

7 September 2020



Ventus Energy (NZ) Ltd
c/o VGA
Unit G-12, The "Zone-23" Complex, 23 Edwin Street
Mount Eden, Auckland, New Zealand

Digitally Delivered

By email: Glenn Starr (glenn@ventusenergy.co.nz)

Dear Glenn,

APPLICATION FOR TAUMATATOTARA WINDFARM – RM200019

Further to the receipt of your application to change conditions 1, 2 and 3 of existing consent RM050019, reduce the number of consented turbines from 22 to 11, increase the tip height of the remaining turbines from 110m to 172.5m and delete condition 5.

Application Acceptance

As already noted by previous correspondence, Waitomo District Council ('Council') have accepted your application for processing under s88(2) of the Resource Management Act 1991 ('RMA').

s127 vs s88 RMA

We have investigated whether or not Council can consider and decide the Taumatototara Wind Farm application under s127 of the RMA as a variation to change specific conditions or whether it should consider it under s88 of the RMA as a new application for land use consent to authorise the proposal (to sit alongside the existing Land Use Consent).

Council's legal advice is that we do not currently have enough information to determine whether Council can process your application under s127 or s88. However, we have undertaken a review of the application and consider that further information is required in order to better understand the nature and extent of the effects. This is particularly important given that the original application was granted 14 years ago and has not yet been given effect to.

Further information under s92 of the RMA

The Council's technical review team has now reviewed the application documents and prepared a request for further information pursuant to s92 of the RMA. As a general comment, for Council to be satisfied with respect to each of the key effects associated with the increase in height, it needs to be satisfied with respect to both the effect of the change and the factual basis for the original effect. Given the significant time period that has elapsed since the original consent application in 2006 (14 years) a number of the assumptions and data are now outdated. As an example, the traffic flows on the road networks may well have changed since 2006 along with the flora and fauna associated with the area where the windfarm is located.

For each subject area I have provided some background comments from the technical reviewer, followed by the specific further information that is sought in relation to that issue *in italics*.

Consultation with tangata whenua

You have provided correspondence from Nga Tai o Kawhia stating that they have a neutral position on the proposal subject to the imposition of appropriate conditions. However, I have been advised by Council that the correct mana whenua for the windfarm area is Te Hauauru RMC.

1. Please provide written feedback from Te Hauauru RMC in relation to the windfarm proposal. The contact person for this RMC is Ronald Takerei who can be contacted at takerei@xtra.co.nz or 027 576 6253.

Landscape and Visual

Dave Mansergh, of Mansergh Graham Landscape Architects, has carried out a technical review of the landscape and visual aspects of the proposal.

Preliminary Review

The landscape and visual assessment report (LVA) provide a brief overview of the proposed amendments and effects at "executive summary" level of detail. Reference and reliance on the findings of the 2006 and 2012 LVA and the absence of the level of detail more commonly found in the assessment of this type of application, makes it difficult to independently confirm the various conclusions and ratings have been reached. Because the assessment is largely restricted to a commentary on the increase in height of the proposed turbines, cumulative effects have not been addressed. It is therefore unclear if other works associated with the proposed change will have additional effects that are either positive or adverse on landscape and visual amenity.

The following comments are made (in no order):

- a. The cumulative effects of the proposed height increase are not assessed. Rather effects ratings are provided for the difference in effects between the existing consented turbines and the proposed turbines.
- b. The LVA contains several caveats in relation to some of the conclusions reached, indicating a lack of certainty in the base data. This includes the conclusions in relation to road user numbers/types, tourism and road widening requirements. This brings into question the validity of the analysis and ratings. No plans have been provided showing the extent of the earthworks/roading changes identified.
- c. The LVA does not include an assessment of the effects against the relevant statutory and planning provisions.
- d. Under the heading *Landscape Effects* (6.1), the LVA identifies that *...Landscape effects are also synonymous with effects on character and amenity and whether a change to the setting is appropriate or not. Landscape character is comprised from a combination of landform, land cover and land use (or cultural patterns).* The report then states that the landscape effects are confined to the volume of earthworks to form the access roads and foundations. This suggests that the aforementioned factors have not been considered.
- e. There is no analysis of effects on the individual view locations identified. It is also noted that most of the view locations are located to the south of the application site, with a limited number of locations in the north. There is no explanation as to why this spread of points has been selected particularly now that the southern 11 turbines have been removed from the application.
- f. The assertion that hub height is the determinant of potential visual effects is not supported by supporting analysis or referenced research. The effects of the overall increase in size on the receiving environment are not described.
- g. It is unclear why the ZVI analysis is restricted to an 8km radius. As a result, approximately 2/3 of Taharoa Village, the only major settlement close to the application site, is not included in this analysis.

