

## **Senate Wind farm Inquiry**

Submission to the Senate Community Affairs References Committee report on the social and economic impacts of rural wind farms.

Submitted by

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(...)

### **Submission summary statement**

There is a wide body of evidence accumulating that disputes the assertion put forward by wind developers that there are no adverse health effects from wind farms.

People living in proximity to wind farms show a range of adverse health effects supported by current research.

Wind farms produce noise both audible and inaudible that has been shown to distress people with a range of measurable physiological effects resulting in ill health.

Land value in proximity to wind farms has been shown to deteriorate in the same way as land in proximity to piggeries or sewage farms.

Commonwealth mandatory renewable energy targets have resulted in disregard for established regional development plans with hasty revisions required to accommodate wind farms. State governments can over ride local planning regulations with major project legislation.

Wind farms place rural communities in greater danger by introducing another potent fire risk and leave local fire fighters with little ability to contain turbine fires while restricting the areas of their operation due to flying debris.

I would like to comment on the following:

**(a) Any adverse health effects for people living in close proximity to wind farms**

In recent time news media, local, state and national have run articles highlighting the adverse health effects of wind farms experienced by people living in their vicinity. These effects as reported are the same in many different locations world wide. The effects include sleeplessness, fatigue, nausea, memory problems, psychiatric distress and dangerously high blood pressure. Data establishing the link between these symptoms and proximity to wind farms has been gathered, recorded and made available on the internet by a number of physicians including, Dr. Nina Pierpont (USA), Dr Robert McMurty (Canada), Dr. Michael Nissenbaum (USA), DR. Amanda Harry (UK) and Dr. John Harrison (UK) amongst others. In Australia Dr. Sarah Laurie, medical director of the Waubra Foundation has organised General Practitioners to gather data on new incidences of hypertension in people living near wind farms. Some patients having their blood pressure recorded over night show vast increases in hypertension when nearby wind turbines are operating. The same people measured in locations far from turbines show no similar increase in blood pressure. Shadow flicker from the blades has also been reported as a disorienting and distressing experience. The conclusion then is that there is a wide body of experience and evidence indicating the adverse effect of wind turbine activity. Much of this data is denied by energy companies and suppressed by the use of confidentiality agreements when people are compensated. Compensation by property acquisition by default recognises adverse health effects and the uninhabitable nature of the property.

Residents of Beetaloo Valley in South Australia are facing the possibility of Origin Energy placing 90 wind turbines in close proximity to houses. I believe there should be a complete moratorium on new wind farm developments until exhaustive study of current health problems associated with them is undertaken.

**(b) Concerns over the excessive noise and vibrations emitted by wind farms, which are in close proximity to people's homes**

People living near wind farms report both audible noise and the effects low frequency sound waves (infrasound). In the audible spectrum people report being annoyed by gearbox whine and swoosh of blades. In the inaudible range, pressure waves have a sometimes profound effect on peoples' ears with the concomitant effect of nausea, headache and balance impairment.

It is known that modern cinema presentations use infrasound in movie sound tracks to

heighten the emotional response of an audience. Many of us have personally experienced the symptoms of this exposure as disturbing anxiety, nausea and clenched body. These are the same feelings as personally experienced standing several hundred metres downwind of an operating turbine.

The physicians cited above (section a) have undertaken surveys in which respondents affirm these symptoms which are felt when turbines operate but are absent when they are not turning. In a paper to the First International Symposium on Adverse Health Effects from Wind Turbines (Ontario, Canada Oct. 2010) Dr. John Harrison recommended that in worst case scenarios wind turbines be setback from habitation 15km. In the town of Waubra, Victoria the developer Acciona admitted the installed turbines near several house emitted noise that exceeded that allowed by the planning permit. ("The Courier" newspaper ://www.thecourier.com.au/news/local/news/general/waubra- wind- farm- buys- more- properties/2000865.aspx)

The fact that turbines can be built and only then on full operation be discovered to make more noise than the planning permit allows shows that neither developers nor governments have a grip on the noise effects for the surrounding community. EPA guidelines as they stand are not able to cover the complex topography of wind farm sites and account for noise carried down gullies by wind current in still conditions.

At Beetaloo Valley community meetings we have been offered noise mitigation strategies by Origin Energy through their representative Mr. David Gladwin. Help with noise abatement is proposed in the form of tree planting, earth barriers, double glazing and air-conditioning. In an environment where you can hear the sound of an owl for kilometres on a quiet night it is an intolerable affront to be offered mitigation like this when you have built a house that needs no air-conditioning. One of the reasons for living in this environment with many of the inconveniences of its remoteness is peace and quiet with the opportunity to open the windows wide on a summer night. The very fact that mitigation is offered shows that wind farm developers are aware that a disturbing level of noise is generated.

