverse Environmental Effects Assessment

Erosion and sediment control: Construction works at the proposed site will result in areas of soil becoming exposed and therefore vulnerable to erosion. Steeper parts of the site are particularly prone to erosion and subsequent instability. Without appropriate erosion and sediment control, the earthworks and vegetation clearance phase of the development may result in significant discharge of sediment into receiving waterways.

A s92 further information request was issued to the applicant to provide further details on the erosion and sediment control on site. The applicant provided two erosion and sediment control plans (one for turbines 1-6 and one for turbines 7-11 – WRC doc#16933196 and #16931482 respectively) and an erosion and sediment control report (WRC doc#16932982).

Kerry Pearce (Land Management Consultant) provided a technical review of the erosions and sediment control documents which I have relied on for this assessment. His technical assessment can be found in WRC doc #16949686.

Mr Pearce's summary states:

"Overall, the applicant's proposed erosion and sediment control methodology is considered to be appropriate for the scale of earthworks to be undertaken provided the above information is provided and certified by WRC prior to the commencement of earthworks. Provided that all erosion and sediment controls are constructed and maintained in general accordance with WRC Guidelines, it is considered that sediment laden flows will be treated to an appropriate standard prior to being discharged off site.

It is also considered that provided the conditions of consent are complied with the resulting effects on the environment from sediment discharges during the earthworks will be appropriately managed. Recommendations to ensure this is the case have been included in this memorandum.

In principle, the overall proposed earthworks and erosion and sediment control methodology is generally appropriate for this site."

Based on the technical review Mr Pearce has provided, I recommend conditions requiring a final erosion and sediment control plan, a flocculation management plan, and an earthworks construction management plan.

I rely on Mr Pearce's review of the application and further information in a technical capacity and

consider, provided the earthworks and construction align with what is submitted in the application and supporting documents, that the effects of erosion and sediment control will be less than minor.

Dust Management: In the joint hearing report prepared by Peter Stevens (Environmental Consultant, PS Environmental Services) in 2014 an assessment of dust emissions has been documented. I consider that there are no changes in the effects of dust emissions from the 2004 assessment of the application compared to the assessment being undertaken in this report. This is due to the minimal change in the proposal other than the scale of the site (i.e 22 turbines is now proposed as 11 turbines).

I therefore have adopted the assessment from the 2004 joint hearing report (WRC DOC# 1059635):

"At earthworks sites, where areas of vegetation have been cleared, there is potential for significant exposure of the soil surface, which in turn can lead to the discharge of dust beyond the boundary of the work site. The risk and severity of dust generation and movement is determined by the influence of factors such as wind velocity, the moisture content of the soil, the percentage of fine soil particles, and the roughness of the soil surface (McClaren and Cameron 1996). Vehicle movements over dry bare soil surfaces can also generate nuisance dust emissions.

Adverse effects associated with the emission of dust relate to:

- Potential health effects from breathing in dust particles;
- Soiling and amenity effects. Dust discharges can deposit on surfaces such as cars, window ledges
 and household washing. For most people the primary effect of dust nuisance is annoyance at the
 increased requirement for cleaning;
- Visibility effects. These effects are largely related to aesthetics and are usually only of concern in the immediate area of a specific activity;
- Effects on vegetation. Excessive dust deposits can adversely effect vegetation through reduced photosynthesis due to reduced light penetration through the leaves, increased incidence of plant pests and diseases (i.e. dust deposits can act as a medium for the growth of fungal disease), and reduced effectiveness of pesticide sprays due to decreased penetration.

In my opinion the adverse effects at the proposed site, relating to the emission of dust, will be minor for the following reasons:

- *i.)* The proposed development site is relatively isolated from nearby dwellings and built up areas.
- ii.) The mitigation measures proposed by the applicant including minimising the area of bare soil exposed as well as retaining as much vegetation as possible and replanting throughout the site, will help to reduce emissions.
- iii.) A series of conditions are recommended, which will help to avoid and/or minimise dust emissions at the site."

I agree with the above assessment and conclude that if resource consent conditions are complied with the effects of dust emissions will be no more than minor.

Effects on Indigenous Vegetation: The vegetation at the sites chosen for the wind turbines consists entirely of exotic pasture. The primary impact on vegetation from the proposal involve the upgrading of the access road. The existing area is currently heavily grazed heavily by stock, and contains only common species, almost all of them exotic according to the 2004 joint hearing report.

As the proposed road realignments follow the existing formed roads, effects on wildlife habitat and corridors for species with large home ranges is likely to be minor. Therefore, effort toward fauna habitat replacement is not considered to be necessary provided no nesting or roosting sites of

threatened species are found within the extension footprint during construction.

Machinery bought in from other areas increase the risk of new exotic weed species establishing in the area. Therefore, it is critical that all machinery is thoroughly cleaned before it is bought on site to remove any attached seed or plant matter. Ensure all machinery is thoroughly cleaned before being allowed on site to prevent the introduction of weeds.

Provided consent conditions are adhered to, I consider these effects would be no more than minor.

Effects on Waterways: No significant streams or wetlands would be directly affected by the proposed wind turbines or public road realignments. All the waterways in question are small, upper catchment, ephemeral and significantly impacted by agricultural practices.

A drainage channel will be formed between the toe of the uphill batter and the edge of the road. This will intercept any rainwater runoff, which will then be directed under the road via appropriately sized pipes or culverts into channels where available.

As the roading will be near to the main ridgelines, catchments serving the culverts will be small, and generally less than 0.5 ha. The culverts have been identified as a permitted activity.

However, there is still a risk that sediments from road works and turbine site construction could enter waterways and adversely affect aquatic macroinvertebrate or fish and their habitats downstream of the proposed works. Provided good practice silt control techniques are implemented during construction, these effects would be no more than minor, and appropriate resource consent conditions would ensure that these measures are implemented.

Further discharges to waterways could result from construction material, lubrication fluid or fuel spillage from machinery. In order to minimise the likelihood of discharges of this nature, I recommend that no refuelling of machinery occur near surface water or drainage systems.

Tangata Whenua values: The application states the following:

"In respect of Iwi, their issues were canvassed at the 2008 hearing (Joint hearing with Waitomo District Council). A representative of the Maniopoto Iwi Trust Board attended the hearing, as did a representative of the Marakopa Marae. Both generally supported the application. At that time Ventus agreed that a representative of Iwi would monitor the construction phase of the project and Ventus supports this still occurring. Ventus Energy supports appropriate conditions being applied if there are any cultural issues encountered on the project – for example an accidental discovery protocol applied in the event of any remains of significance being discovered during the earthworks phase."

I had requested in the s92 further information letter for any further communication about the updated proposal to be submitted to council as part of the application process.

Maniapoto representatives were contacted and sent the application documents to review. Maniapoto responded with the following:

"Further to our discussion, Ngā Tai o Kāwhia are neutral towards the application as presented providing that there are appropriate conditions to:

- 1. Manage environmental effects, including discharges to air, land and water, sediment and erosion controls, so that these effects will be less than minor.
- 2. Manage accidental discoveries of wāhi tapu and archaeological sites.
- 3. Invite at least two tāngata whenua representatives to monitor the construction phase of the project, including appropriately resourcing those representatives."

Although there are no wahi tapu sites/archaeological sites in the vicinity, I recommend including a condition around the accidental discovery protocol and a condition that supports a representative of the Iwi groups being able to monitor the on-site works and accommodate for management of the environmental effects as proposed by iwi.

I consider, if conditions are complied with, that effects on Tangata Whenua Values will be less than minor.

Geotechnical Effects: The application document provides a geotechnical review for the proposed windfarm. They have concluded:

"This inspection has indicated many proposed turbine sites are located in close proximity to slopes affected by creep/ground movement on the basis of the walkover inspection and desktop study. All sites are considered geotechnically feasible and will require specific assessment at detailed design stage.

Setbacks will be needed from the steeper slopes. Foundations are likely to consist of a variety of large pad and piled systems. Some sites are likely to require inground protection walls. Specific subsurface investigation will need to be undertaken at each of the sites.

The access route to the site appears adequate, though may need to be locally widened. Such works are envisaged to be relatively minor.

A suitable aggregate could be sourced from a quarry north of the subject site."

As the exact locations of each turbine platform are yet to be determined, I recommend that a Land Stability Plan is prepared by a suitably qualified geotechnical engineer and submitted to the council prior to works commencing. The Land Stability Plan will include detailed geotechnical investigations for each turbine site and any required earthworks as well as for the stability of the overburden disposal areas.

In addition, I have recommended that an independent peer review of the Land Stability Plan be undertaken prior to works commencement.

Provided that the consent conditions are complied with, I consider that any potential adverse geotechnical effects will be minimised during and post construction.

The actual or potential adverse effects of the proposal on the environment will be, or are likely to be, minor or less than minor.

Step 4: Are there special circumstances that warrant public notification (s95A(9))?

There are no other matters or special circumstances that warrant public notification.

6.3 S95B: Determining whether the application should be limited notified

Step 1: Is there a Statutory Acknowledgment Area under s95E? (s95B(3)(a))

The activity is not on, or adjacent to, or might affect, any land that is the subject of a statutory acknowledgement nor is the person to who the statutory acknowledgment is made, considered affected under s95E.

Step 2: Is there a rule or NES that precludes limited notification? (s95B(6)(a))

There are no rules in the Regional Plan or national environmental standard relevant to this proposal that preclude limited notification.

Step 3: Are there persons who are affected to a "minor or more than minor" extent? (s95B(8))

- (a) There are no rules in the Regional Plan or national environmental standard relevant to this proposal that permit an activity with this effect on a person. (s95E(2)(a))
- (b) There are no controlled or restricted discretionary activities for which effects must be disregarded on persons as the effect does not relate to a rule in the Plan or NES which reserves control or restricts discretion.(s95E(2)(b))
- (c) There are no persons who have given written approval (s95E(3)(a))
- (d) There are no persons whose approval it is unreasonable to seek. (s95E(3)(b))

Step 4: Are there Special Circumstances? (s95B(10))

There are no special circumstances existing that warrant notification to any other persons not already determined to be eligible for limited notification.

7 SECTION 95 NOTIFICATION RECOMMENDATION AND DECISION UNDER DELEGATED AUTHORITY

It is recommended the application proceed on a **<u>non notified</u>** basis for the reasons discussed above:

Reporting Officer:

Emma Symes Resource Officer Resource Use Directorate

Date: 18 August 2020

Approved By:

Jorge Team L

Resource Use Directorate

Date: 20 August 2020

Acting under authority delegated subject to the provisions of the RMA 1991 which at the time of decision had not been revoked.