- h. While the response to the s92 memorandum (2 December) satisfactorily addresses the technical matters raised in relation to the preparation of the photomontages and ZVI analysis (by Energy3 Ltd), issues addressing the WSP Opus assessment have not been responded to.

On the basis of the technical findings set out above, the following further information is requested:

2. *Please provide a detailed assessment of landscape and visual effects report in accordance with NZILA best practice approaches and providing sufficient detail so that the effects of the proposed activity can be independently assessed without recourse to previous assessment reports prepared for the existing consented activity. The assessment should:*
 - a. *Address the comments made above.*
 - b. *Include an analysis of the effects of any and all works that are not already covered by the existing consent;*
 - c. *Provision of further analysis/commentary around the threshold at which all effects fall below the **minor threshold** (not the low threshold as currently used in the WSP-Opus report);*
 - d. *Identification and analysis of all potentially affected view locations (this may include locations representative of potentially affected dwellings on Taumatotara West Road, Taharoa Road and Whakapirau Road).*
 - e. *Further expansion of the analysis around the effects being based on hub height;*
 - f. *Integration of the information contained within the s92 technical response from Energy3 Ltd into the landscapes and visual assessment report.*
 - g. *That any information, supplied by a third party and relied upon in the VLA, is clearly identified and independently verified by a qualified landscape architect;*
 - h. *Identification of any additional mitigation measure required to be implemented.*

Noise

The acoustic information has been technically reviewed by Siiri Wilkening of Marshall Day Acoustics and her comments and further information questions are set out below.

The noise surveys used to determine the existing background sound (in 2005) were of insufficient duration, and therefore did not produce the required number of data pairs per location. NZS6808 (both versions, 1998 and 2010) requires 1440 distinct pairs of wind speed at wind farm hub height vs background sound level at each house under consideration. Each measurement should extend at least 10 days because this is the minimum over which 1440 10-minute data pairs can be collected for each location assessed. The 2005 AEE states that measurements were undertaken over about 4 days only.

The measurements were undertaken during a time when insect noise appeared to have been high (noted in the AEE). The assessment resolved to use only night-time data for one of the two measurement locations, which reduces the available assessment data further.

It is also unclear if wind data from different wind masts was used for the assessment of each receiver. There were three wind masts referenced in the AEE as having been used for the analysis, but only mast A3 appears to be suitable in relation to Houses 1 and 2. Wind data from only one wind mast should be used in any one graph depicting the wind speed vs noise level pairs.

The following information is required:

- 3. At least one appropriately timed survey of sufficient duration should be undertaken to fulfil the requirements of NZS6808. This survey should be undertaken at one relevant receiver location following accurate predictions of noise levels at all relevant receivers (refer below). The receiver location should not be on the wind farm site. However, if a dwelling is outside the wind farm site but has provided written approval, this location may be a suitable measurement location.*

Receiver positions

The quality of the available maps is low. It is difficult to accurately determine the location of the receiver dwellings. The Altissimo letter contains a map of houses, including coordinates. Most houses appear to be on the wind farm site, while others that are outside the wind farm site have been excluded (e.g. Houses 5 and 6 of the original AEE, approximately 11 and 14 Taumatotara West Road and 835 Taharoa Road).

We also note that Houses 1 and 2 of the original application (those at which measurements and assessments were undertaken) appear to now be on a site which is part of the wind farm.