### **(c) The impact of rural wind farms on property values, employment opportunities and farm income**

The representatives of Origin Energy have offered our community mere blandishments over our fears that property values will decline. Having spent 25 years developing our property, building a house with our own hands and growing an olive grove it is an affront to be

brushed off with statements that as far as they are aware Origin does not think that the presence of wind farms has an effect on property value. It is widely known that in the town of Waubra, Victoria up to 15 properties are vacant or for sale and nine have been acquired confidentially by the developer Acciona ([thecourier.com.au](http://thecourier.com.au)). This flood of the real estate market and necessary acquisitions will be seen in any market place as a signal for extreme caution. It is inconceivable in these circumstances that local property values around wind farms can match the rest of the market with such an albatross around its metaphorical neck. In support of this I refer to an open letter widely circulated attributed to Mr. (...), National Sales Manager for elders Rural Australia Ltd. In his opinion, "A proliferation of wind towers adjacent to a property has the same effect as high voltage power lines, rubbish tips, piggeries, hatcheries and sewage treatment plants..... This logically has a detrimental effect on the final price of the adjoining lands.....Experts assess the loss of value to be in excess of 30% and sometimes up to half"

**(d) The interface between Commonwealth, state and local planning laws as they pertain to wind farms**

It is with concern that we see the Commonwealth setting mandatory renewable energy targets without sufficient research into world wide concerns about the health and safety aspects of these developments. The data being used by Environmental Protection Agencies is being challenged internationally and domestically.

Another concern is that State Governments have made "provisions that give wind farms special project status, and exempt them from normal planning rules and land and environment court oversight." ( Weekend Australian, Jan 22-23 2011 p.3)

Regional Councils have been instructed by state government to revise their development plans to prepare for wind farm development and latest copies show they have done so.

We are also told that "Council's Development Assessment Panels will address the Development Plan provisions, along with concerns raised by third parties. The panels are made up of independent experts" (in a letter from The Hon. Paul Holloway 3/11/2010 to Mr. C Stroud and Ms. H Flavel)

It appears to landholders contesting wind farms that despite authority being devolved to the local level, state governments hold a trump card if the decision is not to its liking. We also wonder where the panels of independent experts are going to come from. Since local councils have been so recently required to respond to these developments they are hardly likely to be packed with their own body of expertise. One could conclude that this leaves the independent experts with a lot of sway over council. The status of local government in all of

this seems to be that of a minor player against the heavier resources of the wind industry and the Commonwealth and State Governments.

Landholders in the ordinary course of developing their properties are constrained by a local regional development plans. The Northern Areas Council in South Australia states... "The conservation of the scenic, scientific and heritage features of the environment is intended as the paramount objective when assessing future development proposals in the Ranges Zones." In the normal course of life residents may not plant an exotic forest, cut unnecessary access tracks, develop education, recreation and tourist facilities or have more than one sign of less than a square metre identifying a property. Local residents have historically contested development that infringes some of these objectives of the plan with success. A community having played by the rules of a development plan is justifiably upset when the goalposts may be changed by special project status.

Origin Energy representative, Mr. David Gladwin spoke to local community gatherings in Beetaloo Valley about a proposed 90 turbine development. On being questioned about the nature of the regulations Origin Energy would need to comply with he stated that energy companies are operating without strict guidance from state or federal governments as to where wind farms should be located or how far they should be set back from habitation. They are simply to abide by the EPA regulations which current circumstances are showing to be inadequate. The electorate has always had to play by the rules of regional development plans but has been abandoned to wind farm development which arrives in great secrecy, covered by confidentiality agreements. Community consultation in Beetaloo has been a token gesture after the negotiations with hosting landowners was well advanced. Mr. Gladwin showed little knowledge of the concern about health effects of wind farms in countries like Denmark, Canada, Great Britain and the USA. Our community has been easily gathering masses of data relevant to health, safety and the environment that should have been of great concern to Commonwealth, State government and Origin Energy at the outset. If workers on an industrial site were feeling the same effects as residents adjacent to wind farms it would cause industrial unrest and unleash a flood of Health and Safety investigations.

**(e) Any other relevant matters.**

In rural communities bushfire figures large in everyone's mind. We have seen in many news reports that wind turbines catch fire. Recently at the Starfish Hill wind farm at Cape Jarvis in South Australia a turbine self destructed. The CFS could not fight the fire. OHS&W regulations required them to retreat for at least a kilometre. Some reports cite personnel

saying it was more like 1.5kms. Pieces of blade were flung huge distances. What will happen to householders who may live closer than one kilometre many of the thousands of proposed turbines?

Under the proposed Origin Energy, Collaby Hill development in South Australia many families will be in close proximity to the 90 wind turbines. The country around this development is steep and heavily timbered with little enough access for fire fighters under normal circumstance. If their operating conditions are going to be further restricted this will place our community in even greater danger. Furthermore the use of sky cranes, water bombing aircraft and helicopters will also be severely restricted in their operations around the wind farms.

In some of the most extreme fire danger locations in the world these issues need to be addressed urgently.

## Submissions due 10 February 2011.

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1. in electronic form submitted online at <https://senate.aph.gov.au/submissions/pages/index.aspx> or sent by
2. email to [community.affairs.sen@aph.gov.au](mailto:community.affairs.sen@aph.gov.au) as an attached Adobe PDF or MS Word format document.

3. posted to

Department of the Senate, PO Box 6100, Parliament House, Canberra ACT 2600.

Notes to help you prepare your submission are available from the website at

[http://www.aph.gov.au/senate/committee/wit\\_sub/index.htm](http://www.aph.gov.au/senate/committee/wit_sub/index.htm).

Alternatively, the Committee Secretariat will be able to help you with your inquiries and can be contacted on telephone +61 2 6277 3515 or facsimile +61 2 6277 5829 or by email to [community.affairs.sen@aph.gov.au](mailto:community.affairs.sen@aph.gov.au).

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