8 SECTION 104

A decision was made under section 95 of the Act to process the application on a non-notified basis. An assessment of and decision on the application under section 104 of the Act is provided below.

9 SECTION 104(1)(a) - ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

9.1 Effects Disregarded

Section 104(2) states that when forming an opinion for the purposes of s104(1)(a) a council may disregard an adverse effect of the activity on the environment if the plan or a NES permits an activity with that effect (i.e. a council may apply the "permitted baseline").

Section 104(3)(a) states that when forming an opinion for the purposes of s104(1)(a) a council must not have regard to any effect on a person who has given written approval to the proposal, nor any effects of trade competition.

9.2 The following actual and potential effects are relevant to this proposal:

Section 104(1)(a) of the RMA provides that when considering a consent application, the consent authority must, subject to Part 2, have regard to the actual and potential effects on the environment of allowing the activity. Case law has determined that the "environment" must be read as the environment which exists at the time of the assessment and as the environment may be in the future as modified by the utilisation of permitted activities under the plan and by the exercise of resource consents which are being exercised, or which are likely to be exercised in the future. It does not include the effects of resource consents which might be sought in the future nor any past reversible effects arising from the consent being considered.

The assessment of adverse effects in the approved notification report is also relevant for the purposes of the assessment required under s104(1)(a).

Positive effects that have been identified in the application document have been copied below:

"The proposed earthworks will assist in facilitating the development of the wind farm project which will in turn lead to a greater amount of electricity being generated. Up to 47MW will be able to be produced, up from the output of the consented turbines. The power output from the proposed new machines demonstrates the significant improvements in wind power technology and the positive benefits such technology can bring to the wider community."

In summary, it is considered the actual and potential effects of the proposal are able to be avoided, remedied or mitigated through the imposition of conditions and are therefore acceptable.

10 SECTION 104(1)(b) - RELEVANT POLICIES & PLANS

10.1 National Environmental Standards for Electricity Transmission Activities

The National Environmental Standards for Electricity Transmission Activities (NES) are regulations made under the Resource Management Act 1991. The NES came into effect on 14 January 2010.

The National Environmental Standard for Electricity Transmission Activities is relevant to this proposal.

10.2 National Policy Statement for Fresh Water Management / Renewable Electricity Generation / Electricity Transmission/ NZ Coastal Policy Statement/Urban Development Capacity

The National Policy Statement for Renewable Electricity Generation 2011 (NPS REG) sets out the objective and policies for renewable electricity generation under the Resource Management Act 1991. The NPS REG came into effect on 13 May 2011.

This NPS REG will drive a consistent approach to planning for renewable electricity generation in New Zealand. It gives clear government direction on the benefits of renewable electricity generation and requires all councils to make provision for it in their plans.

The NPS REG is relevant to this proposal. Relevant policies within the NPS REG are:

- Policy A Recognising the benefits of renewable electricity generation activities
- Policy B Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources
- Policy C1 Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities

The application provides an assessment on the relevant policies in the NPSREG. I agree with the applicant's assessment therefore will not repeat the assessment from the report here. Please refer to the application document, pages 14-15 for further details.

I consider the proposal is not inconsistent with the NPSREG.

10.3 Waikato Regional Policy Statement (RPS)

The RPS is a high-level broad-based document containing objectives and policies of which the purpose is to provide an overview of the resource management issues of the region and to achieve integrated management of the natural and physical resources of the Region.

RPS is relevant to this proposal. The application identifies individual objectives and policies: Objective 3.5 - Energy Objective 3.14 - Mauri and values of freshwater bodies Objective 3.25 – Values of Soil Policy 6.6 – Significant infrastructure and energy resources

Tangata Whenua Values are recognised and acknowledged in the application. I have identified relevant policies and objectives that relate to Tangata Whenua and the proposal in the RPS: Objective 3.9 – Relationship of Tangata Whenua with the environment Policy 4.3 – Tangata Whenua

I have also identified relevant policies in relation to the proposal which include: Policy 14.1 - Maintain or enhance the life supporting capacity of the soil resource Policy 14.3 – Soil Contaminants

I agree with the objectives and policies the application identifies. I consider the proposal is not inconsistent with the RPS.

10.4 Waikato Regional Plan

The Waikato Regional Plan ("WRP") is operative. The purpose of regional plans is to help the Council carry out its functions under s30 of the RMA.

The application document identifies the objectives and policies below:

Chapter 5 – Land and Soil Module

Objective 5.1.2 – *Accelerated soils Policies under* 5.1.3:

- Policy 1 Managing Activities that Cause or Have the Potential to Cause Accelerated Erosion and Encouraging Appropriate Land Management Practices
- Policy 2 Use of Regulatory and Non-Regulatory Approaches of Management for Soil Disturbance/Vegetation Clearance Activities in High Risk Erosion Areas
- Policy 3: Promote Good Practice
- Policy 4: Approved Operators Approach

Overall, I agree with the assessment in the application and consider that the proposal is not inconsistent with the Land and Soil module provisions of the Waikato Regional Plan.

11 SECTION 104(1)(c) – ANY OTHER MATTER CONSIDERED RELEVANT AND REASONABLY NECESSARY

11.1 Other Relevant Matters

The following policy initiatives, as per s104(1)(c) of the RMA are considered relevant to this assessing this application as they outline the higher-level strategic goals identified for New Zealand in achieving its goals for renewable energy:

- New Zealand Energy Strategy 2011–2021
- The Government's 100 per cent renewable electricity target by 2035
- Transpower's 2018 long-range planning report called "Te Mauri Hiko, Electricity Futures".

The application has been assessed against these policy documents and is not inconsistent with the above initiatives.

11.2 Iwi Environmental Plans

"The Maniapoto Environmental Management Plan is a direction setting document and describes issues, objectives, policies and actions to protect, restore and enhance the relationship of Maniapoto with the environment including economic, social, cultural and spiritual relationships." (Taken from Maniapoto Maori Trust Board Website.)

The applicant has been in contact with Maniapoto regarding the proposal.

The application states the applicant is happy to work with local iwi throughout the construction of the project.

12 PART 2 MATTERS

Section 104 of the RMA is subject to Part 2 of the Act:

- Section 5 of the RMA outlines the Act's purpose, the basic principle of which is sustainable management.
- Section 6 of the RMA outlines matters of national importance.
- Section 7 outlines the other matters for consideration.
- Section 8 concerns the principles of the Treaty of Waitangi.

I have established throughout my report that the activity will have a less than minor effect on the environment and is consistent with the policy intent of the relevant objectives and policies of the Waikato Regional Plan.

Overall, the application is considered to meet the relevant provisions of Part 2 of the RMA as the proposal achieves the purpose (section 5) of the RMA, being the sustainable management of natural and physical resources.

13 CONCLUSIONS

In considering the subject resource consent the main potential adverse environmental effects associated with the proposed works are considered to be erosion and sediment controls, dust management, effects on Indigenous Vegetation, effects on waterways and Tangata Whenua values.

However, for the reasons outlined in section 6 of this report, I am satisfied that these adverse effects can be avoided, remedied or mitigated such that the adverse environmental effects associated with the works are likely to be minor.

The overall proposal has been assessed in respect to their consistency with the objectives and policies of the Regional Council's policies and plans, and the statutory provisions of the RMA. Provided the activity is undertaken in accordance with the application for consent and subsequent supporting documentation, and the recommended consent conditions in the attached Resource Consent Certificate, I consider that the application will not be inconsistent with Council's policy and plans, or the statutory provisions of the RMA.

14 CONSENT TERM

The Applicant has requested a consent term of 15 years and a lapse period of 10 years.

In assessing the consent term, I have considered the following matters:

- certainty and security for the applicant given the substantial investment;
- Actual and potential adverse effects of the proposed activities on the environment; and
- Section 123 of the Resource Management Act.

I recommend a term be granted for 15 years with a lapse period of 10 years based on the above points.

15 MONITORING

The Waikato Regional Council has a statutory obligation under section 35 of the RMA 1991 to monitor the exercise of resource consents being carried out within the Waikato Region. Consequently, Waikato Regional Council staff or its authorised agents will monitor this site both during and after the works have been completed.

If resource consent is granted for the project, then I consider that monitoring requirements should be included as conditions of the consents. This monitoring should address issues such as:

- the quality of discharges from the construction site;
- the maintenance of erosion and sediment control devices;
- the performance of erosion and sediment controls.

16 RECOMMENDATION

I recommend that in accordance with s104B, and 108 resource consent application APP141827 be granted in accordance with the duration and conditions prescribed in the attached Resource Consent Certificate for the following reasons:

- The activity will have no more than minor actual or potential adverse effects on the environment
- The activity is not contrary to any relevant plans, policies or regulations
- The activity is consistent with the purpose and principles of the Resource Management Act 1991

Syne

Emma Symes Resource Officer Resource Use Directorate Date: 20 August 2020

17 DECISION

Jorge Rodriguez Team Leader

Resource Use Directorate

Date: 20 August 2020

RESOURCE CONSENT CERTIFICATE

Resource Consent:	AUTH141827.01.01
File Number:	61 34 30A
	Pursuant to the Resource Management Act 1991, the Regional Council hereby grants consent to:
	Taumatatotara Wind Farm Limited C/- VGA PO Box 99983 Newmarket Auckland 1149
	(hereinafter referred to as the Consent Holder)
Consent Type:	Land Use Consent
Consent Subtype:	Land - disturbance
Activity authorised:	Undertake earthworks totalling approx. 259,000m3 of excavation associated with the development of a wind farm including construction of tracks and wind turbine platforms.
Location:	Taumatatotara West Road, Te Anga
Map reference:	NZTM 1756000.0000 E 5768000.0000 N
Consent duration:	This consent will commence on the date of decision notification and will expire on 25 August 2035
Lapse Period:	This consent lapses ten years after the date it is granted unless the consent is given effect to or the Council extends the period after which the consent lapses.

Subject to the conditions overleaf:

General Conditions

1. The soil disturbance and construction related activities authorised by this resource consent shall be undertaken in general accordance with the application for this resource consent, and all associated information submitted in relation to this application, except where otherwise required in the resource consent conditions below, titled:

Documents:

- "Taumatatotara Wind Farm Application for Resource Consent for Bulk Earthworks." Prepared for Ventus Energy (NZ) Ltd and dated April 2020 (The Application).
- "Taumatatotara Wind Farm Turbines T1-T11 EROSION AND SEDIMENT CONTROL PLAN 19142-EN-REP-001 Rev A". Prepared by Blue Wallace Surveyors Limited, dated 17 July 2020 (The Erosion and Sediment Control Plan).

