

# **The Social and Economic Impacts of Rural Wind Farms.**

## **A Formal Submission.**

Submitted electronically on the 31<sup>st</sup> January 2011.

We wish to formally object to all rural wind farms; proposed, in construction or completed and operating on the grounds of:

- Adverse health effects for people living and working within 5km of an operating turbine
- No formal setback recommendations for all residential dwellings and turbine locations
- Devaluation of property values, landscape and visual disturbances.
- Restrictions turbine placement and the construction phase has on agricultural business operations
- Breakdown in rural community connectedness and harmony. Appalling lack of community consultation requirements and monitoring.
- Unfair State and Federal Planning Guidelines that is biased towards the wind companies/proponents and the participating land holders.
- Limited avenues of receiving assistance and support for non-participating landowners located in a wind farm precinct.

Our comprehensive submission is attached.

Yours sincerely,

M and W Read

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- Unfair State and Federal Planning Guidelines that is biased towards the wind companies/proponents and the participating land holders.
- Limited avenues of receiving assistance and support for non-participating landowners located in a wind farm precinct.

We purchased our current farming property 5 years, only to find out 6 months post sale that we were to be surrounded by the Stockyard Hill Wind Farm development. The community found out about this wind farm by accident (local word of mouth) only after the proponent had secretly signed up participating landowners. NO COMMUNITY CONSULATION HAD BEEN UNDERTAKEN BY THE WIND COMPANY OR LOCAL AND STATE GOVERNMENT.

We have been involved in the campaign for fairer outcomes for nearly 5 years now and have grave concerns for all rural communities going through the same battle as well as our own personal concerns. This is a serious issue that requires immediate attention.

- **Noise and Adverse Health Impacts, Setback Recommendations:**

Current Victorian and Federal Planning and Policy guidelines have no plan to ensure that residents within a 5km radius of wind farms are protected from unreasonable levels of noise, low frequency vibration, and shadow flicker. There are guidelines that focus on flora and fauna impacts but none regarding the safety or effect on humans living in proximity to turbines. I find it appalling that hundreds of thousands of dollars have been spent on assessing the bearing wind farms would have on bird life and endangered plant life but none on the potential negative health impacts of surrounding residents. It is essential to research the consequences of all life forms living in wind farm precincts.

Governments and wind energy companies continue to ignore current evidence and factual information from around the world regarding the evidence of low frequency noise and 'Wind Turbine Syndrome'. (ref: <http://www.windturbinesyndrome.com/>) To date, proposals have been approved and some constructed with ignorance given to recent recommendations for reasonable setbacks of turbines from homes. Such as the N.S.W Parliamentary Inquiry into Wind Farms (Dec 2009) and the Victorian Liberal's proposal to change the planning policy to a minimum 2km setback between turbines and residential dwellings.

Until there is a thorough independent study into the impact of noise on the health of residents in the area we are requesting that no one is forced to live within 5kms of wind turbines.

The current acoustic standard for wind farms in Victoria is NZS6808:1998. It is 12 years old and is grossly inadequate. It does not allow for a number of factors that are inherent to modern day, larger turbines. These factors include stable air, amplitude modulation and low frequency noise.

Stable air is a factor many in rural Victoria are familiar with. It is the ability of noise to travel long distances at night. Many people hear dogs barking or traffic from far away during the night. Wind turbine noise can also travel in a similar fashion. As stable air is not mentioned in NZS6808:1998 it does not have to be considered.

Amplitude Modulation is the “thump, thump” or whooshing sound created by turbines. The characteristic of this noise means it appears a lot louder than it is, but again wind farm proponents do not have to add it to their calculations.

Low frequency noise is also not in NZS6808:1998. Many residents near Waubra, Portland, Toora and other wind farms describe symptoms of headaches, dizziness, depression, high blood pressure etc. An independent investigation into low frequency noise (or infrasound) must be carried out.

The closest inhabited dwelling on our property is within 2km of the nearest turbine. This is of great concern to us. We personally asked for a guarantee from Origin (Stockyard Hill Wind Farm developer) that anyone that resides or works at our property over the life of the wind farm, will not suffer negative health impacts from turbine noise. Origin never responded to our request or concern. We have been forced into this terrible position against our will. We have spent thousands of dollars and hundreds of hours trying to get a fairer outcome but to no avail. My husband and I were basically told from Origin Energy’s ‘community liaison officer’ that if we had any concerns then we had to present them at the panel hearing. We did present at the panel hearing (3 times) but none of our concerns were met or addressed.

Surely protecting the health of the human species should rate as high as protecting native grasslands and birdlife?

