

I make the following layman's points on glancing over this document regarding Palmerston North Council's recent win over Te Rere Hau wind farm noise.

1. the turbines at Te Rere Hau have a tower height of 30 m and only 2 blades with a rotor DIAMETER of 32.2 metres.
(Waterloo tower height 80 m and rotor diameter 90 m)
2. Marshall Day Acoustics did one of the noise monitoring reports for the wind farm in 2009 (TRUenergy uses Marshall Day at Waterloo and their assertion that the wind farm is complaint is under question)
3. Stage 1 - 5 turbines was completed in Sept 2006
4. Stage 2 – 28 more turbines completed May 2009.
5. Noise complaints started May 2009, by October 2011, the council had over 500 complaints about noise
6. See[44] about sound power levels. "Sound power is the sound energy created at source by a sound generator. Sound power itself cannot be heard nor measured directly although it can be ascertained. Ascertaining the sound power level of the turbines is necessary in order to predict the sound pressure levels experienced by recipients of noise from them. Sound pressure levels convert into audible sound (and presumably inaudible)! which can be both predicted and measured. Accurate determination of sound power level is essential for the accurate prediction of sound pressure level."
7. The difference between the predicted and actual sound power levels from 4 turbines was up to 5.7 dB at 8 m/s and this has a direct flow on effect on the accuracy of other NIAR (Noise Impact Assessment Report)
8. [106] The turbines produced noise with higher sound power levels than predicted in the NIAR; generated noise with special audible characteristics (SAC's)(tonality); noise at residences exceeded those predicted in the Noise Impact Assessment Report
9. [115] Wind company says noise predictions are only predictive and not expected to be binding? NO! did miscalculations of noise contours, said there will be nil noise at houses which turn out to be affected, residents later affected where not provided with the development information,
10. [118] if noise predictions had been more accurate, council would have been obliged to serve (notify?) a wider catchment of residents affected by the proposal!!!!
11. [130} A much larger number of residences fell into the 30dB contour than predicted.
12. CONCLUSION: the acoustic information provided by the wind farm was INACCURATE and consent conditions are to be reviewed.