Plans:

- Overall Site Plan. Drawing Number #1 Rev F.
- Extents of Works Plan. Drawing Number #2 Rev F.
- Erosion and Sediment Control Layout Plans. Drawing Numbers #13 through to #17 Rev F.
- Sediment Control Pond Detail. Drawing Number #18 and #19 Rev F.
- Decanting Earth Bund Detail. Drawing Number #20 Rev F.
- Diversion Channel / Bund Detail. Drawing Number #21 Rev F.
- Silt & Super Silt Fence Detail. Drawing Number #22 Rev F.
- 2. The consent holder shall be responsible for all contracted operations related to the exercise of this resource consent; and shall ensure contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.
- 3. A copy of this consent shall be kept onsite at all times that physical works authorised by this resource consent are being undertaken and shall be produced without unreasonable delay upon request from a servant or agent of the Waikato Regional Council.
- 4. The consent holder shall notify the Waikato Regional Council as soon as practicable and as a minimum requirement within 24 hours of the consent holder becoming aware of any of the conditions of this resource consent being exceeded and/or of any accidental discharge, sediment control device failure, or other circumstances which are likely to result in the conditions of this resource consent being exceeded. The consent holder shall, within 7 days of the non-compliance, provide a written report to the Waikato Regional Council, identifying the non-compliance, possible causes, steps undertaken to remedy the effects of the incident and measures that will be undertaken to ensure future compliance.

Pre-Start Requirements

- 5. The consent holder shall inform the Waikato Regional Council in writing at least 10 working days prior to the commencement of activities of the start date of the works authorised by this resource consent.
- 6. Prior to activities commencing as authorised by this resource consent, the consent holder shall appoint a representative(s) who shall be the Waikato Regional Council's principal contact person(s) in regard to matters relating to this resource consent. The consent holder shall inform the Waikato Regional Council of the representative's name and how they can be contacted, prior to this resource consent being exercised. Should that person(s) change during the term of this resource consent, the consent holder shall immediately inform the Waikato Regional

Council and shall also give written notice to the Waikato Regional Council of the new representatives' name and how they can be contacted.

7. The consent holder shall arrange and conduct a pre-construction site meeting and invite, with a minimum of 10 working days' notice, the Waikato Regional Council, the site representative(s) nominated under condition 7 of this consent, the contractor, and any other party representing the consent holder prior to any work authorised by this consent commencing on site.

The following information shall be made available at the pre-start meeting:

- Timeframes for key stages of the works authorised under this consent
- Resource consent conditions
- Finalised Erosion and Sediment Control Plan
- Flocculation Management Plan

A pre-start meeting shall be held prior to the commencement of the earthworks activity in each period between October 1 and April 30 that this consent is exercised.

Advice Note: In the case that any of the invited parties, other than the site representative does not attend this meeting, the consent holder will have complied with this condition, provided the invitation requirement is met.

8. Prior to exercising this consent the consent holder shall establish a sediment control team which is to be managed by an appropriately qualified person experienced in erosion and sediment control and associated environmental issues. The sediment control team shall consist of personnel who have clearly defined roles and responsibilities to monitor compliance with the consent conditions and will be available to meet with the Waikato Regional Council monitoring personnel on a weekly basis, or as otherwise agreed in writing, to review erosion and sediment control issues. The person managing the sediment control team shall: Be experienced in erosion and sediment control implementation and monitoring; Be recognised by his/her peers as having a high level of knowledge and skill as appropriate for the role; Have completed recognised training in erosion and sediment control; and, be approved in writing by the Waikato Regional Council.

Earthworks Design and Management Plan

9. The consent holder shall prepare an "Earthworks Design and Management Plan" and submit this to the Waikato Regional Council for written approval in a technical certification capacity no later than 20 working days prior to the commencement of any earthworks on the site.

This plan shall include but not be limited to:

- a) The staging of works planned and the description of earthworks in each stage including general site plans;
- b) Outline the engineering controls, supervision and certification that will be applied to each stage;
- c) Outline the site specific design parameters and performance standards that will be applied to each stage, considering both static and seismic conditions;
- Outline stability analysis design procedures that will be used for each stage, including the method of determining turbine setback zones and stability of existing natural slopes loaded by the works;
- e) Outline engineering and management procedures for material sources, use, disposal and treatment, stockpiling, fill placement and disposal of unsuitable materials;
- f) Detail measures for groundwater control, including details of subsoil drainage, within disposal areas;

- g) Confirm volumes of cut, fill and unsuitable material (based on available information at the time). A contingency of plus or minus 20% shall be added to the total excavation of 259,000m3 provided for in this consent, and for the access road to be up to 10m in width dependent upon the type of transporter chosen;
- h) Detail measures for dealing with situations that do not conform at the time of construction with the design assumptions;
- i) Outline the methods of site assessment by suitably qualified persons that will be used to determine the need for the installation of sub soil drainage systems to all earthworks activities that will be required during construction;
- j) Such other procedures that will be employed to ensure land stability is not compromised by construction works.
- k) The format of Producer Statements to be adopted for Design (PS1), Design Review (PS2), Construction (PS3) and Construction Review (PS4).
- 10. Any changes to the Earthworks Design and Management Plan shall be approved in writing by the Waikato Regional Council, acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 11. The consent holder shall ensure that a copy of the certified ESCP, including any certified amendments, is kept onsite and this copy is updated within 5 working days of any amendments being certified.
- 12. The Consent Holder shall engage Chartered Professional Engineers with geotechnical and civil engineering experience to direct and supervise appropriate site investigations, and undertake design, peer review, supervision and certify the construction of all works in accordance with the procedures set out in the Earthworks Design and Management Plan. The peer review resources engaged by the consent holder shall be agreed in writing by the Waikato Regional Council.
- 13. Producer Statements as detailed in condition 9 above for Design and Design Review shall be submitted to the Waikato Regional Council no later than 10 days prior to subject works commencing.

<u>Advisory Note:</u> The consent holder may at any time and with notification to the Waikato Regional Council (but without written approval) undertake minor works such as are required to carry out site investigations for the purposes of design, including the formation of minor access required for the same. It is expected that these activities will be undertaken in accordance with the permitted activity rules and associated criteria of the Waikato Regional Council.

- 14. The consent holder shall ensure that all cut and fill batters associated with access roads, borrow areas, and turbine platforms and pads (and associated hard stand) shall be re-contoured to visually reintegrate into the natural landform, and within 3 months of earthworks being completed in each of these areas shall be re-vegetated to visually integrate with surrounding vegetation patterns. This re-contouring and re-vegetation shall occur in a progressive manner on the site as earthworks have been completed.
- 15. The Consent Holder shall employ a suitably qualified geotechnical engineer to ensure that cut slopes and spoil disposal sites are individually and appropriately assessed for stability prior to, during and following individual cutting and filling operations, and to ensure that appropriate drainage is installed at each site.

Erosion and Sediment Control Plan

16. The consent holder shall provide the Waikato Regional Council with a finalised 'Erosion and Sediment Control Plan' (ESCP), at least 20 working days prior to the commencement of

earthworks for the activities authorised by this consent. The objective of the ESCP shall be to minimise sediment discharge from the site to the extent practicable over the earthworks period.

- 17. The ESCP shall be based on those specific principles and practices which are contained within the Waikato Regional Council document titled "Erosion and Sediment Control – Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 – dated January 2009), and including at least the following:
 - a) Details of all principles, procedures and practices that will be implemented to undertake erosion and sediment control to minimise the potential for sediment discharge from the site;
 - b) The final location of the turbines and subsequent design criteria and dimensions of all key erosion and sediment control structures. Final turbine locations may vary by up to 150m from those set out in the plans accompanying the application;
 - c) A site plan of a suitable scale to identify:
 - i. The locations of waterways
 - ii. The extent of soil disturbance and vegetation removal
 - iii. Any "no go" and/or buffer areas to be maintained undisturbed adjacent to watercourses
 - iv. Areas of cut and fill
 - v. Locations of topsoil stockpiles
 - vi. All key erosion and sediment control structures
 - vii. The boundaries and area of catchments contributing to all sediment retention structures
 - viii. The locations of all specific points of discharge to the environment.
 - d) Construction timetable for the erosion and sediment control works and the bulk earthworks proposed;
 - e) Timetable and nature of progressive site rehabilitation and re-vegetation proposed;
 - f) Maintenance, monitoring and reporting procedures;
 - g) Rainfall response and contingency measures including procedures to minimise adverse effects in the event of extreme rainfall events and/or the failure of any key erosion and sediment control structures.

The ESCP shall be approved in writing by the Waikato Regional Council, acting in a technical certification capacity, prior to commencement of any works authorised by this consent and the consent holder shall undertake these works in accordance with the approved ESCP.

- 18. Any changes proposed to the ESCP provided as part of the application shall be confirmed in writing by the consent holder and certified in writing by the Waikato Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.
- 19. The consent holder shall ensure that a copy of the certified ESCP, including any certified amendments, is kept onsite and this copy is updated within 5 working days of any amendments being certified.
- 20. Prior to bulk earthworks commencing, a certificate signed by a suitably qualified and experienced person shall be submitted to the Waikato Regional Council, to certify that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plan.

Certified controls shall include the Decanting Earth Bunds, Dirty Water Diversions, and Clean Water Diversions. The certification for these subsequent measures shall be supplied immediately upon completion of construction of those measures. Information supplied if applicable, shall include:

- a) Contributing catchment area;
- b) Shape and volume of the structure (dimensions of structure);
- c) Position of inlets/outlets; and
- d) Stabilisation of the structure.

Flocculation

- 21. Prior to the commencement of bulk earthworks, the consent holder shall undertake flocculent bench testing to determine the reactivity of soils to chemical treatment within those areas of the site where runoff is proposed to be treated by sediment retention ponds and decanting earth bunds.
- 22. If/where soils positively react to chemical treatment, the implementation of a flocculation treatment system shall be maintained as a contingency throughout the duration of earthworks and shall be implemented at the request of the Waikato Regional Council monitoring officer in accordance with the Flocculation Management Plan required by Condition 14.
- 23. Prior to the commissioning of any flocculation treatment system, the consent holder shall provide the Waikato Regional Council with a 'Flocculation Management Plan' (FMP), for the written approval of the Waikato Regional Council acting in a technical certification capacity. The FMP shall include as a minimum:
 - a) Specific design details for the flocculation system;
 - b) Monitoring, maintenance (including posts-storm) and including a record system;
 - c) Details of optimum dosage (including assumptions);
 - d) Results of any initial flocculation trial;
 - e) A spill contingency plan; and
 - f) Contact details of the persons responsible for the operation and maintenance of the flocculation treatment system and the organisational structure to which this person shall report.
- 24. The FMP required by Condition 14 shall be approved in writing by the Waikato Regional Council, acting in a technical certification capacity, prior to the commencement of bulk earthworks and the consent holder shall undertake all flocculation activities in accordance with the approved FMP.
- 25. Any changes proposed to the FMP required by Condition 14 shall be confirmed in writing by the consent holder and approved in writing by the Waikato Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.