- **Landscape and Visual Assessment**

The homestead on our property was built in 1908, on a rise over looking Mount Langi Ghiran, Mount Cole and Stockyard Hill. The views are significant hence the positioning of the homestead over 100 years ago. We purchased this property for the productive flat and hilly farming land but also for the beautiful views from the old homestead and the cottage. We are in the process of restoring our home back to its’ former glory and will make additions to the house to further encompass the uninterrupted views of the mountains and landscape. Our intent to renovate and restore was made clear to the community liaison officer of Origin Energy during many meetings and a request for a photo montage was rejected on the grounds that the turbines will not dominate our view. We were specifically told us our visual impact was low but would offer Allan Wyatt of ERM to perform a visual assessment is we would like.

Refer to emails below:

**From:**

**Sent:** Wednesday, 24 September 2008 8:11 AM

**To:** Ross Richards  
**Subject:** Visual assessment for St Marnocks  
**Importance:** High

Hi Ross,

After discussing the option of having Wind Power do a visual assessment at ST Marnocks, we've decided not to go ahead with it for several reasons. We don't believe Allan Wyatt from ERM is an appropriate independent person to be carrying out the visual assessment for the opponents to the Stockyard hill wind farm. He is obviously biased towards the wind industry (as he himself confesses) and we do not want his report 'playing down' our concerns and the impact we will have at St Marnocks if the wind farm is constructed. As Wind Power gave no other alternative of another Landscape expert, we really didn't have any other option but to say no. I was also concerned that the visual assessment reports from Allan Wyatt were not public documents until Wind Power's planning application was officially submitted. Again, this is disappointing as the owners of the properties you're assessing have no idea what Allan is writing or what their report details until it's too late.

You have already mentioned that St Marnocks will have a 'low visual impact' on the wind farm so we feel we have been trapped into a position where any further consultation or concerns we have will be dismissed or not taken seriously.

Kind regards,

Megan Read

Response from Ross Richards of Origin Energy:

Dear Megan,

Thanks for your email. I feel that I understand your concerns and I can understand you not wanting a visual assessment.

You raised some interesting points in our conversation the other day and I raised them with Allan as we travelled around yesterday. Even though we employ the consultants, they must be beyond reproach. If not, they would get crucified by a panel and never get any work again. Allan (or any consultant) doesn't shy away from decisions that may have an impact on the project. Their job is to inform us so that we can make a legitimate and justified submission to the planning panel, an independent body. It is then their job to way up the concerns of residents such as yourself and to follow the planning guidelines.

I'm not going to go on about it, but after travelling with Allan yesterday, I saw how he works and how he calls it as he sees it, from a professional perspective.

Take care Meagan.

Regards,

Ross.

The Landscape and Visual Assessment Report prepared by company; ERM for the Stockyard Hill Wind Farm planning submission (2010) appears to be thoroughly deficient in assessing landscape value and our likely visual impacts.

Our property falls in the ERM's categories of :

- No vegetation (ref: 5.2 vegetation map, p21 ERM report) **Incorrect: Our property accommodates native grasslands, natural swamps, 2 springs, thousands of native trees etc.**
- 2% Slope Analysis –flat terrain surrounding the wind farm site. (ref: 5.3 Slope Analysis Diagram, p22 ERM report) . **Incorrect: property consists of natural rolling hills, undulating land, main homestead situated on a rise.**
- The property is within 1.5-8.5km of the turbines/wind farm. From the “ Zones of Visual Impact” table (4.1, p19 ERM report), we are classified as;
  - ‘Potentially noticeable and will dominate the landscape.’ And
  - ‘Highly visible and will dominate the landscape’.
- ‘Seen Area Analysis’ and ‘Visibility Parameters’ (Ref: point 6 and 6.1, p31-38 ERM report) shows the extent to which turbines are visible. Both properties fall in all classified zones A,B,C and D. The classification suggests that potentially between 1-242 turbines will be visible in either part or of their entirety from any point on our farm.

Like many others, we were offered screening in the form of vegetation to reduce the visual impact on our dwellings. We don’t believe this is an adequate form of mitigation as the trees will take many years to establish in order to reduce the visual impact. This is a cheap quick fix mitigation measure used by wind energy companies with little long term thought put into ongoing maintenance, fencing, land acquisition for plantations, drought and fire safety.

We were never surveyed regarding what we consider significant from a landscape and visual perspective.

Planning submissions’ classifications of the impact of visual amenity is purely one person’s opinion with no scientific approach to assessing the degree to which that person will be affected. Time after time, numerous significant landscape features are ignored in the planning process. It is plainly bias to say that the landscape can “absorb” wind turbines when clearly the wind turbines at Waubra are highly visible both during the day and at night from great distances.