The following information is required:

- 4. The coordinates of all dwellings that are to be assessed (i.e. not on the wind farm site, or from which written approval has been obtained from the owner and occupier)*
- 5. The coordinates of any dwellings that are not on the wind farm site, but from which written approval has been obtained, and confirmation that written approval has been provided by owner and occupier following information provided about the predicted noise levels.*

Wind turbine generators

We note that the table of sound power levels in Section 3.3 of the "Acoustic Report" attached to the original AEE is not readable. We query which wind turbine generator is to be used. The sound power level of 107 dB L_{WA} does not provide for frequency dependent predictions. In addition, a clear table of coordinates of the proposed turbines location would be helpful.

The following information is required:

- 6. For the proposed wind turbine, manufacturer's sound power data (in 1/3 octave band) for wind speeds from cut in to cut off; and*
- 7. A table of wind turbine coordinates, including absolute hub height.*

Noise level predictions

The application does not contain a table of predicted noise levels at all relevant receiver locations. Predictions are only provided for Houses 1 and 2. However, both seem to be excluded from the assessment as per amended Condition 8b. Furthermore, the figure in the Altissimo letter indicates that these houses are on the wind farm site. No predictions are provided for any of the other houses.

The original assessment correctly makes allowance for the higher wind speed at hub height compared with the anemometer height. However, this adjustment has not been taken into consideration in the application for the proposed higher hub height.

The increased height in hub and tip would result in higher wind speeds, which needs to be accounted for in the predictions. While the Altissimo letter accounts for the increase in height in terms of "acoustic line of sight", it does not account for the increased wind speed.

The following information is required:

- 8. Predicted noise levels for each of the relevant receiver positions identified under (b) and (c) above. The prediction should be based on the highest sound power level (and based on 1/3 octave sound data), the updated hub height and the relevant current prediction method (IoA method).*
- 9. Noise level contours, predicted in accordance with the IoA method, extending beyond the wind farm sites.*

10. For the survey position from (a) above, analysis of measured data showing the wind/background sound data and the predicted wind farm noise level per wind speed predicted under (f) above.

Other noise sources on site

House 6 appears to be very close to Grid connection A. No assessment of corona noise was undertaken, which would need to comply with the noise limits of condition 7. We are also unsure if and where a substation will be located on the site. The circuit breaker noise should be assessed against the noise limits of condition 7 also, should a substation be in the vicinity of any dwelling. We assume that the noise limits of condition 7 apply at the notional boundary of dwellings rather than the site boundary, even though this is not stated.

The following information is required:

11. Prediction of corona noise at closest houses.

12. Prediction/discussion of circuit breaker noise as well as any substation noise.

In summary, an assessment of wind farm noise needs to be undertaken in accordance with the relevant NZS6806:2010 standard, taking into consideration the Institute of Acoustics prediction methodology, which is considered industry best practice. The existing information is not sufficient to determine compliance with the relevant performance standards.

Ecology

The Ecological aspects of the proposal have been technically reviewed by Leigh Bull of Boffa Miskell.

In order to be able to assess potential ecological effects, it is critical to first have an understanding of what species are present and how they are utilising the sites. As per the AUSWEA (2018) best practice guidelines, ecological assessments for wind farms should include:

- a desktop review of available information to identify any potential issues that may prevent the project being approved;
- field surveys to map the vegetation and identify flora and fauna species;
- species-specific studies to obtain more information about significant flora and fauna (particularly birds and bats) that may be at risk from the development or to avoid them or develop mitigation strategies
- development of avoidance, mitigation and offset strategies to minimise impacts on species if required; and
- development and implementation of monitoring programs for the construction and operational phases of the wind farm development.

The assessment of ecological effects undertaken for the Taumatotara wind farm do not follow these best practice guidelines, and currently do not contain the necessary information (as outlined above) to be able to accurately determine the effects of the proposal. Outlined below is the information that is currently missing and required to be able to determine the effects of the proposal on ecology.