Construction

- 26. The consent holder shall ensure that sediment losses to natural water arising from the exercise of this resource consent are minimised during the duration of the works and during the term of this consent. In this regard, erosion and sediment control measures shall be established and maintained in accordance with Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009).
- 27. All sediment retention ponds and decanting earth bunds implemented on site shall incorporate the following measures to ensure that treatment efficiencies are maximized over the duration of the earthworks activities:
 - a) Reverse grading invert to maximise sediment capture at the front end of the device; and

- b) Installation of silt fence baffles extending across the width of the device invert single baffles for decanting earth bunds and double baffles for sediment retention ponds.
- c) The minimum volume of sediment retention ponds and decanting earth bunds shall be 3 percent of the contributing catchment (300m³ capacity for each hectare of contributing catchment).
- 28. Dirty water diversion drains shall incorporate sediment pits excavated at no greater than 50m intervals along the drains to allow for capture of gross sediment particles and minimise sediment loading on treatment devices.
- 29. All earthmoving machinery, pumps, generators and ancillary equipment shall be operated in a manner, which ensures spillages of fuel, oil and similar contaminants are prevented, particularly during refuelling and machinery servicing and maintenance. Refuelling and lubrication activities shall be carried out away from any water body, ephemeral water body, or overland flow path, such that any spillage can be contained so that it does not enter surface water.
- 30. The consent holder shall ensure that, as far as practicable, all clean water run-off from stabilised surfaces including catchment areas above the site shall be diverted away from the exposed areas via a stabilised system to prevent erosion. The consent holder shall also ensure the outfall(s) of these systems are protected against erosion.
- 31. No vehicles or earth moving machinery shall enter any waterways on the subject site at any time. All machinery shall be operated from an appropriate distance beyond any waterways to avoid bank instability.
- 32. All activities undertaken on site shall be conducted and managed in a manner that ensures that all dust emissions are kept to a practicable minimum. To this end there shall be no discharge of dust as a result of the activities authorised by this consent that causes an objectionable or offensive effect beyond the boundary of the property that the activities are being undertaken on.

Note: For the purposes of Condition 23 of this consent, the Waikato Regional Council will consider an effect that is objectionable or offensive to have occurred if any appropriately experienced officer of the Waikato Regional Council determines it so after having regard to:

- The frequency, intensity, duration, location and effect of the dust emission(s), and/or
- Receipt of complaints from neighbours or the public, and/or
- Where relevant written advice from an experienced officer of the Waitomo District Council or the Waikato District Health Board has been issued.

Winter Works

- 33. The consent holder shall ensure that the site is appropriately stabilised by 30 April of each year unless otherwise approved in writing by the Waikato Regional Council. Stabilisation shall be undertaken by providing adequate measures (vegetative and/or structural and including, pavement, metalling, hydro-seeding, re-vegetation and mulching) that will minimise erosion of exposed soil to the extent practical.
- 34. Earthworks shall not be conducted during the period 1 May to 30 September inclusive during any year that this consent is current, apart from necessary maintenance works, unless agreed to in writing by the Waikato Regional Council.
- 35. Requests to undertake earthworks during the period 1 May to 30 September inclusive, for any year that this consent is current, shall be submitted in writing to the Waikato Regional Council

by 1 April and shall be in the form of amendments to the certified E&SCP in accordance with condition 16 of this consent.

Advice Note: In considering a request for the continuation of winter earthworks, the Waikato Regional Council will consider a number of factors; including:

- The nature of the site and the winter soil disturbance works proposed;
- The quality of the existing/proposed erosion and sediment controls;
- The compliance history of the site/operator;
- Seasonal/local soil and weather conditions;
- Sensitivity of the receiving environment; and
- Any other relevant factor.

Water Quality

- 36. The consent holder shall measure the suspended solids concentration and turbidity at the outlet of all stormwater retention structures approved in the Erosion and Sediment Control Plan.
- 37. Water sampling shall be undertaken where there is a rainfall event of greater than 25 millimetres in the preceding 24 hours and at a minimum of monthly intervals. The consent holder shall within twenty-four hours of the rainfall reading being taken, measure the suspended solids concentration and turbidity at the discharge points specified. Results shall be forwarded to the Waikato Regional Council within 7 days of analysis.
- 38. Additionally, if flocculants are being used and if recommended in the Flocculation Management Plan, water sampling at the respective sediment retention device/s shall include testing for pH, and soluble aluminium.

Advice Note: In the event that the sediment retention structures are not discharging when sampling is due, water sampling shall be undertaken at the next discharge event.

- 39. The activity or discharge shall not result in the suspended solids concentration in the stormwater discharged from the site exceeding 80 grams per cubic metre, unless there is a rainfall event greater than 50mm in the preceding 24 hours in which case the activity or discharge shall not result in the suspended solids concentration in the stormwater discharged from the site exceeding 100 grams per cubic metre.
- 40. The consent holder shall ensure that the stormwater discharge shall not cause a conspicuous change in the colour or visual clarity of the receiving water body. If a conspicuous change to colour or visual clarity of the receiving water body is observed by the Consent Holder, the Waikato Regional Council shall be advised in writing within 24 hours.
- 41. Any sampling required by the conditions of this resource consent, the frequency of sampling, analyses and reporting may be altered or reduced with the written approval of the Waikato Regional Council if the applicant can demonstrate that its erosion and sediment control measures are effective in managing discharges from the site.
- 42. The consent holder shall ensure that all sediment laden run-off from the site is treated by sediment retention structures. These structures shall be fully operational before bulk earthworks commence and shall be maintained to perform at least at 80% of their operational capacity.

Dust

- 43. The consent holder shall manage the earthworks, filling and ancillary activities in such a manner to ensure that dust emissions are kept to a practicable minimum, including;
 - a) Measures including, but not limited to, the use of water to suppress dust from the site and from access roads;
 - b) The revegetation of disturbed land which is currently not being worked;
 - c) The regrassing of topsoil stockpiles;
 - d) The area of land open for stockpiling, load out and rehabilitation activities shall be kept to a practicable minimum.
- 44. There shall be no discharge of airborne particulate matter that causes an adverse effect beyond the boundary of the site.
- 45. Should airborne particulate matter resulting from the exercise of this consent generate a complaint, the consent holder shall provide a written report to the Waikato Regional Council within five (5) working days of the complaint being made known to the consent holder. The report shall specify:
 - a) The cause or likely cause of the event and any factors that influenced its severity;
 - b) The nature and timing of any measures implemented by the consent holder to avoid, remedy or mitigate any adverse effects; and,
 - c) The steps to be taken in future to prevent recurrence of similar events.

Advice Note: Chapter 6.4 of the Waikato Regional Plan 2012 provides guidance on the assessment of the effect of odour and dust emissions.

- 46. If so required by the Waikato Regional Council, the consent holder shall carry out immediate sealing of any problematic dust generating surfaces within the site using hydro-seed/hydro-mulch, polymer soil stabilisers or a similar dust control product to provide instant remediation of dust effects to the satisfaction of the Waikato Regional Council.
- 47. The consent holder shall ensure that an adequate supply of water for dust control and an effective means for applying that quantity of water, is available at all times during construction, and until such time as the site is fully stabilised unless otherwise agreed in writing with the Waikato Regional Council.

Monitoring and Maintenance

- 48. The consent holder shall ensure that all erosion and sediment control structures are inspected on a weekly basis and within 24 hours of each rainstorm event that is likely to impair the function or performance of the controls.
- 49. The consent holder shall carry out monitoring and maintenance of erosion and sediment controls in accordance with the conditions of this resource consent and shall maintain records detailing:
 - a) The date, time and results of the monitoring undertaken; and
 - b) The erosion and sediment controls that required maintenance; and
 - c) The date and time when the maintenance was completed.

These records shall be provided to the Waikato Regional Council at all reasonable times and within 72 hours of a written request to do so.

50. The consent holder shall provide to the Resource Use Group of the Waikato Regional Council, a report by 1 May each year a Compliance and Monitoring Report. As a minimum this report shall include the following:

- a) earthworks and filling activities undertaken during the preceding 12 months and proposed to be carried out during the following 12 months;
- b) any water quality data collected;
- c) daily rainfall records;
- d) a compliance audit of all consent conditions;
- e) any reasons for non-compliance or difficulties in achieving compliance with all consent conditions;
- f) recommendations on alterations to monitoring required by consent conditions;
- g) any necessary updates to the management plans;
- h) any other issues considered important by the consent holder;
- i) Provision of any sediment discharge monitoring data; and discussion and interpretation of the monitoring results.

Site Restoration

- 51. The removal of any erosion and sediment control measure from any area where soil has been disturbed as a result of the exercise of this resource consent shall only occur after consultation and written approval has been obtained from the Waikato Regional Council acting in a technical certification capacity. In this respect, the main issues that will be considered by the Waikato Regional Council include:
 - a) The quality of the soil stabilisation and/or covering vegetation;
 - b) The quality of the water discharged from the rehabilitated land; and
 - c) The quality of the receiving water.
- 52. The consent holder shall ensure those areas of the site which have been completed shall be progressively stabilised against erosion as soon as practically possible and within a period not exceeding 3 days after completion of any works authorised by this resource consent. Stabilisation shall be undertaken by providing adequate measures (vegetative and/or structural) that will minimise sediment runoff and erosion and in accordance with Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009). The consent holder shall monitor and maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any surface water.
- 53. Re-vegetation and/or stabilisation of all disturbed areas shall be completed in accordance with the measures detailed in Waikato Regional Council document titled "Erosion and Sediment Control Guidelines for Soil Disturbing Activities" (Technical Report No. 2009/02 dated January 2009).

Rehabilitation

- 54. As soon as practicable after the completion of any of the works authorised by this resource consent, the consent holder shall stabilise and re-contour all disturbed areas to limit/prevent sediment runoff and erosion. The consent holder shall maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any watercourse.
- 55. The consent holder shall undertake hydro-seeding of all cut slopes and batters, or other means of stabilisation as proposed by the consent holder in relation to turbine platforms, as soon as practicable after their formation to ensure rapid revegetation.
- 56. The consent holder shall undertake a maintenance programme to ensure rehabilitation of disturbed areas including weed control, to the satisfaction of the Waikato Regional Council. The

programme shall ensure the re-establishment of indigenous plant species on areas where soil is disturbed on Taumatatotara West Road.