The sheer scale of the Stockyard Hill Wind Farm along with the cumulative effect of Waubra, Lexton, Challicum Hills, Crowlands, Ararat, Chepstowe and the proposed Nerrin Nerrin wind farms are going to permanently destroy the landscape and the visual amenity of residents for much of the surrounding area. These projects, including the extensive power line construction, are much too big to be placed in such a concentrated area. Such large scale projects should not even be considered in a closely settled rural area and where the environmental and social impact is considered so significant.

We also hold grave concerns for our property value. As we will be a non-participating neighbours to the largest wind farm in the Southern Hemisphere, we believe that the value of our farm will be significantly reduced on the grounds of:

- Potential disturbances to ground water and spring flow from the explosive works carried out through construction phase
- Limited access to agricultural spraying due to restrictions on aircraft turnaround circles from our property border to nearest turbines.
- Public acknowledgement from Elders National Sales Manager. (...) that property will devalue if neighbouring to a wind farm. See email correspondence below:

----- Original Message -----

**From** (

**To:**

**Sent:** Tuesday, January 18, 2011 11:39 AM

**Subject:** RE: Wind farm affect on land values

Dear (...),

I have been a Licensed Estate Agent for 30 years, specialising in the sale of Rural property, essentially all over Australia, with an emphasis on Victoria and the Riverina. I have held senior Management positions with the largest Rural real estate Companies in Australia. In recent years the growth of activity and the actuality of wind towers throughout the Victorian rural landscape have been significant. Challicum Hills, Coddington, and Mt Mitchell have all emerged as large scale wind farms, located on the tops of the low hill country, interrupting the landscape for many kilometres. Of significant importance, is the negative effect on the value of adjoining lands where wind towers have been erected. Visually, the towers are seen by the majority of the market as repulsive. Audibly, the towers effect the stillness a property enjoys, in particular the resonating tones in the night, invading serenity of the adjoining lands. A proliferation of wind towers adjacent to a property has the same effect as high voltage power lines, rubbish tips, piggeries, hatcheries, and sewerage treatment plants, in that, if buyers are given a choice, they choose not to be near any of these impediments to value. The ultimate effect is that the number of buyers willing to endure these structures is significantly less than if the structures were not there. 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.

My personal experience is that when an enquiry (potential buyer) becomes aware of the presence of wind towers, or the possibility of wind towers in the immediate district of a property advertised for sale, the "fall out" of buyers is major. Very few go on to inspect the property, and even fewer consider a purchase. On the remote chance they wish to purchase, they seek a significant reduction in the price.

There is absolutely no doubt, that the value of lands adjacent to wind towers falls significantly in value. The ambience of a rural property is important, and oftentimes, the sole reason why a purchaser selects a particular area or district. The imposition of wind towers, destroys this ambience forever.

(...)

National Sales Manager

Elders Rural Services Australia Limited.

- **Lack of Community Consultation and breakdown in rural harmony.**

Dealing with rural and farming communities is different then communicating with metropolitan people. The lack of strict guidelines in wind farm community consulting is a disgrace and is having serious repercussions on rural Australians.

The Stockyard Hill Wind farm is located in the Victorian Pyrenees Shire which is a predominately rural farming/agricultural region comprising approx 7,200 people.

Agriculture makes up 25.2% of employment in the Pyrenees Shire, it is the single most important leading industry of employment in the region. Agriculture/farming is the main industry within the wind farm site.

Remoteness is a defining characteristic for many small communities in the Pyrenees Shire. Families living on farms experience greater difficulties in accessing services of all types.

(Ref: [www.grampianspyreneespcp.org.au](http://www.grampianspyreneespcp.org.au) )

No where in the planning submission report for the Stockyard Hill wind farm, identifies the fragility of the state of the Pyrenees Shire (socio-economic status, health status) or the challenges and special circumstances that may be encountered when dealing with a rural farming community. It should be noted that Socom Pty Ltd was engaged to prepare the community consultation strategy after SHWF Pty Ltd approached landowners to negotiate potential turbine sites. "I accidentally found out..." is a reoccurring theme within all communities where wind farms are proposed. Stakeholders are not allowed to discuss wind farm details and contract due to secrecy clauses making it very difficult to get up-to-date information on proposals.

Lack of Community Consultation:

Community engagement refers to interaction that a person has with others in their community. Community engagement provides the opportunity for social connectedness which is linked not only to health of individuals but to the health of communities. (ref: [www.theindex.org.au/Data/CommunityConnectedness.aspx](http://www.theindex.org.au/Data/CommunityConnectedness.aspx) )

Being deprived of social connectedness or being disconnected from society can have major impacts on health and can cause premature death. The quality of life in a community is a powerful determinant of health. Studies conducted...have identified factors that contribute to quality of life; social cohesion, the existence of social networks and active involvement in the community.

