



The Waubra Foundation.
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Australia

Reg. No. A0054185H
ABN: 65 801 147 788

5th April, 2013

Ms Chloe Munro, Chair and CEO
Dr Michael Sargent, Member
Ms Anne T Brown, Member
Ms Virginia Malley, Member
Clean Energy Regulator
chair@cleanenergyregulator.gov.au

Dear Ms Munro, Dr Sargent, Ms Brown and Ms Malley,

Letter of Notice

The Waubra Foundation wish to advise that we are formally putting you individually on notice, that the Clean Energy Regulator is funding the activities of some wind turbine power generators, which are directly causing serious harm to the health of surrounding neighbours.

The Foundation also has good reason to believe that a number of power generators may be obtaining RECS whilst knowingly exceeding allowable audible noise limits allowed by existing state wind turbine noise guidelines.

The commonest problem reported by residents including turbine hosts is chronic severe sleep deprivation, well known to be directly associated with serious harm to physical and mental health, and well known to be caused by night time environmental noise exposure, including frequencies below 200 Hz which are not currently included in existing wind turbine noise guidelines. The specific exclusion of these frequencies from noise monitoring renders the current guidelines inadequate to protect human health.

The consequences of cumulative sleep deprivation are well known to clinical medicine. They include a greater risk of cardiovascular disorders, serious mental health problems including suicide, impaired immunity including increased risk of serious infections and malignancies (cancers) and metabolic disorders such as diabetes. All these clinical problems are being reported by clinicians and residents living near industrial wind developments in Australia and internationally.

There is currently no external audit and verification of noise pollution emissions possible, because data from the wind developers relating to wind speed and power output data is required in order to determine compliance. The wind developer / power generators have consistently refused to hand this data over to acousticians independent of the wind industry, at the request of either the residents or their lawyers. There is therefore no effective transparent accountability.

We understand that you have been notified by Senator John Madigan during Senate Estimates in Federal Parliament on 11th February, 2013 of an email from a staff member from the Victorian Department of Planning, indicating that the Waubra Wind Development may be operating without evidence of compliance with existing wind turbine noise regulations, as is required by the Renewable Energy Act.

That is, that Acciona Pty Ltd have not been issued with a certificate of compliance in relation to noise, and is, therefore, operating in breach of its conditions of planning consent. This breach has continued for almost three and a half years, and appears to be incapable of remedy. Accordingly, Acciona Pty Ltd should not have been accredited to receive Renewable Energy Certificates (RECs). **In other words, there are concerns that Acciona's Waubra Wind Development may be fraudulently obtaining RECS from your organization.**

The state noise pollution regulatory authorities who are meant to be in charge of verifying compliance with those state guidelines, have consistently failed to investigate adequately, independently of the wind developer, in a timely and transparent manner, despite being made well aware of the severity of the health and sleep problems these residents are experiencing, including the home abandonments.

The rural residents impacted adversely by this noise pollution currently have no faith in the state based noise regulatory authority's intention or ability to adequately continuously monitor the noise pollution, and nor does the Waubra Foundation. This is why there is an urgent requirement for completely independent and continuous transparent, publicly available monitoring of the noise pollution, in order to verify the accuracy of the claims of compliance from both the state regulatory authorities and the wind developers, to ensure that the power generators are not breaking current state noise laws, and thereby obtaining RECS from your organisation fraudulently.

We note that the Federal Parliament Senate inquiry recommendations from the Inquiry into the Social and Economic Impact of Rural Wind Farms from June 2011 recommended "urgent" research, including the investigation of the acoustic spectrum inside the homes of sick people. This has not yet occurred, some 20 months later. We are aware of over 40 families who have abandoned their homes, because of the severity of the health problems their family members have suffered. Some of these conditions are potentially life threatening.

We also note that a motion proposed by Ms Judi Moylan MHR on 10th May 2012, was passed in the Australian Federal Parliament House of Representatives, which included the following provisions:

- that the NHMRC's 2010 rapid review "should not be principally relied upon to inform planning guidelines" (at 5)
- calls on government authorities to "adopt cautious planning policies" and provide "adequate buffer zones" (at 9) and
- calls upon State and Local approval processes to require wind farm developers to indemnify against potential health issues (at 10)

We bring your attention to the following statement issued in December 2012 as part of an acoustic survey conducted in the same month in Wisconsin by a collaboration of acousticians including those working for the wind developers. The team included Dr Paul Schomer, the current Standards Director of the Acoustical Society of America. Their joint report stated the following:

"The four investigating firms are of the opinion that enough evidence and hypotheses have been given herein to classify LFN and infrasound as a serious issue, possibly affecting the future of the industry. It should be addressed beyond the present practice of showing that wind turbine levels are magnitudes below the threshold of hearing at low frequencies"

We further advise that during a tribunal hearing in Victoria, on 6th March, 2013, concerning Infigen's proposed Cherry Tree Wind Development, Commissioners Wright and Liston stated

"The Tribunal finds itself in a position where there is some direct evidence and much anecdotal evidence that people living in proximity to wind farms experience deleterious health effects, and those effects are of the same type, being sleep disturbance, increased anxiety, headaches, and pressure at the base of the neck.

