

Submission  
No 32

## INQUIRY INTO RURAL WIND FARMS

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**Position:** President  
**Date received:** 15/08/2009

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## Upper Hunter Landscape Guardians Inc

(Incorporated under the Associations Incorporation Act 1984)

August 15, 2009

The Director  
General Purpose Standing Committee No. 5  
Parliament House  
Macquarie Street  
Sydney NSW 2000

Dear Director,

### **Ref: Inquiry into Rural Wind Farms**

The Upper Hunter Landscape Guardians (UHLG) is a residents group whose aim is to preserve the Upper Hunter's natural landscape. Many of us live within a 3km range or less of the proposed Kyoto Energy Park which is currently awaiting a decision under Part 3A of the NSW Major Projects SEPP. There are approximately 60 residences (150 people) within the 3km range. The developer, Pamada Pty Ltd, noted 265 affected residents in their EA from a slightly wider area.

Whilst the Kyoto Energy Park has three components, Wind, Solar and Hydro, 92% of the proposal is wind with a stated generating capacity of up to 126Mw. It is the wind farm component that the residents are concerned with. The 42 turbines and towers are to have a total height of 150m, which we believe to be the highest in Australia to date and possibly the world. Associated red flashing airport navigation lights are required on the turbines as the Scone Airport is within 3-6km of the wind farm and there are affects on flight paths.

Specifically in relation to your inquiry we have requested the NSW Minister for Planning the Hon Kristina Keneally MP to postpone any decision on the Kyoto Energy Park until after the results of your inquiry into Rural Wind Farms. At the time of writing this submission to you we have had no response from the Minister.

In response to the Terms of Reference of you Inquiry our comments are detailed below.

#### **1. The role of utility-scale wind generation in: –**

- a) **Reducing greenhouse gas emissions generated by electricity production –**  
Taking into account the amount of CO<sub>2</sub> used for the concrete (300m<sup>3</sup> cubic metres per tower, plus slabs for maintenance sheds and sub-stations), steel that is required to make the wind farm components, the manufacture and installation of new HV power lines and transformers together with emissions from the ocean freight for imported components, the volume of truck traffic for roads and cartage and the cost of erection it is questionable whether or not a wind farm could generate sufficient 'green power' in typically 15 years of operation to offset greenhouse gas emissions created during its construction.

The push by both the Federal and State Governments embracing wind farms as a major source to meet their renewable energy targets will not be enough to make any significant difference. Wind farms only operate at between 25-30% capacity. Locating them all over Australia with associated infrastructure to connect to the grid would not produce sufficient power to begin to meet the demands of heavy industry and major cities.

- b) **Producing off peak and base load power** – due to the intermittency of wind power and until such time as a way has been found to store it, wind will never be a reliable source of power. It does have potential for use with mixed sources such as hydro as can be seen by developments in Tasmania, but it will always need to work alongside a base load power source for demand times and use by industry.

## **2. Locating rural wind farms to optimise wind resources use and minimise residential and environmental impacts.**

It would appear that because of the large subsidies for renewable energy and rental paid to hosting landholders by the wind farm industry that not enough is being done to target appropriate locations for wind farms.

As an example, in the Upper Hunter we have large areas of rehabilitated mine land, denuded of vegetation and formed in high mounds which lie close to the existing power stations. This would be a much better place to locate wind turbines where no further damage can be done to the environment, connecting infrastructure for the large power cables already exists, transmission losses would be minimised and these areas could become a showcase for mixed power sources of coal, gas, solar and wind power stations. Mining companies could utilize the subsidies they would receive from the wind turbines to offset investment in 'clean coal technologies' and make a significant contribution to reducing green house gas emissions.

The location of the Kyoto Energy Park near Scone is on the ranges to the west of the town with its beautiful, unspoilt landscape and ancient rock formations. It is more than 40km from the proposed connection point to the grid.

Locating wind farms in industrialised areas around mines and power stations would avoid issues within local rural communities in relation to noise, visual impact, property values and the inequity of one or more wind farm hosting landowners reaping all the monetary compensation at the expense of their affected neighbours.

Affected residents by mines have often been bought out and there is a mechanism in place to continue to do so with ongoing mining approvals. No such option exists for adjoining or affected residents of wind farm developments.

The affects on heritage, particularly local aboriginal heritage, the environment, wildlife corridors, and birds kills (eagles \$1500 per bird killed) is not seriously taken into account by the self-appraisal system required under the EPBC Act both Federal and State. See further comments under the heading 'Any Other Relevant Matters – Environmental Protection and Biodiversity Conservation'. The wedge-tailed eagles that soar above the ranges to the west of Scone do not inhabit the denuded areas around coal mines.

