31st October 2012

The Committee Secretary
Senate Environment and Communications Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Secretary,

Re: Submission to the Senate Environment and Communications Committee Inquiring into the Renewable Energy (Electricity) Amendment (Excessive Noise From Wind Farms) Bill 2012.

We are residents of South Gippsland and became concerned about wind farm noise when the Toora Wind Farm commenced operating in 2002.
A number of people known to us, who were living near the newly erected wind turbines were adversely affected by noise, particularly in certain weather conditions, e.g. on a summer's evening/night, when the air at ground level was relatively still, but there was obviously considerable wind velocity at the height of the turbine hubs, as the turbines were rotating.
Proponents of wind farms often suggest that such people suffer from a psychogenic condition resulting from the *nocebo* effect of absorbing negative information about noise impacts from opponent groups and reinforced by their own dislike of wind farms. In our view, such arguments are close to sophistry as they ignore the fact that opponent groups are often created by the people who are adversely affected. In many cases, those people were receptive to the building of the wind farm and only became opponents when it began operating.
We acknowledge that the committee has the unenviable task of considering the definition of *Excessive Noise From Wind Farms.* It is our understanding that the current noise standard applied in Victoria is NZ6808 2010. If rigorously enforced, it provides a measure of protection for people living and working nearby, but can be made less effective if the permissible upper ambient noise levels are set too high by the use of *creative* measurement techniques by Acousticians working for the wind farm developers at the planning stage.
A further problem with NZ6808 2010, and the other wind farm noise standards of which we are aware, is that there are no specified limits for very low frequency noise, or recognition of the ways that it may be transmitted to nearby dwellings.
Most people can habituate to high levels of random ambient noise e.g. from a busy highway, but many cannot adjust to intrusive long term repetitive sounds, which is probably why it has been used as a 'psychological torture' technique. People living close to wind farms often report that the repetitive 'thumping' or 'whooshing' denies them sleep. They also say that the repetitive noise even intrudes when ambient noise levels are high, e.g. when high winds are blowing through nearby vegetation and farm structures
From the experience of people living close to some wind farms, it is clear that

'beat' and other disturbing sound effects can be generated when the wind blows through several adjacent turbines before reaching a dwelling, despite the pre-construction placement modelling undertaken by the developer, which should have minimised that effect.
Because of the above considerations, we urge the committee to recommend that the act incorporates:

1. Recognition that the most effective method of reducing excessive noise from wind farms is to ensure that there is an adequate minimum setback from any wind turbine to the nearest dwelling. The present planning requirements in Victoria prescribe a setback of 2 km, unless the owner/occupier of the dwelling agrees to a shorter distance. Given that noise is greatly influenced by the size of the wind turbine and as they are becoming progressively larger, we would suggest that a minimum setback of 20 times the height of the turbine tower plus blade length would be more effective.
2. The NZ6808 2010 noise standard, but with an unambiguous limit of a 5dBA increase above the baseline noise levels, for high ambient noise conditions.
3. A requirement that pre-construction modelling of expected noise levels should be undertaken by an organisation that is entirely independent of the developer or future operator.
4. A requirement that all dwellings within 3 km of any turbine should have permanently installed noise measuring equipment paid for and continuously monitored by the wind farm operator. If the noise measured by that equipment exceeds the permitted level, the operator should shut down or modify the operation of the offending turbine or turbines until the conditions that caused the problem, abate.
5. A requirement that the noise measuring equipment under 4. be installed and regularly calibrated by a suitably competent organisation that is independent of the wind farm operator.

Thank you for considering this submission.

Yours sincerely

Peter Wingett.

Linda Brookman.

John O'Shea.

Alexander McKinlay.