BEFORE AN INDEPENDENT COMISSIONER 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

SUMMARY STATEMENT AND SUPPLEMENTARY EVIDENCE OF

MICHAEL MOORE ON BEHALF OF TAUMATATOTARA WIND FARM LIMITED

[LANDSCAPE] 10 NOVEMBER 2023

Counsel: G K Chappell

SUMMARY STATEMENT

- 1.1 My full name is Michael William Moore.
- 1.2 My evidence addresses the landscape (including visual) effects of the proposed variation application and the updated variation application. An A3 graphic supplement containing supporting diagrams, maps, and images forms part of my evidence. This is Attachment One of my Evidence in Chief.
- 1.3 A 22-turbine wind farm with 110m and 121.5m high turbines is already part of the consented baseline. The variation application proposes surrender of turbines 12 22 whilst increasing the height of the remaining turbines to 172.5m, whilst the updated variation application proposes surrender of turbines 12 22 as well as turbines 2, 4 and 9, and increasing the remaining turbine height to 180.5m. My assessment relates to the effects of the difference between what is consented and now proposed, on the landscape values.
- 1.4 The site and relevant surrounding landscape context has no District Plan overlays recognising any significant landscape values. The key landscape values relate to rural character, including openness, legible natural landform, the presence of indigenous vegetation in places, and rural land uses. Considering the fact that the consented wind farm is already part of the 'existing environment' I assess the sensitivity of the landscape to the proposed variation as low.
- 1.5 The variation will result in a substantially reduced wind farm footprint overall with a smaller area impacted by earthworks. Whilst the variation application and updated variation application involve fewer turbines, these are larger in scale, resulting in an increase in height over those consent of 42% and 48% respectively.
- 1.6 The nature and degree of visual effects will vary with viewpoint, in general, being positive in relation to the consented wind farm from viewpoints to the south. From viewpoints to the north / north-east near the proposed larger turbines, there will be some adverse effects. Given that the primary effect is the presence of the wind farm at all, the effects of greater visual

dominance associated with the larger turbines on the rural character amenity values of openness and naturalness is less significant.

- 1.7 Overall, in relation to the consented environment, physical landscape effects will be positive. Whilst the nature of visual effects will vary with specific viewing location, my assessment is that these will be positive overall. The main reason for this is that reduction in the number of turbines and the reduced spread of the windfarm will be more visually significant than an increase in turbine scale. Of the specific viewpoints assessed, I consider that adverse effects associated with both the variation application and the updated variation application will be no more than low-moderate (minor).
- 1.8 I have assessed the variation consent and the updated variation consent against the statutory provisions relevant to landscape matters and conclude that these variations will be generally consistent with those provisions.

2. SUPPLEMENTARY EVIDENCE

- 2.1 Since providing my evidence it has come to my attention that there are some questions about the accuracy of the photo-montages and wireframes prepared by Energy3, which have helped to inform my assessment. These relate to a lack of alignment in some cases between the images derived from the digital terrain model and the associated photographs.
- 2.2 Tom Cameron of Energy3 will address this issue at the hearing. He has provided a revised full set of images overlaying the wire-frame diagrams with the photographs to illustrate the match which I attach as "Overlays" in a separate file. Provided within this overlay set are amended Figures 6 (a) (c) to correct an error. These represent the only changes.
- 2.3 In undertaking my assessments, I have been aware of the accuracy limits of the 20m contour data used to create the terrain models, and the associated need for a degree of interpretation. This is of most significance where there are closer proximity landforms. Whilst the highest accuracy possible is important, to some extent, it is the comparison between the various options (based on the available terrain data) that is of most relevance, given the baseline of the consented wind farm.

2.4 Having reviewed the overlays dated 10 November 2023 ("updated overlays"), I briefly run through my assessment of each viewpoint assessed, as follows:

Figures 3(a) – (c) Taharoa Road

2.5 These are fully rendered photo-simulations and show a good photograph / wireframe image match. I confirm my assessment.

Figures 4(a) – (c) Marakopa Road

2.6 These are fully rendered photo-simulations and show a good photograph/ wireframe image match. I confirm my assessment.

Figures 5(a) – (c) Taharoa Village

- 2.7 These are wireframe diagrams, and the photograph / wireframe image match tends to understate visibility to an extent. Having reviewed the updated overlays and considered the relative turbine elevations and viewing distances, I consider that my assessment descriptions understate the visibility slightly in terms of the numbers and extents of turbines visible.
- 2.8 The consented wind farm will be largely as shown in the wireframe except that the tips of turbine 7 may also be visible. The variation application will also be largely as shown except that I believe the tips of turbines 7 10 may also be visible. As regards the updated variation application, I consider that this will be largely as shown in the wireframe but that the tips of turbines 7, 8 and 10 are likely to also be visible over the hilltop.
- 2.9 Overall, beyond the cluster of the closest turbines additional wind farm visibility is minimal and limited to turbine tips seen at considerable distance, and I confirm my assessment.

Figures 6(a) – (c) 158 Coutts Road.

2.10 In the updated overlay Energy3 have corrected the images to have a much better match with the photograph. The original Figures 6(a) – (c) wireframes appeared to have a viewpoint that was too high, which overstated visibility of the wind farm site ridgeline relative to the photograph. For the purposes of assessing the effects of the variation, this made no difference to turbine visibility. Having reviewed the new overlay, I confirm my assessment.

Figures 7(a) – (c) 233 Coutts Road

2.11 These are wireframe diagrams and the match with the photograph is good for the background but poor for the foreground. The effect of this is to understate the height of the landform that provides screening of the variation site. This creates no adverse visual effects issues, and I confirm my assessment.

Figures 8(a) – (c) Adjacent to 11 Taumatatotara West Road

2.12 These are wireframe diagrams, and considering the difficulties associated with 20m contours and close-by landform, I consider that they are a good match with the photograph. The mismatches have the effect of understating the landform screening and create no adverse visual effects issues. I confirm my assessment.

Figures 9(a) – (c) 83 Te Waitere Road

2.13 These are wireframe diagrams, and considering the difficulties associated with 20m contours and close-by landform, I consider that they are fair, albeit limited. In my assessment they provide confirmation that no matter which wind farm iteration is involved, most of the turbines will be entirely screened. The updated overlay leaves unanswered whether the tips of turbines 1 – 4 may be visible over the ridgeline but having visited this site, I consider that unlikely. This conclusion is supported by the ZTV map and overall, I confirm my assessment.

Figures 10(a) – (c) 84 Te Waitere Road

2.14 These are wireframe diagrams and provide an acceptable match with the photograph in my assessment. In terms of landform screening and the height of the site ridgeline, the wireframes slightly overstate visual effects. I confirm my assessment.

Figures 11(a) – (c) 176 Te Waitere Road

2.15 These are wireframe diagrams and provide an acceptable match with the photograph in my assessment. In terms of landform screening, the wireframes slightly overstate visual effects. I confirm my assessment.

Mike Moore