(ref:

[www.grampianspyreneespcp.org.au/File/Grampians%20Pyrenees%20Primary%20Care%20Partnership%20Evidence.pdf](http://www.grampianspyreneespcp.org.au/File/Grampians%20Pyrenees%20Primary%20Care%20Partnership%20Evidence.pdf) )

Farming communities rely heavily upon community cohesion and connectedness. Without it, we wouldn't survive. It is well documented that rural communities tend to demonstrate strong internal networks, often through necessity. Community Connection was measured in the 2007 Community Indicators Victoria Survey. Respondents were asked to rate their satisfaction with feeling part of their community and answers are presented according to a 0-100 range.

\* People living in the Pyrenees averaged 76.6

\* Victorian State average was 70.7

(Ref: [www.grampianspyreneespcp.org.au](http://www.grampianspyreneespcp.org.au) )

It would be interesting to rate satisfaction levels now following the many wind farm proposals in this shire.

The Pyrenees Shire ranks 5<sup>th</sup> out of 79 in the most disadvantaged socio-economic municipalities in Victoria. Life expectancy for men and women in the Grampians Pyrenees region is markedly lower than the rest of Victoria. Depression is ranked in the top 7 diseases contributing to the disability burden in the Grampians Pyrenees region. (Ref: [www.Grampianspyreneespcp.org.au/Aboutus/index.aspx](http://www.Grampianspyreneespcp.org.au/Aboutus/index.aspx) )

Mental health disorders have been described as the strongest risk factor for suicide across all ages.

Suicide rates have consistently been found to be higher in rural than metropolitan areas

(ref: [www.mja.com.au/public/issues/181\\_07\\_041004/cal10801\\_fm.pdf](http://www.mja.com.au/public/issues/181_07_041004/cal10801_fm.pdf) )

Social inclusion is a determinant of mental health and wellbeing that is integrally linked to health promotion, particularly through the action areas of building healthy public policy, creating supportive environments and strengthening community action.

(Ref: Pyrenees Shire Municipal Public Health and Wellbeing Plan 2009-2013. [www.pyrenees.vic.gov.au](http://www.pyrenees.vic.gov.au) )

There is clear evidence about the positive effects of social connectedness and the disastrous consequences when community cohesion breaks down. Our community connectedness has been slowly breaking down for approx 4 years now due to the approved wind farm. Other rural communities have been suffering for longer, others are just about to experience it. The lack of community consultation in the planning stages of wind farms should be addressed immediately. The secrecy, misleading & limited info, untruths, greed, denial of open community discussion, payoffs, gag clauses, hostility, stress, and anxiety all caused by wind farms, are contributing to a slow breakdown with disastrous effects that rural Australia has not experienced before.

- **State and Federal Planning and Policy Guidelines**

After taking three months to prepare a submission and presentation to Panels Victoria for the Stockyard Hill Wind Farm, we found the whole process biased towards the wind companies/proponents and the participating land holders. The Government was blatantly pushing through renewable energy projects too quickly without thorough investigation.

There were limited avenues of receiving assistance and support for non-participating landowners located in a wind farm precinct or anyone else concerned. Issues needing to be addresses and rectified immediately include:

- Non-existent Government support for rural communities voicing concerns about wind farm developments
- No formal bodies to represent and advise community concerns
- No independent wind-farm watch dog to supervise and monitor
- Pre-application consultation is not a formal statutory requirement of the planning process...

The Victorian Policy and Planning Guidelines fail rural communities. Guideline principles to guide community consultation focus on the stakeholders and not the community as a whole. It was utterly disappointing to know that the guidelines require the following in terms of community consultation:

- \* Provide briefings on progress and further information on request.
- \* Provide suitable opportunities for input by particular community groups
- \* Start early
- \* Ensure the consultation is well planned
- \* Listening to what the public have to say.

(Ref: Policy and planning guidelines for development of wind energy facilities in Victoria, revised September 2009)

But none of these points were exercised to their potential or monitored by an independent body throughout the Stockyard Hill wind farm proposal. The consultation to the broader public was non existent, misleading in the little information that was provided and superficial in order to receive that tick of approval.

We strongly advise that this inquiry looks into the negative social and economic impacts that wind farms have on rural communities. Changes in technology and industrial development advancements have outdated the existing research into turbine noise and infrasound. The figures and evidence that the wind industry are relying on to pass through these proposals are outdated and require immediate investigation into the negative health effects on humans living close to turbines. The Planning and Policy Guidelines for wind farms are in urgent need of reviewing and need to take into account previous approved wind farm proposals and the troubles that have arisen from these developments. An independent monitoring body is also essential.

Regards,

M and W Read