Land Stability Plan

- 57. At least 20 working days prior to works commencement, the consent holder shall provide to the Waikato Regional Council a Land Stability Plan containing the following information for all works authorised by this consent:
 - a) A detailed geotechnical investigation, including current site stability, slope stability, and potential risks;
 - b) Road design including all crossings, stormwater, and erosion control measures;
 - c) Measures that will be undertaken to avoid land instability and/or erosion;

The Land Stability Plan shall be written by an appropriately experienced, and qualified geotechnical engineer.

- 58. The consent holder shall exercise this consent in accordance with the approved Land Stability Plan. Any subsequent changes to the Land Stability Plan shall only be made with the written approval of the Waikato Regional Council. In the event of any conflict or inconsistency between the conditions of this consent and the provisions of the Land Stability Plan, then the conditions of this consent shall prevail.
- 59. The consent holder shall ensure that a copy of the approved Land Stability Plan including any approved amendments, is kept onsite at all times that physical works authorised by this consent are being undertaken and the onsite copy of the Land Stability Plan shall be updated within 5 working days of any amendments being approved. The Land Stability Plan shall be produced without unreasonable delay upon request from a servant or agent of the Waikato Regional Council.

Peer Review

- 60. Prior to exercising this consent, the consent holder shall engage, at its own cost, an Independent Peer Reviewer(s) to review the Land Stability Plan required by condition 57 of this consent, to assess whether or not the design has been undertaken by appropriately qualified personnel in accordance with best practice.
- 61. The peer review required by condition 60 of this consent shall include review of the following aspects as a minimum:
 - (a) Design
 - (b) Site Stability
 - (c) Construction methods
 - (d) Hazards and hazard mitigation should the works result in erosion and/or slope failure
- 62. The Independent Peer Reviewer(s) shall be:
 - (a) Independent of the planning, design, construction, management and monitoring of this site;
 - (b) Experienced in road and earthworks design, construction, management and monitoring;
 - (c) Recognised by his/her peers as having such experience, knowledge and skill;
 - (d) Approved in writing by the Waikato Regional Council.
- 63. The Independent Peer Reviewer(s) shall report directly to the Waikato Regional Council in writing on all matters which are submitted to it for review, other than draft proposals submitted to it by the consent holder and which are superseded.

64. The consent holder shall provide the Peer Reviewer(s) with all records, plans, designs, etc, that the Peer Reviewer requests, and shall afford the Peer Reviewer full access to the site at all reasonable times.

Archaeological sites

- 65. The consent holder shall ensure that the exercise of this resource consent does not disturb sites of spiritual or cultural significance to Tangata Whenua. In the event of any archaeological remains being discovered, the works in the vicinity of the discovery shall cease immediately and the Waikato Regional Council shall be notified within 24 hours. Works may recommence on the written approval of the Waikato Regional Council after considering:
 - (a) Tangata Whenua interests and values;
 - (b) The consent holder's interests; and
 - (c) Any archaeological or scientific evidence

Administration

66. The Consent Holder shall pay the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act (1991), or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act (1991).

Lapse Date

67. This consent shall lapse ten years after the date it is granted unless the consent is given effect to or the Council extends the period after which the consent lapses.

Appendix 2

Existing Consent Conditions (2011)

- a) In consideration of Section 104, and pursuant to Sections 104B and 108 of the Resource Management Act 1991, the Waitomo District Council grants consent to Ventus Energy (NZ) Limited to construct and operate a utility scale wind farm comprised of a maximum of 22 horizontal axis turbines and associated substation buildings, earthworks and access roads and activities as described in Conditions (1) and (2) below for the purpose of generating electricity, on a Rural Zoned site located at Taumatatotara West Road, Taharoa, legally described as:
 - Part Section 10 Block V Kawhia South Survey District and Section 3 Survey Office Plan 53968 comprised in Certificate of Title 141077;
 - Section 3 Block IX Kawhia South Survey District comprised in Certificate of Title SA28A/586;
 - Section 1 Survey Office Plan 58558 comprised in Certificate of Title SA47A/876;
 - Section IA Block V Kawhia South Survey District comprised in Certificate of Title SA37A/25;
 - Section 12 and Section 22 Block V Kawhia South Survey District comprised in Certificate of Title SA31C/23;
 - Section 2 Block V Kawhia South Survey District comprised in Certificate of Title SA37A/26; and
 - Part Section 24 Block V Kawhia South Survey District and Section 2 Survey Office Plan 53968 comprised in Certificate of Title SA48B/494;

subject to the following conditions:

General

- 1. The wind farm development shall be constructed, operated and maintained in general accordance with the information, plans and drawings submitted with the application and received by Council on 23rd December 2005; and the additional information received on 30th January 2005 and 8th March 2005 except as otherwise amended by the s 127 application dated 21st November 2011 and the further information response dated 28th February 2012. The application documentation comprises of:
 - (a) Taumatatotara Windfarm Assessment of Environmental Effects, Volume 1 Main Report, dated March 2005;
 - (b) Taumatatotara Windfarm Assessment of Environmental Effects, Volume 2 Book of Figures, dated March 2005.
 - (c) Further information received 30th January 2005 and 8th March 2005.
 - (d) Further Information provided in respect of the revised proposal approved as part of

the change to the conditions of consent in accordance with Section 127 of the Resource Management Act 1991, namely:

- i. Report dated 21st November 2011; titled 'Taumatatotara Windfarm Assessment of Environmental Effects for a Turbine Tip Height Increase', prepared by Ventus Energy (NZ) Ltd;
- ii. Further information response dated 28th February 2012; titled 'Taumatatotara Windfarm Further Information for a Turbine Tip Height Increase', prepared by Ventus Energy (NZ) Ltd;
- iii. Report dated 24th February 2012; titled 'Taumatatotara Wind Farm Landscape and Visual Assessment for S 92(1) Further Information Request', prepared by Opus International Consultants Ltd.
- 2. For the purposes of this consent and for avoidance of doubt the activities authorised by this consent include:
 - (a) the installation, operation and maintenance of no more than twenty-two (22) horizontal axis wind turbines ("turbines");
 - (b) An underground fibre optic network connecting each turbine to the central control system in the on-site operations building(s);
 - (c) Tracking and placement of an underground network of 33kV transmission lines delivering electricity from each turbine to the two on-site substations;
 - (d) Overhead or underground powerlines connecting the on-site wind farm substations to the two existing 33kV lines that traverse the eastern edge of the landholding;
 - (e) A fenced compound to house the on-site control building and sub-station equipment;
 - (f) Earthworks associated with the creation of the turbine building platforms, access roads and other facilities described in items a) toe) above.
 - (g) Widening and/or realignment works along parts of Taumatatotara West Road to enable the safe passage of the oversized wind farm components to the site.
- 3. The turbines shall have a maximum height measured from the ground to the top of the vertically extended blade tip as follows:
 - (a) Turbines 1 to 11 inclusive- maximum height of 121.5 metres.
 - (b) Turbines 12 to 22 inclusive maximum height of 110 metres.
- 4. Each turbine shall be located within a turbine contingency zone of no greater than 100 metre radius from the turbine locations specified in the application. The turbine contingency zones shall avoid locations closer to external property boundaries, significant indigenous vegetation and significant habitats of indigenous fauna.
- 5. Prior to construction, the consent holder shall submit to the Manager Policy and Planning, Waitomo District Council for approval a plan specifying the final proposed locations of turbines 19 to 22 and a report outlining the reasons for the final locations. The locations of

these turbines shall be chosen so that they are located as far as practicable back from the western ridgeline, taking into account geotechnical and other such location requirements, so as to minimise their visual impact as viewed from the west and south.

- 6. The consent holder shall submit to the Manager Policy and Planning, Waitomo District Council an as-built plan confirming the locations of all constructed turbines, access roads, entranceways, excess material fills, the substations and control building, the spare turbine component storage area, electricity transmission lines, and road upgrading/realignment works. The Plan shall also include but is not limited to:
 - (a) The finished line of cut and fill batters;
 - (b) The finished edge line of pavement and seal widening works;
 - (c) The location and dimensions of site entrances;
 - (d) The finished level of access road centrelines;
 - (e) The location, size and extent of all new stormwater drains or culvert extensions;
 - (f) The location of all subsoil drains, sumps and manholes; and
 - (g) Any underground services installed or altered as part of the works.

This plan shall be certified by a registered surveyor as to the accuracy at the completion of the work and is required to be submitted to Council within 6 months of the completion of construction of the wind farm.

Noise

Operational Noise

7. The noise from all other activities on the site (other than wind turbine generator operation and construction activities) shall not exceed the following limits when measured in accordance with the requirements of NZS 6801:1991 Measurement of Sound and assessed in accordance with the requirements of NZS 6802:1991 Assessment of Environmental Sound:

7.00am to 7.00pm 45dBA L10 7.00pm to 7.00am 35dBAL10 7.00pm to 7.00am 60dBA Lmax

- 8. The noise from the wind farm shall comply with the requirements of NZS6808:1998, Acoustics The Assessment and Measurement of Sound from Wind Turbine Generators in relation to any dwelling existing at the date of the granting of this consent, except:
 - (a) Any dwelling on any site that forms part of the wind farm; and
 - (b) The dwellings labelled as Hl, H2, H2A, H3, and H4 on the approved plans.
- 9. Prior to commencing any development of the wind farm, detailed ambient noise monitoring shall be undertaken within the notional boundary of any dwelling within the 30dBA noise contour (other than the dwellings specifically referred to in (a) and (b) of condition 8 above)

by a person suitably qualified and experienced in acoustics and accepted by the Manager, Policy and Planning, Waitomo District Council. The monitoring shall be undertaken to determine the existing background sound in terms of the requirements of NZS6808:1998 Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators. Sufficient field measurements shall be undertaken to demonstrate to the satisfaction of Council's Manager, Policy and Planning, that the best fit regression curve gives an accurate representation of the existing noise environment.

- 10. Prior to commencing any development of the wind farm, the consent holder shall prepare a noise report to demonstrate, to the satisfaction of Council's Manager, Policy and Planning, that the wind farm will comply with the requirements of NZS6808:1998. This report shall be prepared by a person suitably qualified and experienced in acoustics and accepted by the Manager, Policy and Planning, Waitomo District Council.
- 11. The wind turbines shall not exceed a rotor tip height of 110 metres above ground level and a sound power of 107.2dBA unless it can be demonstrated by a person specialising in acoustics and accepted by the Manager, Policy and Planning, Waitomo District Council that higher turbine heights or sound power will still comply with the requirements of NZS6808:1998.