13. Pages 9-11 of the original ecological assessment (Kessels & Associates Ltd 2004) are missing from the 2005 AEE. Can the applicant please provide a copy of these missing pages.

14. Given the time elapsed between the original 2004 ecological assessment and the 2020 application, the following information is required to confirm the ecological features that were identified on the wind farm site are still accurate and therefore determine if the assessment is appropriate:

a) Indigenous vegetation maps;

- b) *Proximity of different avifauna habitats (e.g. pasture, native forest, exotic forest, scrub / shrubland, wetland etc);*
 - c) *Recent site photos; and*
 - d) *Description of terrestrial and freshwater habitat and specie values present on the wind farm site.*
15. *The Ecology New Zealand report concludes that "while bird and bat fatalities are unlikely to change with increased blade tip height and rotor diameter, the 50% reduction in turbine numbers is highly likely to reduce fatalities, which could be a positive ecological benefit overall". Further information is required regarding how these conclusions can be quantified. How exactly was it determined that the bird and bat fatalities are unlikely to change given that no data is presented on what those effects might be in the first instance. How many birds or bats were determined to be impacted by the previous proposal?*

Avifauna

16. *To date none of the ecological assessments for the Taumatotara wind farm site have provided a comprehensive list of native avifauna species that are, or may be, utilising the site throughout the year. The following information is required regarding:*
- e) *What native species are utilising what type of habitat on the wind farm site;*
 - f) *Information regarding any nesting species that may be present on the site;*
 - g) *What are the abundances of each species;*
 - h) *What are the seasonal patterns to species diversity and abundance?*
 - i) *For each species, what are the flight patterns, behaviours and heights across the wind farm site, including at the turbine locations?*
17. *Threatened and At Risk species, including Australasian bittern and spotless crane, are known to occur in the wider landscape; wetland birds such as these use a habitat network and as such are known to fly considerable distances over the landscape. As such, information and identification of avifauna habitat features such as wetlands and waterbodies on the wind farm site and in the wider landscape are required to assess any potential movements across the wind farm, and therefore any associated effects.*
18. *Given NZ falcon (an At Risk species) has been identified as potentially utilising the site, further information is required regarding:*
- a) *NZ falcon surveys conducted on the site and the methods used to undertake those surveys.*
 - b) *If NZ falcon are present, how they are utilising the Taumatotara wind farm site throughout the year.*
 - c) *What are the flight patterns, behaviours and heights across the wind farm site, including at the turbine locations?*
 - d) *Are adult and / or juvenile NZ falcon utilising the site? This is important as the risk of turbine collisions with raptors can differ depending on their age.*

Bats

19. *The original¹ ecology assessment reported that long-tailed bats were present in the wider area (Aorangi Scenic Reserve). That assessment identified that bats may be present in the forest on the cliffs adjacent to the wind farm site and foraging at night within the vicinity of the turbines. Long-tailed bats are classified by DOC as having the highest threat ranking – Nationally Critical. It is therefore expected that for any wind farm site for which there is the potential for bats to be present, survey work will be undertaken to confirm their presence or absence on the site, particularly at the turbine locations (as per the AUSWEA guidelines). As such, further information is required regarding long-tailed bats on the Taumatotara wind farm site, including their distribution and relative abundance at each turbine site, as well as movements across the site in relation to their key habitat requirements (foraging, commuting and proximity to roost sites, including maternity roost sites). This information is fundamental to be able to determine if the proposal will in fact effect this Nationally Critical species.*

Roading and civil works

20. *It was noted in the original ecology assessment¹ that "the access roads pass through or besides stand of native forest and shrubland, and two small wetlands". The current application states that "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". Confirmation needs to be provided in the ecological assessment that no further vegetation clearance or wetland reclamation will be occurring as a result of the proposal, particularly in regard to the Significant Natural Areas (SNAs) that occur on the site and along the road. If additional vegetation is to be removed, that will need to be quantified and assessed.*

Transportation

The transportation aspects of the proposal have been reviewed by Lindsay Boltman, Traffic Engineer of BBO in conjunction with Joanna Towler, Manager – Local Roads at Waitomo District Council.