There is clearly an association between wind farms and the symptoms that have been described"

The Waubra Foundation's field research, and the data collected by others in Australia independent of the Foundation has confirmed that these deleterious effects on sleep and other symptoms are being reported out to 10km from existing wind developments, and that a significant proportion of the local population's sleep is adversely affected. For example, Mr Wang, a Masters student from Adelaide University, found in a population survey at Waterloo involving 75 households within 5km of the Waterloo Wind Development, that 50% of the respondents were moderately to severely affected by the noise. Details of Mr Wang's survey and others at Waterloo and Cullerin are contained in my statement of evidence, attached.

The characteristic acoustic signature of wind turbine noise has been measured by an independent acoustician 8km from the nearest wind turbine, inside and outside the home of a severely sleep deprived resident, at a time when both the resident and the acoustician could clearly hear the audible component of that noise. This resident has now chosen not to host 6 wind turbines himself, because of the negative impact of the wind turbine noise on his health, and the effect on his neighbours. Research from 1985 conducted by NASA clearly shows that this information about wind turbine generated infrasound and low frequency noise propagation to distances of 10km and beyond was known almost 30 years ago.

We have also attached additional information for your careful consideration, including Dr Bob Thorne's case series of residents living for over 2 years near 2 Victorian wind developments. Dr Thorne's data, found the health of residents living near wind developments was worse even than data from hospital inpatients (p8, Table 3.1.2). This finding is in accordance with our own field research, and reports from clinicians, and from residents, and is consistent with current peer reviewed published research relating to the effects of chronic sleep deprivation and chronic stress.

Through this communication, you have been made aware of the suffering being caused to residents living in the proximity of the Acciona Waubra wind development, where numerous families have been forced to abandon their homes. You have the power to rectify this. Should you fail to act appropriately, your responsibility to affected residents, sounding in compensatory damages, must be considerable.

We request that the Clean Energy Regulator immediately acknowledge receipt of this communication and indicate what courses of action it proposes to take, with a view to dealing appropriately with the critically important information this letter contains.

Yours faithfully,



Dr Sarah Laurie, CEO

Attachments

1. Explicit Cautionary notice, dated 29th June 2011
<https://www.wind-watch.org/documents/explicit-cautionary-notice-to-those-responsible-for-wind-turbine-siting-decisions/>
2. Dr Laurie's Cherry Tree evidence statement to Cherry Tree VCAT Tribunal, 2013
<https://www.wind-watch.org/documents/statement-of-dr-sarah-elisabeth-laurie/>
3. Mr Peter Mitchell's closing address to the Cherry Tree VCAT Tribunal
<https://www.wind-watch.org/documents/waubra-foundation-statement-on-cherry-tree-wind-farm/>
4. Dr Ian Arra and Dr Hazel Lynn, powerpoint of a Literature Review of the current peer reviewed published studies relating to wind turbines and human distress <https://www.wind-watch.org/documents/association-between-wind-turbine-noise-and-human-distress-literature-review/>
5. Dr Bob Thorne, "Wind farm generated noise and Adverse Health effects" 2012,
<https://www.wind-watch.org/documents/wind-farm-generated-noise-and-adverse-health-effects/>

Other information sources referred to in the text of the letter:

Peer reviewed published evidence concerning the consequences of sleep deprivation

Further information about the known and well accepted specific clinical consequences of chronic sleep deprivation can be obtained directly from peer reviewed published clinical papers from the links below:

<http://eurheartj.oxfordjournals.org/content/early/2011/02/03/eurheartj.ehr007.full>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2656315/>

<https://www.wind-watch.org/documents/effects-of-insufficient-sleep-on-circadian-rhythmicity-and-expression-amplitude-of-the-human-blood-transcriptome/>

Acoustic field evidence indicating distances travelled by infrasound and low frequency noise

NASA 1985, Willshire, William

<https://www.wind-watch.org/documents/long-range-downwind-propagation-of-low-frequency-sound/>

Cooper, Steven "Are wind farms too close to communities?" 2012, Figure 11

<https://www.wind-watch.org/documents/are-wind-farms-too-close-to-communities/>

Examples of first hand reports from clinicians and residents

Interview with Sonia Trist, from Cape Bridgewater

<http://stopthesethings.com/2013/03/24/cape-bridgewater-sonia/>

Interview with Melissa Ware and Rikki Nicholson, from Cape Bridgewater

<http://stopthesethings.com/2013/04/04/cape-bridgewater-melissa-and-rikki/>

Dr Sandy Reider MD, American Family Physician testimony to the Vermont

Legislature <http://www.windturbinesyndrome.com/2013/acoustic-trauma-produced-by-large-wind-turbines-is-real-and-significant-sandy-reider-md-vermont/?var=cna>