Construction Noise

- 12. Noise from all construction and decommissioning work including (but not limited to):
 - (a) Site works;
 - (b) Wind turbine generator assembly and placement;
 - (c) Concrete placement;
 - (d) Wind turbine removal; and
 - (e) Land reinstatement

Shall be measured and assessed in accordance with the requirements of NZS6803:1999 Acoustics - Construction Noise. The noise limits shall be those set out in Table 2 of NZS6803 for works of "long term" duration (the levels for long term construction work are reproduced in the table below).

Time	Weekdays		Saturdays		Sundays	
	Leq	L _{max}	Leq	L _{max}	Leq	L _{max}
0630-0730	55dBA	75dBA	45dBA	75dBA	45dBA	75dBA
0730-1800	70dBA	85dBA	70dBA	85dBA	55dBA	85dBA
1800-2000	65dBA	80dBA	45dBA	75dBA	45dBA	75dBA
2000-0630	45dBA	75dBA	45dBA	75dBA	45dBA	75dBA

- 13. No concrete trucks shall be permitted to enter the site before 7.00am or leave the site after 7.00pm.
- 14. Prior to the commencement of construction, a Construction Noise Management Plan shall be prepared to the satisfaction of the Manager, Policy and Planning, Waitomo District
Council. The Construction Noise Management Plan shall demonstrate how the requirements of condition 12 will be achieved.

15. The Construction Noise Management Plan shall address, amongst other things, the potential noise effects of construction traffic on the roads and techniques to minimise these effects. Any night time (10.00pm - 7.00am) traffic movements must be included in the evaluation.

Noise Monitoring:

- 16. Within six months of the commencement of operation of the wind farm, the noise levels shall be measured and results provided to the Manager, Policy and Planning, Waitomo District Council.
- 17. The consent holder shall pay all costs associated with noise compliance measurements, monitoring and reporting.

Traffic and Roading

Construction Programme

- 18. A Construction Programme shall be prepared by the consent holder and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to any construction works commencing. The Construction Programme shall include the following:
 - (a) The hours of construction work on Taumatatotara West Road and other Waitomo District Council administered roads shall be between 7.00am and 7.00pm Monday to Saturday (excluding public holidays), unless written approval is otherwise obtained from the Manager, Policy and Planning, Waitomo District Council to work outside of these hours;
 - (b) Provision shall be made to maintain adequate and safe access to and from individual properties along Taumatatotara West Road and other Waitomo District Council administered roads while transportation movements are undertaken; and
 - (c) The consent holder shall arrange to hold a copy of all Resource Consents on site at all times during construction.

Traffic Management Plan

- 19. A Traffic Management Plan shall be prepared by the consent holder and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to any construction works commencing. The Traffic Management Plan shall be prepared in accordance with the latest edition of the Transit New Zealand Code of Practice for Temporary Traffic Management and shall include but not be limited to:
 - (a) The transport route (in general accordance with the route proposed in the application);
 - (b) Times and locations when deliveries are prohibited;
 - (c) Piloting and traffic management procedures;
 - (d) Contingency plans for breakdowns, bridge or pavement failure, severe weather conditions, accidents or roadworks;

- (e) Provisions for co-ordination with other parties, including emergency services;
- (f) Provisions to maintain adequate and safe access to and from individual properties along Taumatatotara West Road and other Waitomo District Council administered roads while transportation movements are undertaken; and
- (g) A construction timetable, detailing vehicles movements to and from the site, and the hours that the trucks will operate.
- 20. The Traffic Management Plan shall be designed to ensure that at all times during construction, all Waitomo District Council administered roads shall be kept open. In exceptional circumstances a request may be sought for short term road closures. Any road closures shall be approved by the Manager, Policy and Planning, Waitomo District Council.
- 21. If traffic control measures are not carried out in accordance with the Traffic Management Plan and the Transit New Zealand Code of Practice for Temporary Traffic Management, the Waitomo District Council reserves the right after notifying the consent holder or contractors either verbally or in writing, to instruct the consent holder or contractors to cease all work until the requirements of this Plan and Code of Practice are met. Alternatively the Manager, Policy and Planning, Waitomo District Council, may arrange for the traffic management to be carried out by others, the costs of which will be borne by the consent holder.

Roading Design

- 22. The consent holder shall provide, to the satisfaction of the Manager, Policy and Planning, Waitomo District Council, pavement deflection data for relevant sections of Waitomo District Council roads that are to be utilised for transportation of construction materials and turbine components both before and after the construction period. The pavement deflection measurements shall be carried out using either Falling Weight Deflectometer or Benkelman Beam testing techniques.
- 23. The consent holder shall provide, to the satisfaction of the Manager, Policy and Planning, Waitomo District Council, bridge inspection findings and details of axle loadings resulting from the transportation of the turbine components, to verify that all Waitomo District Council bridges are able to accommodate the transportation of these loads without resulting in any damage. If the Manager, Policy and Planning, Waitomo District Council considers it to be necessary, Council may require the consent holder to provide an appropriate level of supervision of heavy loads across Waitomo District Council bridges.
- 24. Detailed roading design plans for internal site access roads, Taumatatotara West Road, and any other Waitomo District Council roads that are subject to upgrading or realignment works, shall be developed in accordance with appropriate construction standards and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to construction commencing. The detailed design shall include:
 - (a) Geotechnical investigation and interpretation report;
 - (b) Comer widening design (including cut/fill batters details);
 - (c) Taumatatotara West Road/ Taharoa Road intersection design;
 - (d) Pavement design;

- (e) Surfacing details;
- (f) Shoulder feather-edge details;
- (g) Drainage (surface water channels and culverts);
- (h) Safe stopping sight distance; and
- (i) Minimised cut earthworks for the construction of the internal access roads.

Road Maintenance

- 25. A maintenance regime covering all Waitomo District Council roads and bridges to be utilised for transportation of construction materials and turbine components shall be prepared by the consent holder and submitted to the satisfaction of the Manager, Policy and Planning, Waitomo District Council prior to any construction works commencing. The maintenance regime shall cover the full construction period and may be developed in partnership with an ongoing maintenance programme (shared with the Waitomo District Council's own Network Maintenance Contractors). The maintenance regime shall ensure the following:
 - (a) During the construction period, the consent holder shall undertake any necessary works to ensure that the roads and bridges utilised for transportation of construction materials and turbine components are maintained at a quality no less than the quality of the road and bridges prior to construction commencing.
- 26. A bond of \$86,000 shall be paid to Council to secure the ongoing performance of condition 25 with regard to Taumatatotara West Road maintenance only, pursuant to section 108(2)(b) and section 108A of the Resource Management Act 1991. The bond applies to regular maintenance only, not pavement rehabilitation and shall be refunded to the consent holder at such a time as the Manager, Policy and Planning, Waitomo District Council is satisfied that the objectives of the maintenance regime required by condition 25, as it relates to Taumatatotara West Road, has been met. Should the Manager, Policy and Planning, Waitomo District Council consider the consent holder is not meeting the objectives of the maintenance regime with regard to the maintenance of Taumatatotara West Road, the bond will be utilised to undertake the work.

Access

- 27. Detail of vehicle access points and permanent entranceways along Taumatatotara West Road shall be provided prior to construction works commencing. The details will include allowances for:
 - (a) Pavement widening to a minimum 6.5 metre sealed width;
 - (b) Bellmouth radii to a minimum 15 metres;
 - (c) Entranceway culverts to a minimum 300mm diameter; and
 - (d) Pavement surfacing to a minimum 70 metres at full width, with matching in tapers at 1 in 10.
- 28. All internal access roads shall be a minimum of 5 metres in width.

Landscaping and Visual

- 29. Prior to construction commencing the consent holder shall submit to the satisfaction of the Manager, Policy and Planning, Waitomo District Council, a Landscape Mitigation Plan prepared by a suitably qualified Landscape Architect. The Landscape Mitigation Plan shall detail the visual mitigation and landscape restoration strategies that will be undertaken and shall include but not be limited to:
 - (a) A plan showing details of planting and landscaping to be undertaken around the substation, control building and spare turbine part storage area;
 - (b) The height and location of any earth bunds or mounds created for visual, noise, or mitigation purposes;
 - (c) Topsoil stockpile and management plan for all topsoil stockpiled for more than six months from the time of stripping;
 - (d) The restoration strategy for any disturbed landforms including:
 - i. Permanent earthworks, including all road cuttings;
 - ii. Temporary earthworks, including construction pads; and
 - iii. Topsoil restoration.
 - (e) The restoration shall integrate the new landform into the natural contours, and revegetate (with either pasture or planting) so it appears homogenous with the surrounding landscape;
 - (f) An implementation strategy identifying when the mitigation works will be undertaken;
 - (g) A maintenance schedule.
- 30. The colour of the turbines shall be selected to minimise the visual impact. Due consideration will be given to the predominant ambient background sky colour in selection of the final colour. Low reflectivity finishes shall be used on the turbines and the turbine blades where practicable.
- 31. All "dead" turbines and turbine components shall be removed within one month from the time that they ceased to function, unless exceptional circumstances exist and written approval is obtained from Manager, Policy and Planning, Waitomo District Council.
- 32. Upon decommissioning of the wind farm, all visible structures (including turbines, substations and hard stand areas) shall be removed from the site. All foundations shall be buried under a minimum of two metres of soil and revegetated, unless otherwise approved by the Manager, Policy and Planning, Waitomo District Council.

Air Safety

33. The consent holder shall comply with the Civil Aviation Authority (CAA) Determinations issued to Ventus Energy Limited dated 7 February 2006 and 23 August 2011.

34. Those turbines identified as numbers 1, 5, 10, 18 and 22 on the approved plan (and identified below) shall be lit with a medium intensity obstacle light located on the highest practicable point, sufficient to indicate to aircraft the general location of the wind farm.

Turbine ID	Easting	Northing	Attitude
1	2664848	6331439	251m AMSL
5	2665338	6330549	322m AMSL
10	2666640	6329258	319m AMSL
18	2667836	6327401	367m AMSL
22	2668272	6326391	321m AMSL

- 35. The medium intensity obstacle lights shall:
 - be red; and
 - have an effective intensity of not less than 1600 cd of red light;
 - be visible to aircraft approaching the wind farm from any direction; and
 - shall be installed and operated in a way that minimise their visibility to persons on the ground while meeting CAA requirements.