Wind developers have basically had 'carte blanche' from the DoP regarding location. The fight to defend the natural environment is left up to local communities which causes unnecessary stress and very few, if any, concessions are put in place to mitigate impacts on residents and the environment. Succinct guidelines on appropriate locations would alleviate the issues for both communities and developers alike.

### **3. The impact of rural wind farms on property values.**

Increasingly data is becoming available 'locally' within Australia in relation to property values and quoted below is an excerpt from Mr John Jess. Mr Jess is associated with CJA Lee Property Pty Ltd, Yarram, Victoria and can be contacted on 03 5182 5251.

Excerpt from press article: *In November 2008, John Jess, an experienced valuer in Gippsland, Victoria was quoted as stating "wind turbines are having a significant impact on values for both farmland and residential property. Having conducted valuations for a panel hearing on proposed wind farms, Mr Jess said farming properties appear to drop 10-15% near turbines. There is stronger evidence to suggest rural-residential values drop by 30-40%".*

For non-hosting landholders the lack of setback guidelines for wind turbines creates a great risk of property devaluation, particularly for rural lifestyle and rural residential properties. To date the NSW DoP has paid little attention to setbacks even where these have been specified in local council Development Control Plans created specifically for Wind Farms and necessitated because there are no State or Federal wind farm guidelines.

### **4. Mechanisms for encouraging local ownership and control of wind technology**

Whilst not moving away from comments previously made in relation to effectiveness of wind farms, if one assumes that the Government is determined to pursue this technology, then the following should be considered.

In Europe adjoining, non-hosting landholders have received some part of the income from the wind farm to help compensate for the loss of amenity and potential loss of property value etc.

Issues re income for a single or even multiple landholders may still divide the community, but much less if the community are not directly affected in any way in relation to noise, property devaluation or visual impact.

Communities should be able to ensure that they receive 'green' power without the premium that goes with it and there should be technology in place to ensure they are the first receiver of power from their local wind farm(s). Often grid connections are made many kilometres away from the hosting community due to connection incompatibility with local sub-stations.

A combination of the above mechanisms would encourage communities to be more supportive of wind farms and potentially dispel unrest from affected, non-hosting landholders.

### **5. The potential role of energy generated by rural wind farms in relation to the Australian Government's proposed Renewable Energy Target**

Theoretically by putting wind farms across Australia the wind would be blowing somewhere at any given time and wind power could trickle feed the electricity grid. This scenario assumes that all the grids are joined and have technology available to ensure that the wind power takes precedence over other forms of electricity. This is not so in Australia. It is understood that Western Australia and the Northern Territory do not form part of the National Grid.

Due to the inherent inefficiency and intermittency of wind no amount of wind farms will remove the reliance on stable forms of electricity generation eg. coal, gas and nuclear.

Hydro and wind is a workable combination but not for base load power and not in a country that suffers from extreme drought for extended periods.

Energy created by wind farms cannot be relied upon to make any significant impact on the Australian Government's proposed Renewable Energy Target.

The reality is however, that one would be better off ensuring changes to the building code and renovation code for dwellings so that they are fitted with appropriate solar to run the entire house. Whilst this sounds expensive it is not because with volume solar pricing must reduce. The current incentives to make hot water systems solar is a mere drop in the bucket for most people's electricity bill and the number of solar panels required is the minimum and they will not run anything else.

Rural properties are required to utilize bio-cycle waste re-cycling systems and have sufficient on-site water storage for drinking, irrigation if required and fire. However, rural residents receive no subsidies nor benefits from the government for doing this. The pumps required on rural properties to run this infrastructure require electricity and most are utilizing conventional power. If solar was cheaper rural properties could become self sufficient of grid electricity and perhaps produce enough to sell it back to the grid. It is not just the larger rural properties that would benefit as there are an ever increasing number of rural lifestyle blocks in the 20-50 acre range.

Further in-roads into the development of solar and solar thermal are probably the best way in which a significant impact will be made in Australia's Renewable Energy Target.

The attractiveness of wind farms for the developers is predominately due to the rebates they receive from the government and as wind power cannot be stored, it is guaranteed to be purchased first off the grid.

Appropriate investment and rebates must be made available to other alternate energy sources, the most obvious being solar and its derivatives.

There must be appropriate reporting of availability and output for all energy sources utilized for grid power. A good example of this is the Canadian Independent Electricity System Operator (IESO) that manages the wholesale electricity market.

