

9 February 2011

Community Affairs Reference Committee
Department of the Senate
Parliament House
Canberra ACT 2600

By Email : community.affairs.sen@aph.gov.au

Dear Sir / Madam

Submission into the social and economic impact of rural wind farms

1. Introduction:

I welcome the opportunity to formally raise issues of concern in relation to the social and economic impact of wind farms. In particular, concerns such as the failure of planning bodies to meaningfully address the unique challenges facing rural communities confronted with wind farms 'less than 30 megawatts'.

My farming property shares a common boundary with an approved wind energy facility; I therefore have first-hand knowledge of these challenges. My experience to date also provides a substantial understanding of the impact of wind farms on neighbouring properties and is the basis of my comments to this enquiry. This submission also highlights significant flaws with the planning approval process as they pertain to wind farms under 30 megawatts, and submits recommendations for the Committees consideration.

1.1 Victorian Wind farms in general

Currently, the only locational factor constraining wind energy developments in rural Victoria is the avoidance of land designated under the *National Parks Act 1975*. This strong direction from policy requires any assessment of wind energy facilities places great weight upon greenhouse gas and sustainability benefits, and little weight is afforded any environmental, landscape or amenity harm to local communities.

The Baillieu Government's policy for new wind farm applications will rightfully include a two kilometer setback from dwellings, however, Independent Panels and Tribunals have already approved numerous wind farms based on the assurances of developers that their operation is viable and will not cause detriment to adjoining landowners. No scientific data or evidence has been presented to show that their projected benefits and outputs are likely to be achieved, and scant regard has been given to the environmental and social effects of their proposals.

1.2.1 Background: The Yarram Wind Farm

In December 2007, the Victorian Civil and Administrative Tribunal (VCAT) set aside a decision by Wellington Shire Council to reject an application for permit from a German developer, Synergy Wind Pty Ltd, and approved the construction of a wind farm at Devon North; 8 km inland from the township of Yarram Victoria, and 16 km north of Port Albert.

The 120ha Yarram Wind Farm is centrally located on a 160 metre high hill which is a prominent location within the local pastoral landscape. Three of the turbines are sited at approximately 150 AHD and thus have a total height of 278 metres, neighbouring dwellings adjoining the wind farm site (and closest to these turbines) are set at only 50 AHD. The local elevated ridgeline that the property sits on provides expansive views towards Port Albert and beyond. This combination of area, height and landscape combine to produce a wind farm of overpowering visual dominance.

My property, which I purchased in 2003 totals 89 acres, and shares the longest boundary with the wind farm site. Prior to purchasing my farm, I paid Wellington Shire Council a fee to ascertain whether there were any foreseeable reasons I would be unable to build my home on this land. It was my plan to breed and raise cattle, establish an aquacultural business, and to open a plumbing business within the township of Yarram. Synergy Wind Pty Ltd has never contacted me; I naively thought a wind monitoring tower erected in 2005 on the adjoining property was a communications tower for the logging company.

The Yarram wind farm layout is for seven turbines (130m) in a concentrated pattern over a comparatively small and elevated site central to the pattern of settlement of Devon North. The Yarram wind farm is currently listed for sale on the Turnus Energy website: turnusenergy.com

1.3 The outcome of wind farm planning decision making in Victoria:

The approval of the Yarram wind farm provides a clear example of the systematic indifference of Victorian planning authorities and wind farm developers to the rights and interests of neighbouring land holders, and an inexcusable disregard for public health and safety concerns. The following points detail the facts:

- The approved site context plan clearly shows Turbine #1 is only **40 metres** from my adjoining boundary. The rotors of this turbine (96 meters in diameter) when constructed will intrude several metres over my boundary. This distance has been confirmed with on-site measurements. The location of the wind farm hazardous area is also in this vicinity and Turbine #5 is only **70 metres** from boundary. (See attachment – Yarram wind farm site context plan – Synergy Wind has marked my property boundary in black on the left of the wind farm site).

Recommendation 1: *Clearly planners need to balance the need for wind farms under 30Mw, with the impact on local communities and the capability of the land to accommodate the wind farm.*

Recommendation 2: *I submit that developers should provide proof of contact with owners of vacant land within 2 kilometres of the proposed wind farm site to ascertain any future development plans they may have for their properties.*

- My work shed and cattle holding yards are only 35 metres from the blade tips of Turbine #1. The blades will be spinning in excess of 300 kph only 30 metres above the ground. This irresponsible negligence bears substantial liability for the Shire, wind farm developer and the stakeholder under contract because they have knowingly placed my families' health and safety at risk.

Recommendation 3: *Work sheds and areas where people regularly work in close proximity with animals should be afforded greater set backs. There is justifiable concern as animals may elicit a dangerous response to the low frequency noise, shadow flicker, unexpected start up of turbines, or in the event of blade failure, lightening strike, fire or turbine collapse.*

- My property (450 metres in width) will experience total black out from the shadow of the turbines, and multiple shadow flicker from most of the turbines on the wind farm site. VCAT considered the general set back provisions of the Farming Zone to be appropriate for wind farms under 30 megawatts.

Recommendation 4: *A suitable separation from common boundaries should be provided within land controlled by the wind farmer. - “At a distance of approx. 400 metres between a turbine and residence, there is the potential for the sun to be completely blocked by blades of 3.5 metres width”*
(Source: Visual Impact Statement – Proponent: Capital Wind Farm).