Geotechnical

36. In accordance with the recommendations of the geotechnical review prepared by Riley Consultants, and submitted with the application (Appendix K of Volume One), the consent holder shall undertake subsurface geotechnical investigation and engineering geological mapping for the wind farm area, to ensure that all of the turbine sites are geotechnically feasible, and provided with stable building platforms. The results of these investigations and detailed design of the proposed geotechnical foundation works for each of the turbines shall be provided for the approval of the Manager, Policy and Planning, Waitomo District Council prior to construction commencing.

Effects on Wildlife

Register

37. The consent holder shall keep a register of observations of effects of the wind farm activities on wildlife. This will include evidence of turbine strike (with species, date, weather conditions and other relevant observations), notes of avoidance behaviour observed, and other observed interaction of wildlife with the wind farm. Ground inspections with nil results should also be recorded. The register shall be maintained for the life of the consent, and shall be made available to Council within 2 working days of its request.

Inspections

- 38. In accordance with Condition 37 above, all wind farm personnel will inspect the area around the turbine bases when visiting or passing by a turbine, throughout the life of the consent, for evidence of wildlife mortality.
- 39. The consent holder shall undertake dedicated inspections of all turbine bases for evidence of

wildlife mortality at monthly intervals for the first two years of operation. If construction is staged, later turbines shall also continue to be inspected for a full two years.

40. If no significant adverse effects on wildlife are evident then dedicated inspections shall be discontinued, with the prior approval of the Manager, Policy and Planning, Waitomo District Council.

If a significant adverse effect is found (through dedicated monitoring or other monitoring) then monthly inspections shall continue in the interim and a plan developed, to the satisfaction of the Manager, Policy and Planning, Waitomo District Council and in consultation with the Department of Conservation, acting reasonably, to address the effects. Such a plan shall propose a monitoring regime and identify methods and options to avoid, remedy or mitigate the adverse effects. Specifically excluded from a plan will be any modification or restriction on the operation of the wind turbines.

Reporting:

41. An annual report, detailing the information required in conditions 37 - 40 above shall be provided to Waitomo District Council and the Department of Conservation. Any unidentified species remains recovered shall be referred to the Department of Conservation for identification as soon as is practicably possible following their discovery.

Bird Perches

- 42. No telecommunications devices or signs shall be connected/attached to any part of the turbines and/or the accessory structures.
- 43. With the exception of the transmission lines connecting the substation to the existing transmission lines, all other intra project lines within the wind farm shall be underground.
- 44. The turbine towers shall be tubular in design.

Ecological Effects

Native Vegetation

- 45. The clearance and trimming of native vegetation associated with the wind farm activities shall be restricted to the minimum area required to undertake the road realignment works, and any realignments of the power line routes. In particular, the consent holder shall avoid the removal of pole stand Rimu where practicable.
- 46. The consent holder shall develop and implement a weed control programme for the site and access roads, to the satisfaction of Council, and for the first 2 years of operation.

Communications

47. In the event that the wind farm activities result in any disruption to free to air (not satellite) television, Broadband Wireless access licenses and/or microwave path operators at those properties in the area surrounding the wind farm site, the consent holder shall assist those parties to obtain reception comparable to the pre-construction quality, to the satisfaction of Council. The consent holder shall advise the Manager Policy and Planning, Waitomo District Council of the agreed mitigation measures in writing.

Complaints Register

- 48. The consent holder shall appoint a representative who shall be the Waitomo District Council's principal contact person in regard to matters relating to this resource consent. The consent holder shall inform the Manager Policy and Planning, Waitomo District Council of the representative's name and how they can be contacted prior to this resource consent being commenced.
- 49. The consent holder shall maintain a complaints register for the wind farm activities. The register shall record all complaints received and shall include:
 - (a) The date, time and duration of the incident that has resulted in the complaint;
 - (b) The location of the complainant;
 - (c) The cause of the incident where appropriate;
 - (d) Any corrective action undertaken by the consent holder in response to the complaint.

The register shall be available to Council within 2 working days of its request.

Implementation, Review and Monitoring

- 50. Pursuant to sections 128 to 130 of the Resource Management Act the Waitomo District Council may undertake a review of conditions of consent, within twelve months of the commencement of operation of the wind farm and thereafter on an annual basis for the following purpose:
 - (a) to review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent (in particular the potential adverse environmental effects in relation to noise, vegetation removal, earthworks, and the visual, landscape and amenity effects), and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or
 - (b) to address any adverse effect on the environment which has arisen as a result of the exercise of this consent; or
 - (c) if necessary and appropriate, to require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the surrounding environment; or
 - (d) to review the adequacy of and the necessity for monitoring undertaken by the consent holder.

The Council will undertake the review in consultation with the consent holder. The consent holder shall pay the actual and reasonable costs of the review.

- 51. The consent holder shall pay all costs associated with the implementation of this consent in order to achieve and demonstrate compliance with the consent conditions therein.
- 52. Pursuant to section 36 of the Resource Management Act 1991 the consent holder shall pay the actual and reasonable costs incurred by the Council when monitoring the conditions of

this consent.

Lapse Period

53. This consent shall lapse eight years after the date of it being granted, unless the consent is either given effect to before that lapsing date, or unless the Waitomo District Council fixes a longer period pursuant to section 125 of the Resource Management Act 1991.

Advisory Notes

- 1) The consent holder shall also ensure compliance with conditions of the Waikato Regional Council resource consent. Conditions related to matters covered by that consent have been omitted from this consent to avoid duplication.
- 2) All on-site works shall comply with the requirements of the Health and Safety in Employment Act 1992.
- 3) This consent covers road widening and realignment works associated with Taumatatotara West Road only. The consent holder shall obtain any other resource consents required for road widening, including any resource consents required from Waikato Regional Council.
- 4) The consent holder will need to consult with and meet the requirements of all road controlling authorities affected by the transportation of the turbine components, including Transit New Zealand.
- 5) The consent holder will need to consult with the Manager, Policy and Planning, Waitomo District Council in order to facilitate proceeding with the establishment of a turbine viewing area on Marokopa Road.
- 6) If the transmission lines connecting the substation to the existing electricity transmission lines are located above ground, they shall be designed and located so that they are a permitted activity in accordance with Rule 15.5.1 of the Proposed Waitomo District Plan and the NZ Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).
- 7) For the purposes of condition 11, a height greater than 110 metres will be approved for turbines 1 to 11 inclusive subject to the necessary confirmation being provided in respect of compliance with NZS6808:1998. Condition 3 also requires that the maximum height of turbines 1 to 11 inclusive must not exceed 121.5 metres and that the maximum height of turbines 12 to 22 inclusive must not exceed 110 metres.

ATTENTION: Tipene Wilson [tangata whenua engagement facilitator]

RESPONSE TO PROPOSED WIND FARM- Extra extra large TURBINES,

- TAUMATATOTARA WEST ROAD

HUI: Held 04 May 2021 @ Tahaaroa.

	Taumatatotara Proposed Wind Farm Hui				
	Te Kura o Tahaaroa				
	Tahaaroa				
	04 May 2021				
In attendance:		Ngāti Mahuta: Nga Armstrong, Reanin King, Aherata King, Rachael Mura, Tommy King, Joanne King, Robyn Maikuku			
		aig Shearer (Planning Consultant), Tipene Wilson (Tāngata Whenua engagement cilitator)			
1.	Mihim	fihimihi, karakia: Nga Armstrong, Tipene Wilson			
2.	Confir	onfirmation of Agenda and key outcome(s) from hui:			
	a.	Karakia, mihimihi, whakawhanaungatanga,			
	b.	Review of photo montages and site visit,			
	с.	Next steps: Closing karakia			
3.	Summary of application:				
	a.	A reduction in the number of consented turbines by 11 turbines from 22 to 11, and			
	b.	An increase of 62.5m in maximum height from 110m to 172.5m for those 11 turbines			
	с.	Interested in any effects of that change.			
4.	Discussion:				
	a.	Long term effects of windmills			
	b.	Visual effects			
	с.	Hunting effects			
	d.	Ensuring other environmental effects are suitably avoided or mitigated.			
	e.	Cultural effects			
	f.	Condition to ensure that any disposal of parts or windmills occurs in an environmentally and			
		culturally appropriate manner.			
	g.	Benefit back to whānau (e.g. power to marae)			
5.	5. Tipene and Craig left the hui.				

REPRESENTING : - Ngaati Mahuta ki te Tai Hauaauru

Kaaore! Hee hau kino e rite ki te hauaauru...

On behalf of and humbly proud to be representing Ngaati Mahuta ki te Hauaauru. I and those in attendance and those that have been canvassed have considered and acknowledge the information that was presented to us today [1st Hui].

After very careful consideration, and robust discussion of the Pro's and Con's we decided collectively and unanimously to refute and categorically object to any idea that a wind farm within reach of our mana whenua Ngaati Mahuta ki te Tai Hauaauru could be advocated for.

We are disappointed that we [Ngaati Mahuta- NM] was not consulted in the consenting process. We still do not comprehend [although explained] why Kawhia over 50km's away were included in the discussions and initial consent being sourced and assured. Ngaati Mahuta has always been well within the 10km radius of the Ventus' –studies, graphics, diagrams, reports, pictorial montages and all published work scopes designed for this wind farm application. Our cultural narrative embraces [te oranga tonu oo maatou taiao] derived from our histories, our stories, our sacred places, our interactions with the land, life forms combined with 'whakapapa – intergenerational', our ways of being, as a people. We have strived to live with a common understanding of tikanga, kawa, values, heritage and tradition. Spiritual connections to the land and our environment are of paramount importance. These inter-relationships form 'mauri' and are non-negotiable, we do not mess with these realms, and one would pay heed too take note.

We cannot support the change of wind turbine size, an extra 62.5 metres in height, nor do we see a reduction in turbine numbers as a mitigating factor to lessening the impact of junk/ scrap metal, zero waste, visual effects and all of what was up for discussion. With hand on heart we are not confidently assured that the environmental and cultural impact, the ecological –dirty footprint, biodiversity of indigenous, the health and wellbeing of lives and environment present and in the future has been addressed adequately.

We decline and will not pursue the suggestion, an 'opportunity for benefits' from these wind turbines [e.g free/discounted power to the Marae, providing our cultural and environmental concerns are addressed appropriately].