The proposed arrangement is that truck & trailer units will transport the turbines from New Plymouth Port to the subject site via SH3, Marokopa Road and Taharoa Road. In 2005, Ventus Energy Ltd predicted that the development would generate a total of 2650 trips for the entire project, however, did not include the following.

- Trips per day (07:00 PM to 07:00 AM)
- Trips per route
- Duration / Period
- Number of trips where roads will need to be closed during transport due to extra long loads.

An update of all the vehicle trips to the subject site should be provided in a detailed description/table format including the Annual Average Daily Traffic,

Traffic Volumes

Ventus Energy Ltd provides Annual Average Daily Traffic (AADT) volumes for the year 2004. Traffic volumes over the last 16 years have increased since that date. The applicant should provide the latest traffic volumes along the proposed traffic route to go hand in hand with the traffic volumes generated by the windfarm. This will also provide a clear understanding of the existing road network.

¹ Kessels & Associates Ltd (2004). Ecological Assessments of Proposed Wind Farms, Taumatotara West Rd, Taharoa. Report prepared for Ventus Energy Ltd, dated 17 December 2004.

Route

Ventus Energy Ltd identified five locations along Taharoa Road which required upgrading and removal of vegetation. The current assessment is not supported as a full route assessment should be undertaken by a Traffic Engineer which should include the following.

- To assess all Waitomo Roads, including intersections that are relevant to the project.
- Identify areas along the route where the semi-trailer may have limited manoeuvring space e.g. tight corners / bends, intersections and bridges.
- Provide RP locations as a reference.

The isolated areas should be provided with a RP location (Mobileroad) along with detailed mitigating measure. A swept path should be provided for all locations as this would help identify the constraints.

Overview of the assessment

The Taumatotara Windfarm should address all aspects along the entire route and alternative route. Detailed information / mitigating measures should be provided by a competent professional in order to support the assessment. It is recommended that a journey run / test run with a semi-trailer truck be undertaken along the entire route and a recording of this should be provided as evidence. This would reveal all locations along the route that would require mitigating measures.

- 21. Please provide an update of CAS data and AADT for the full length of the project route. A trip generation (daily trips) of the windfarm should be presented according to the following.*
 - a. Expected number of vehicle movements, particularly heavy vehicle numbers during each construction phase.*
 - b. Preferred routes for heavy vehicles.*
 - c. Temporary traffic management measures required to manage heavy vehicle movements to / from site.*
 - d. Measures to prevent, monitor and remedy tracking of dust and debris.*
 - e. Monitoring and reporting of construction traffic and traffic management measures.*
- 22. Please provide an assessment of the achievable sight lines at the site access should be undertaken to confirm whether sufficient sight distance exists to meet the minimum requirements of NZTA Guidelines RTS 6.*
- 23. Please provide an assessment of the vehicle swept path should be provided for the isolated areas along the entire route. Furthermore, a journey run / test run with a semi-trailer truck should be undertaken along the entire route (New Plymouth Port to subject site) and a recording of this should be provided as evidence.*

IMPORTANT NOTES

Within 15 working days from the date of this request you must either:

- a) Provide the information requested, or
- b) Advise Council in writing that you agree to provide the information requested,
or
- c) Advise Council in writing that you refuse to provide the information requested.

A response is due from you no later than: **28 September 2020**.

If you advise Council in writing that you agree to provide the information, Council will advise you in writing the date by which the information must be provided.

Please note that the statutory timeframes for processing your application have been put on hold until the further information requested has been received. Once it is received, the information will be assessed for completeness.

If you do not provide, or refuse to provide the information, council must publicly notify your application under section 95(C) of the RMA. If this happens, you will be required to pay the notification fee as per the fees and charges (less any deposit already paid) in full before the application processing can proceed.

Please contact Chris Dawson, BBO who is processing this application on behalf of Waitomo District Council on 0275 333 899 or cdawson@bbo.co.nz if you have any questions regarding this letter.

Yours faithfully



Terrena Kelly
General Manager Strategy and Environment