Prom Coast Guardians Inc.

PO Box 51 Foster Vic 3960 3rd February, 2011

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

Dear Senators,

SUBMISSION TO THE ENQUIRY INTO THE SOCIAL AND ECONOMIC IMPACT OF RURAL WIND FARMS.

We are a community organisation with a charter that seeks to protect, preserve and enhance the natural landscape, environment, economic future and cultural heritage of South Gippsland's Prom Coast (from Welshpool to Cape Liptrap, including the Corner Inlet hill country hinterland).

We are grateful for this opportunity to express our concerns about the impact of wind farms on our rural area.

Within the area covered by our charter there is a wind farm in the hills above the township of Toora. The previous State Government approved an application for a large wind farm in the closely settled Dollar-Foster North area despite strong community opposition. Approximately 1500 submissions objecting to the application were lodged with Planning Panels Victoria. Subsequently the wind farm developer company withdrew its planning permit application.

Despite strong opposition, the previous State Government also gave approval for a large wind farm in the Bald Hills district, which adjoins the area of interest defined in our charter. The proponent's subsequent application for an increase in the height of the wind turbines was also approved. Construction of that wind farm is pending.

The Commonwealth and Victorian state parliamentary representatives for our area are:

Mr. Russell Broadbent MP: Member for the electorate of McMillan.

The Hon. Peter Ryan MP, Deputy Premier of Victoria, Minister for Bushfire Response, Minister for Police and Emergency Services, Minister for Regional and Rural Development: Member for Gippsland South.

The Hon. Peter Hall MLC, Minister for Higher Education & Skills, Minister responsible for the Teaching Profession: Representing Eastern Victoria in the Legislative Council.

Their principled and reasoned opposition to the inappropriate placement of wind farms in our closely settled and scenic area is much appreciated in the community.

The Hon. Peter Ryan and the Hon. Peter Hall attended the Planning Panels Victoria hearing into the proposed Dollar-Foster North wind farm and presented the National Party submission opposing the project (Ref B1).

Community opposition is often dismissed by the proponents of wind farms as 'NIMBYism' or 'stirring' by small vocal minorities who do not like the appearance of wind turbines. The weakness of this argument was demonstrated by the well articulated and informed objecting submissions, at the Panels Victoria hearing.

In it's election campaign the new Liberal-National coalition government in Victoria stated that the wind turbines in any future wind farms will have to be setback a minimum of 2km from dwellings. It has also indicated that wind farms will not be permitted in designated scenic areas.

If this policy is supplemented by a rigorous wind farm noise standard such as NZ6808:2010, with 'shut-down if exceeded' provisions, the adverse effects on the well-being of people living nearby will be reduced.

Exclusion of wind farms from scenic areas such as the Prom Coast, the Westernport & Port Phillip Bays, the Great Ocean Road and their hinterlands will protect their appeal to tourists. The large investments in tourist facilities, farm & residential real estate and their supporting industries will be protected. This is also true for many inland scenic areas.

The adoption of a 2 km setback, a rigorous noise standard and scenic exclusion zones throughout Australia would not prevent the construction of wind farms, but it will provide an incentive for developers to concentrate on suitable sparsely populated areas of lower scenic significance.

The proponents of wind farms often make exaggerated claims for the CO2 emission savings that would be achieved (Ref B5). Regrettably, some sections of the electronic and print media uncritically repeat such claims. The use of such exaggerated claims to assert an overriding common good to justify the placement of a wind farm in a closely settled, scenic or environmentally sensitive area, is the cause of much community anger (Refs B5, B6 & B7).

Our experience with the above mentioned Dollar-Foster North wind farm proposal was frustrating, as the previous Victorian state government's planning approval process favoured wind farm developers. Their "Policy and planning guidelines for development of wind energy facilities in Victoria" contained no prescriptive placement criteria (except prohibiting their establishment in National Parks). They effectively denied local councils any right to determine if and where a wind farm of 30 MW or greater, could be established. Where a Panels Victoria hearing was convened to consider a proponent's application and objectors submissions, the hearing was required to "give due weight" to the State Government Guidelines. The proponents usually had the resources to retain expert witnesses to present evidence favourable to their position, as well as lawyers to argue their case and to cross-examine objectors. Local communities and councils in rural areas did not have the resources to match this State Government and corporate overkill and struggled to raise enough funds to engage 'expert witnesses'. That communities such

as ours were still able to contest the proponent's arguments is a tribute to their spirit, tenacity and willingness to 'dig-deep'. In the unlikely event that a panel hearing found in favour of the objectors, the Planning Minister did not have to accept the recommendations, or make them public and could issue a permit anyway.

This made a lot of people in South Gippsland feel that the whole process disenfranchised them, despite their uniquely beautiful coastal and hill country.

When applying for planning approval for a wind farm, the proponents sometimes argue that landscape sensitivity should be assessed by determinate methods i.e. by 'measurement' or at best, a combination of such methods and some allowance for the subjective assessment of people living in and near the area.

The determinate method often includes arbitrary ratings of the 'sensitivity' of particular landscapes. In South Gippsland this led to assertions that the scenic hill country of the Strzelecki Ranges is largely 'man-modified' and therefore has 'low landscape sensitivity'. The suggestion that any landscapes that are man-modified have a lower 'landscape sensitivity' than natural bushland may be a comfortable notion for those seeking an excuse to erect large structures in those areas, but a few moments' reflection will reveal the absurdity of that proposition. The high sensitivity landscapes painted by Tom Roberts and other revered Australian artists that capture the essence of "Australia Felix", are often of man-modified scenes.