- As a condition of my planning permit, I must build my home no less than 400 metres from a turbine location. I am unable to comply with this condition until Synergy Wind Pty Ltd submits a new site layout plan (Synergy Wind successfully requested at the hearing that they be allowed to micro-site turbine #4 closer to boundaries). I have been waiting over three years now which has caused me substantial emotional and financial hardship. Synergy Wind Pty Ltd would not withdraw an ‘application for review’ lodged with VCAT (contesting my planning permit) unless a section 173 approved by them be placed on my title, or I undertake my own noise and visual studies. The section 173 agreement (Planning and Environment Act) states: I will “acknowledge the right of the Wind Energy Facility (WEF) on the abutting property to the east to operate, and that such operation may create noise which may cause disturbance, and may be visually intrusive to occupiers of the land and agree not to interfere with the legitimate operation of the WEF.”

Recommendation 5: *All property owners should have the opportunity to live on and farm their land in safety. Wind farm developers should not be able to sterilise adjoining properties from future development.*

- The only building envelope left available to me to meet Condition 3 & 4 of my planning permit is located on my western boundary, and inaccessible to the rest of my property. This home site is directly next door to my nearest neighbour and will result in four rural dwellings next door to each other on Bolgers Road. This degree of clustering (in rural living terms) will cause adverse effects to the locality and is a direct result of a wind farm developer imposing his will over land over which he has no control.

Recommendation 6: *Neighbouring farmers should maintain the right to build their home in the most appropriate location on their properties. Developers should consider a two kilometer set back from proposed home sites appropriate, unless an alternative agreement is made with the land owner.*

- The CASA requires aviation hazard lighting be placed on the Yarram Wind Farm as they are over 110 metres in height. There are 9 dwellings within 500 metres of a turbine location, 14 dwellings within 1 kilometer and 53 homes within 3 kilometres of this wind farm.

Recommendation 7: *If a wind farm requires aviation hazard lighting, a buffer of 3 kilometres from the turbine that has the lighting to the closest dwelling should apply.*

- The Yarram wind farm, when constructed, **must operate in ‘noise reduced’ mode at all times** to meet noise requirements at existing dwellings. The noise study submitted by Marshall Day Acoustics stated the wind power station (using RE Power turbines) will not meet noise standards (at dwellings) if the turbines are operated in ‘open’ mode, and only marginally when operated in ‘noise reduced mode’. Their efficiency and economic viability will be compromised by having to operate in ‘noise reduced’ mode for the life of the facility, and limit the ability of Synergy Wind to mitigate any future noise issues when the facility is operational. Despite having this knowledge, the Tribunal agreed to Synergy Wind’s demands at the hearing to increase the diameter of the rotors by 4 metres without requesting additional noise or shadow flicker studies to be undertaken.

Recommendation 8: *If a wind farm does not meet current noise standards at a receptor, developers should abandon plans immediately, or if operational the offending turbine should be decommissioned. (Wind farms that operate in noise reduced mode or are proposed for areas of low wind speeds require greater Government subsidies.)*

- The impact of the Yarram wind farm is potentially greater on this site than it might have been in other locations of the shire because of the unique hydrogeological features and instability of the surface forms. The wind farms location is one of the few areas that the Latrobe Valley Coal Measures outcrops and receives surface water recharge into the ground water. This aquifer is the main aquifer used for irrigation on plain around the Yarram area and towards Sale. The Yarram wind farm will reduce the size of the

recharge area, and substantially increase the risk of contaminants such as oil entering directly into the aquifer; any accidental spill causing ground water contamination would be irreversible and have wider than local community effects. (Source: Environmental Earth Sciences Vic – Expert Witness Statement –P2691/2006)

- The Yarram wind farm site is geologically both fragile and unstable, the property is prone to land slip and erosion (exhibits evidence of past land slips) and directly beneath the site is the Yarram monocline (major fault line). Devon North is in a high rain fall area and natural seismic tremors are also periodically experienced in the area. (Source: Environmental Earth Sciences Vic – Expert Witness Statement –P2691/2006)
- Synergy Wind Pty Ltd failed to submit a geotechnical study, even though these last two points were repeatedly raised with planning authorities. The expert geological/hydrogeological statements submitted by the community of Devon North were dismissed by VCAT as 'no more than a desk top study'.

EXTRACT: [There] appear to be deficiencies in the assessment of the impact of the wind farm. These include the potential for the contamination of the groundwater resources and the geotechnical stability of the area. I would have expected these issues to be considered in the development application for the wind farm..." (Source: Letter: Chief of Land and Water, CSIRO)

Recommendation 9: *Wind farm applications proposed for sensitive areas should require detailed (EPA approved) independent geotechnical investigation of the site in the development phase of planning. Ground water is an important resource for future generations and warrants protection. Any development of these areas should be limited.*

2. Cumulative Impact of Wind farms under 30 Megawatts

Turnus Energy has several wind farm projects listed for Australia. These projects include:

Jack River	(16 megawatts)
Alberton	(30 megawatts)
Hedley	(30 megawatts)

These three proposed wind farm sites are located between Toora and Yarram Victoria, and if constructed, there will be a total of six operational wind farms within 40 kilometers.

Recommendation 10: *The cumulative impact of multiple wind farms on the flora and fauna and rural landscapes of a region should be thoroughly investigated.*

Yours Sincerely

Sharon Dohnt