<http://www.ieso.ca/imoweb/marketdata/genEnergy.asp>

You can see hourly and daily actual delivery figures compared to stated capacity figures together with historical data for all energy sources. Attached as Appendix 3 is the output of their wind farms for 2007 which clearly indicates that they operate at only 25-30% of capacity.

In Australia we have AEMO (Australian Energy Market Operator) which has taken over from NEMMCO. They are limited in their reporting and we could find no statistics for wind farms on this site and certainly nothing as useful as that provided by the Canadian IESO.

#### **6. Any other relevant matters:**

***The Premiers announcement of 5 Renewable Energy Precincts:*** This announcement was made on February 27, 2009 – see Appendix 1 attached. No specifics were made in that announcement in relation to exact locations, timeframes and processes. As you would understand residents became nervous and concerned that the Government's desire to fast track wind farms by announcing these precincts would allow major developments with potentially significant impacts on lifestyle, health and property value that would not be rigorously assessed.

As a result of this announcement we approached our local member for the Upper Hunter, Mr George Souris MP and requested he ask some specific questions in parliament. See Appendix 2 which includes the Premier's response. The response by the Premier provides no more details than his press release. This is unacceptable and indicates that the Premier and the Government have not thought through the issues that are likely to affect rural communities.

It is now 6 months since the Premier's announcement and our local Council is none the wiser regarding the Premier's intent. There have been no further announcements that would shed any light on the Premier's decision. As residents of a rural area which already has one wind farm proposal under consideration by the NSW DoP and has at least 3 wind monitoring towers erected by other developers around the area, residents have a right to expect answers now about the Premier's intention for renewable energy precincts.

Can we be assured that the NSW DoP will put on hold any decisions regarding wind farm developments until the result of your enquiry and will your Inquiry into Rural Wind Farms have any affect in providing answers in relation to the Premier's intentions for Renewable Energy Precincts?

**National Code for Wind Farms:** The Federal Government committed in November last year to have a set of guidelines available for use by the States and Territories within 12 months. During the workshops held with stakeholders last year where all current guidelines used by each State were compared significant variations existed specifically in the application of noise guidelines. There were no guidelines anywhere in relation to setbacks. The draft of the National Code (or Guidelines) for Wind Farms is due for public consultation in November this year.

Is it your intent to take the National Code for Wind Farms into consideration with your Inquiry?

**Environmental Protection & Biodiversity Conservation – Federal and State:** The current process for wind farm developers requires them to 'self assess' impact in relation to the Federal act for flora, fauna and National Heritage and lodge a 'referral' with the Federal Government if they believe there is an impact. The same has to be done at the State level because the flora, fauna and heritage listings differ. At both Federal and State levels the knocking down of a small area of endangered species of flora or killing a number of endangered species of birds and bats does not appear to receive other than cursory consideration if it appears small in the overall scheme of the development. Developers in some cases say they will replant. You cannot replace long-standing flora without consideration of the time to recover. This attitude should be changed and (wind) developers and host landholders encouraged to resite their turbines to avoid this type of destruction. The decision to charge \$1,500 for every eagle kill is sending the wrong message for a government who claims they wish to protect the environment.

The overall process needs to be reviewed so there is one assessment to cover both federal and state which would create consistency and save time and money for the developer, the government and the communities that fight to protect their environment. There should be a complete review of what is 'acceptable destruction to the environment'. We already have huge scarring on our landscape in the Upper Hunter due to mining. We should not further destroy the natural landscape of ancient hills and forests for the sake of wind turbines, an inefficient energy source.

A year ago we commenced a petition which stated:

*"The Upper Hunter Landscape Guardians are asking for you to support them in relation to the positioning of the Wind Industry Installations. We are NOT against renewable energy initiatives BUT we strongly object to such an industry being situated where it impacts on a unique landscape, wildlife, people's quality of life and their property values."*

To date we have received 750 signatures. A copy of the petition can be made available to your Inquiry upon request. The response to this petition clearly indicates the concern of the community to the wind component of the proposed Kyoto Energy Park development as well as wind farm installations generally in and around our community.

People are not opposed to wind farms 'per se', rather they see they should be treated as an industrial development and located close to the existing power stations and mines where they would provide a positive addition to the electricity generation mix.

Thank you for taking the time to consider our submission.

Yours faithfully,



**Carmelle Lymbery**  
**President**

Attachments:

Appendix 1 – 'Doing Green Business in NSW Made Easier'- announcement by the Premier of the Renewable Energy Precincts.

Appendix 2 – Questions and Answers asked by Mr George Souris MP in Parliament on behalf of the UHLG

Appendix 3 – Data from Canada specifying wind farm capacity and output for 2007