Anyone researching the assessment of landscape value and the impact of wind farms on landscapes can find material that will support a particular point-of-view. A common theme in the writings of landscape architects and 'experts' allied to the wind industry, is that modern wind turbines are large through technical necessity and are stark elegant aesthetically pleasing structures, that should be placed in the landscape as features in their own right, albeit, in a manner that is 'sympathetic with landforms'. Some are honest enough to say that they have to be made prominent features, because their size precludes them from being placed in a way that can be effectively shielded by other elements in the landscape. It is sometimes tacitly admitted that in areas where community perceptions are that landscape is of intrinsically high aesthetic value, the only way that planning acceptance can be obtained, is if the landscape can be rated as having low sensitivity.

In this context, we see the different deterministic methods as close to sophistry, and feel that they should have a lower weighting than the subjective assessment of landscape sensitivity by people living in or near the area.

The sharp drop in the value of dwellings in an area threatened by a wind farm is often disputed by the proponents, despite the clear evidence to the contrary and the difficulty in finding a buyer, even at a heavily discounted price. Understandably, this is the cause of much anguish and anger in the community concerned (Ref B7).

The decrease in the value of the properties near a wind farm reduces the rate income that the local council derives from them. The previous Victorian State Government prevented local councils levying reasonable commercial or industrial site rates on wind farms that would compensate for this.

Noise from wind turbines is a contentious and complex issue. Deficiencies in wind farm noise standards led to the formation of a committee to produce an Australian Standard, but we understand that committee has been aborted. Whilst the latest version of the NZ 6808 standard for wind farm noise (NZ 6808.2010) overcomes deficiencies in earlier versions, in our view it does not provide adequate allowance for atmospheric stability considerations that can result in high noise levels, particularly at night (Ref B2). It does not prescribe adequate measurement methods for low-frequency effects such as 'infra-sound'.

Wind farm proponents often dispute that very low-frequency 'infra-sound' is generated by wind turbines, but this effect has been independently investigated and reported (Refs A,B2,B3 & B4). Setbacks seem to be the only way to mitigate the severe impacts that it has on the health of some of the people who live near wind farms.

In our view there is an urgent need for a rigorous Australian Standard for wind turbine noise which is formulated on the precautionary principle that the default criteria should assume worst-case conditions. For example, it should explicitly recognise that when there are light winds at ground level, but strong winds at the height of the blade hub, the noise can subject neighbouring residents to very pronounced repetitive 'thumping or whooshing' sounds. At night, this can prevent or disturb sleep.

Adequate setbacks reduce 'blade flicker' and blade glint which can be very disturbing for people living near wind turbines e.g. when sunlight reaching windows is modulated by the rotating blades. Adequate setbacks minimise this problem.

Many modern wind turbines are very large structures with blades that sweep areas greater than 1 Hectare. Their height makes them a hazard for aviation, necessitating the fitting of flashing red warning lights. In cities or large towns such lighting is less obtrusive because of the high ambient night-time light level. In rural areas it is intrusive because of the low ambient night-time light level.

Developers seeking planning approval for wind farms are often large corporations with the resources to retain experts and consultants that will present modelled or determinate submissions favourable to their clients. In the absence of adequate prescribed setbacks and a rigorous noise standard, this can result in a wind farm being built that causes problems for neighbouring communities e.g. if night-time noise is greater than forecast and it affects people at a greater distance than the modelling suggested. Those communities are then faced with a thankless task of trying to marshal resources to seek remedies through the courts. In our view this is oppressive and unjust.

The heart wrenching anguish of people suffering from intolerable noise generated by newly established wind farms has recently been shown in television documentaries and documented in the print media (Refs B6, B7, B8 & B9). Some of those people accepted the assurances of the developers that the wind farm would not adversely affect them, but suffered a rude awakening when it commenced operation. A *not negotiable* minimum setback of at least 2km and a more rigorous noise standard would help prevent this blighting of people's lives.

For your convenience the following references are attached:

A. Book; Wind Turbine Syndrome-A Report on a Natural Experiment. Author, Nina Pierpont, MD PhD.

B. A CD containing:

- 1. A pdf file-copy of the submission to the Dollar Wind Farm panel hearing by the Victorian Nationals.
- 2. A pdf file: The Sounds Of High Winds-The Effect Of Atmospheric Stability On Wind Turbine Sound And Microphone Noise. author G.P. van den Berg PhD.
- 3. A pdf file: Wind Turbines Are Hazardous To Human Health-author Alec N. Salt, PhD. Cochlear Fluids Research Laboratory, Washington University St. Louis USA.
- 4. A pdf file-Wind Turbine Syndrome & the Brain. author Nina Pierpont, MD PhD.
- 5. A pdf file-executive summary of a study by the Electricity Supply Board in Ireland: Impact of Wind Power Generation in Ireland on the Operation of Conventional Plant and the Economic Implications.
- 6. A pdf file-text of an article in the Australian dated 27-11-2010 entitled: The Great Wind Rush.
- 7. A pdf file-text of an article in the Weekly Times dated 18-1-2010 entitled: Powerless: the Victorian Government's policy on wind farms is destroying rural communities.
- 8. A pdf file-text of an article in the Courier, Ballarat dated 18-01-2011 entitled: Waubra resident tells court of wind farm "hell".
- 9. A pdf file-text of an article in the Herald Sun dated 30-01-2011 entitled: Turbines declared a nasty neighbour as secret buyout is revealed.

Thank you for considering our submission. Yours Sincerely,

Alexander McKinlay, President, for the Executive Committee.