Naaku noa

Yvonne N Armstrong **Yvonne N Armstrong**

APPENDIX 5

Taumatatotara Wind Farm, Iwi Consultation Summary 7 September 2020 – 29 July 2023

Chronological List of Consultation

2020

- 1. Initially consulted with Ngā Tai o Kāwhia Regional Management Committee as they were involved historically in the application for the wind farm in 2008 they have a neutral position on the proposal subject to the imposition of appropriate conditions
- 7 September 2020 Waitomo DC provided guidance via their s92 request and advised that we speak to Te Hauāuru RMC (TRMC) in relation to the windfarm proposal. The contact person for this RMC is Ronald Takerei who can be contacted at <u>takerei@xtra.co.nz</u> or 027 576 6253.
- 3. 28 September 2020. Site visit held with Iwi representatives;
- 4. 6 October 2020 email Steven (Tipene) Wilson to Ronnie Takerei setting out the proposed consent changes to the wind farm project and requesting a discussion on the proposal with him and/or TRMC. Ronnie phone call to Steven Wilson saying TRMC would like to be involved, and they would like Taumatatotara Wind Farm (TWF) to talk with Marakopa Marae, Tasha Willison.
- 5. 22 October Zui held with Tasha Willison, Ronnie Takerei, Glenn Starr, Craig Shearer and Steven Wilson. <u>Minutes sent 26 October</u>, request for any questions, asking for a further hui.
- 6. 22 October Steven sent migratory bird tracking information to Ronnie, Tasha as requested at Zui on the same day;
- 7. 19 November Steven Wilson sent various documents to Ronnie and Tasha. These were:
 - a. The Council's 2006 hearing report and the WRC conditions;
 - b. Earthworks consent granted by WRC in August 2020;
 - c. The conditions attached to the 2008 consent 2008 because the WDC decision had been appealed to the Environment Court and settled by consent order in 2008;
- 8. 19 November email Steven to Tasha, Ronnie sending Avian Study report and with advice to assist in reading it (key points in the report); Steven invited questions;
- 9. 2 December email to Tasha, Ronnie from Steven requesting Kaupapa on TWF either before Christmas or in the New Year;
- 10. 7 December email from Tasha to Steven

2021

- 11. 10 February 18 February series of emails Steven and Tasha/Ronnie trying to set up a hui with Glenn Starr and Craig Shearer
- 12. 12 March site visit held with Yvonne Ngahinaturae Armstrong, Ronnie, and Pita (Steven and Craig Shearer attended). (Note, some other community members attended as well as media)
- 13. 18 March information requested at site visit sent to site visit attendees:
 - a. Comparison document comparing the consented wind farm with the proposed changes;
 - b. The ZVI analysis maps which show where turbines will be able to be seen from;
 - c. The Taharoa Road view comparison maps (photomontages);
 - d. Request for mana whenua to determine their position on the application and offering to provide more information if wanted;
- 14. 20 March email from Tasha to Yvonne saying 'Marokopa marae will tautoko the decision to whanau i Taharoa decision';

- 15. 21 March email from Yvonne saying she has yet to get a collective opinion, and asking for a hui with Ventus representatives.
- 16. 22 March response to Yvonne and others (Ronnie, Tasha, Hera Denton) saying Ventus representatives would welcome the opportunity to hui with the whanau
- 17. 4 May Hui at Taharoa attended by Nga Armstrong, Reaniin King, Aherata King, Rachael Mura, Tommy King, Joanna King, Robyn Maikuku, Tipene Wilson, Craig Shearer. Issues discussed included:
 - a. Long tern effects of windmills
 - b. Visual effects
 - c. Hunting effects
 - d. Ensuring other environmental effects are suitably avoided or mitigated
 - e. Cultural effects
 - f. Condition to ensure that any disposal or parts or windmills occurs in an environmentally and culturally appropriate manner
 - g. Benefits to whanau (eg power to marae)
 - h. Nuisance from transporting any windmills up to the site
- 18. 27 July, email from Yvonne setting out a response from Ngaati Mahuta ki te Tai Hauaauru after the hui held 4 May 2021. The response provided a position on the TWF application.
- 19. 17 August acknowledgement from Steven Wilson to 27 July Ngaati Mahuta ki te Tai Hauaauru response;
- 20. 7 September email Steven Wilson to Yvonne (cc Tasha) asking for a face to face korero to see if there is a way forward to resolving concerns expressed in 27 July email;
- 21. 29 October email from Steven Wilson inviting Yvonne and other to a site visit at Te Uku wind farm Yvonne responded that too many things with covid at the moment;

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- 22. 1 May a number of submissions are received by Council to public notification of the wind farm variation application from Iwi;
- 23. 29 July hui with Ngaati Mahuta ki te Hauaauru and other submitters at Te Kooraha Marae. Hui resolved to appoint a person to undertake a Cultural Impact Assessment (CIA);
- 24. 29 July email from Mia Morgan (Te Nehenehenui Trust) she would be unable to make the hui at Te Kooraha Marae.
- 25. 30 July email to submitters (Natasha Willison, Nga (Yvonne) Armstrong, Roimata Harmon, Aruka Marae Trust, Te Kooraha Marae Trust, Maketuu Marae Trustees, Te Ruunanga o Ngaati Mahuta ki te Hauaauru Trust), Mia Morgan (Te Nehenehenui Trust) providing an update on the hui at Te Kooaraha Marae. Also offering submitters to explore if they would like to work on the CIA together on areas of common concern.
- 26. 31 July email to Ruhia King (copied in to Ngaati Mahuta contacts), as the Ngaati Mahuta appointee to set up a hui/Zui to discuss CIA.
- 27. 04 30 August Zui and email exchange with Ruhia King to discuss the process for the CIA development, and roles that Tipene Wilson will have to support preparing background information for the CIA. Ruhia to discuss application with Larry Harpur, the landowner and indicate preferred date for the site visit to Te Uku Windfarm.
- 28. 24 August email from Roimata Harmon noting she would be overseas on the day of the hearing but would be keen to hear the outcome.
- 29. 25 August email exchange between Roimara Harmon and Tipene Wilson seeing if she would like to be involved in the CIA process. Roimata responded, *"Thanks for the update. It's reassuring to hear that there is a CIA being conducted. I have been in touch with Ngahuia*

Herangi to explain my inclusion in this process and send my support. I would be interested in receiving a copy of the CIA when that has been complete? I will await the outcome of the hearing"

- 30. 10 September brief discussion with Ngaati Mahuta (Ngahuia Herangi) re: progress with CIA and potential mitigation matters, including support for Ngaati Mahuta aspirations.
- 31. 15 September email to Roimata Harmon acknowledging her email of 25 August and that a CIA copy would be forwarded to her.
- 32. 15 September sent Consultation record to applicant's solicitor at this point.
- 33. 15 September email to Ruhia King to firm up site visit to Te Uku.
- 34. 28 September email to Ruhia King to firm up site visit to Te Uku.
- 35. 06 October draft Ngaati Mahuta assessment completed by Steven Wilson and emailed to Ngaati Mahuta.
- 36. 07 October assessment discussed with Ngaati Mahuta representatives.
- 37. 12 October email from Ngaati Mahuta suggesting a Zoom catchup in following week to enable time for them to discuss positions amongst their marae. SW requested if he would be able to forward draft assessment to applicant to begin discussions regarding mitigation measures. Draft assessment (v1.1 and v1.2) emailed to applicant and copied to Ngaati Mahuta ki te Hauaauru.
- 38. 15 October email from Ngaati Mahuta ki te Hauaauru seeking further clarification on queries and noting general comfort with other mitigation components. Emailed applicant seeking feedback on Ngaati Mahuta email.
- 39. 18 October emailed draft MOU and supporting material to Ngaati Mahuta.
- 40. 19 October Zui with Ngaati Mahuta to discuss MOU and Effects Assessment Report.
- 41. 20 October draft MOU, Effects Assessment Report, cover letter and minutes of 19/10 zui emailed to Ngaati Mahuta.
- 42. 20 October email to Sam Mikaere, Tramaine Murray (TNN) re: approach to hearing and if they wanted to make contact.

Appendix 7

Ngaati Mahuta ki te Hauaauru effects assessment report FINAL.docx

Memorandum of Understanding between TWF and Ngaati Mahuta ki te

Hauaauru

In response to this report, TWF drafted a Memorandum of Understanding ('MOU') that TWF and Ngaati Mahuta ki te Hauaauru discussed and amended to a mutually satisfactory draft. This MOU was subsequently signed by both parties. Though the specifics of the MOU are confidential to the parties, Schedule 1 of the MOU outlines the conditions of agreed by the parties. These conditions will be promoted ny TWF to the extent possible as amended conditions of the current consent and/or as a condition that is part of the MOU. These conditions are noted below in Table 2.

lssue	Agreed Condition		
Wāhi tapu, taonga	Subject to the Parties first consulting with Tangata Whenua and are resourced in		
discovery, archaeological	relation to the protocols:		
impacts.	1. TWF to engage Ngaati Mahuta ki te Hauaauru to act as cultural		
	monitor/observer during all development phases of the wind farm project.		
	2. Accidental Discovery Protocol to include reference to Ngaati Mahuta ki te		
	Hauaauru to be contacted, through Te Ruunanga o Ngaati Mahuta ki te		
	Hauaauru (and/or other named entities).		
Whole of life impact,	3. The Ruunanga shall be invited to contribute to any proposal to remove turbines		
disposal of redundant or	and associated structures from the site to ensure the materials are disposed of		
replaced material. Site	in an environmentally sustainable manner.		
remediation.			
Maatauranga Maaori and	4. TWF shall invite the Ruunanga to organise a poowhiri prior to the		
tikanga being considered	commencement of operations of the wind farm.		
	5. TWF shall invite the Ruunanga to organise a cultural induction programme, to		
	form part of the site induction, for all new staff, for all contractors constructing		
	the wind farm, and for the operator of the wind farm.		
Local economic impact, job	6. Prior to hearing, TWF shall, at its cost, draft this Memorandum of Understanding		
creation	(and to be transferred as a condition of any sale of rights to the consent		
	operation) to achieve appropriate mitigation measures with respect to		
	accidental discovery protocols, processes for consultation re disposal of blades,		
	payments for induction services, career opportunities/scholarships, work		
	opportunities and other resourcing issues (as adequately addressed in these		
	Agreed Conditions).		
	7. TWF to work with and use the services that Ngaati Mahuta ki te Hauaauru,		
	through the Ruunanga, can provide wherever possible.		
Net benefit to Ngaati	8. TWF agrees to the following:		
Mahuta	(a) energy relief for the three marae or a hardship system with terms to be		
	further discussed between the parties;		
	(b) potential for other power sources to be installed at the marae; and		
	(c) resourcing of the Ruunanga involvement in the implementation of the		
	resource consent conditions, for example accidental discover protocols,		
	monitoring processes (as adequately addressed in these Agreed		
	Conditions).		
Cultural Impact Assessment	9. CIA submitted at or prior to hearing.		
- commission an			
assessment			

Table 2: Agreed conditions