November 23, 2010

Senate Wind Farm Inquiry, Community Affairs References Committee, Parliament House, Canberra 2600

## The need for research into a possible link between wind turbines and ill-health

I am a supporter of action on climate change, early and substantial development of renewable energy, and wind power in particular (I look after a Net site on wind power in Australia – see <a href="http://ramblingsdc.net/Australia/WindPower.html">http://ramblingsdc.net/Australia/WindPower.html</a>).

We all hear a lot of emotional and nonsensical accusations made against wind power by opponents, but I believe that there is sufficient anecdotal evidence connecting health problems and wind turbines to justify research.

Some questions that should have answers are:

- If a wind turbine is going to be built x metres from my home, how often am I likely to hear it?
- Is it likely to be loud enough to be annoying and keep me awake at night?
- Is it at all likely to make me ill?
- Will it affect the health and wellbeing of my domestic animals?

Anybody who is likely to have a turbine built close to his or her house has a right to have answers to these questions; at present the answers are not available from sources that can be seen to be unbiased. The National Health and Medical Research Council recently (correctly) stated that "there is no published scientific evidence to support adverse effects of wind turbines on health"; but in fact there is very little relevant published research at all.

Thorough primary scientific research (not simply studies of exiting research) into human and animal heath and annoyance due to sound and infrasound from wind turbines should be carried out, and it should be done on behalf of government, the wind industry, and the general public so that the research can be seen to be unbiased.

A single two or three megawatt wind turbine costs around four million dollars to erect and connect into the power grid. There are at present about a thousand such turbines in Australia. Surely several hundred thousand dollars spent on independent quality research would be well justified.

The research would have to be multidisciplinary. It would require researchers with experience in acoustics (particularly, but not exclusively in infrasound), psychology, animal health, and human physical health (particularly hearing) at least.

The aspects that should be researched would include (these points would need to be refined):

- An examination of the existing primary research published in respectable peer-reviewed journals in the last 15 years (Confined to the last 15 years because there were no large wind turbines before that. There is very little such research.)
- A survey of those people who live near wind turbines, their health problems, and whether those problems are related to the turbines.
- A psychological study of the perceived health problems and their causes (are the health concerns psychosomatic?).
- A survey of the number of people who have moved away from wind turbines for health or other reasons.
- Research into the health of animals that graze near wind turbines. (Things like breeding rates and growth rates can be readily measured. If turbines make humans ill we should expect similar illness in domestic animals.)
- Research into the mechanisms, if any, by which wind turbines cause ill-health in animals and humans (sound and infrasound are most often cited).

Should you decide to take this matter further, I'd be happy to assist in any way that I could.

Regards, Dave Clarke.