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Senate Community Affairs Committee
Parliament House
CANBERRA ACT 2600

Re: Submission for the Social and Economic Impact of Rural Wind Farms

Dear Senators,

We are pleased that the Senate is conducting a special inquiry into the impact of rural Wind Farms (WFs) and very happy to be able to offer our perspectives on this matter.

In Summary:
The latest scientific evidence concludes that there are no adverse health effects for people living in close proximity to WFs.
The latest guidelines for WF developments prevent any unduly noise impact on people living near them and the often cited infrasound effects are undetectable to the human ear. Higher infrasound levels than at WFs are at many places and don't interfere with their enjoyment.
Rural WFs have positive impact on the value of those properties, where they are erected, on local employment and farm income, but have adverse impact on values of lifestyle properties in their vicinity.

In more detail we will address your inquiry points in order of your suggested subpoints.

a. Adverse health effects for people living in close proximity to wind farms

Rather than giving you our own views as co-developer of WFs, we would like to refer you to the most recent 'independent' research and studies about this subject and let them speak for themselves. The most relevant research findings we would consider are:

- Australian Government: National Health and Medical Research Council (NHMRC), Wind Turbines and Health: A Rapid Review of the Evidence; July 2010: http://www.nhmrc.gov.au/_files_nhmrc/file/publications/synopses/evidence_review__wind_turbines_and_health.pdf

- The Health Impact of Wind Turbines: A Review of the Current White, Grey, and

Published Literature; Chatham-Kent Public Health Unit; June 2008: http://www.wind-works.org/LargeTurbines/Health%20and%20Wind%20by%20C-K%20Health%20Unit.pdf

However, apart from these scientifically-based literature reviews, there are also some 'minority' views expressed in publications. One of the studies, often referred to by WF opponents is by Dr Nina Pierpont; Wind Turbine Syndrome, A Report on a Natural Experiment; Santa Fe, NM; 2009; http://www.dpi.vic.gov.au/CA256F310024B628/0/AC708819BAAFAD9BCA25770D00471BA3/$File/Expert+Witness+Statement+of+Dr+Nina+Pierpont.pdf

Let us put these findings into context:

1. There are probably over 100,000 Wind Turbine Generators (WTGs) operating all over the world by now with millions of people living in close proximity to them. Dr. Pierpont only picked 10 (ten) families (38 'subjects'), most living outside the USA, to base her findings on (page 41). (By any measure, not a very representative sample.)

2. These people all complained about the negative health effects of WTGs and therefore most moved away from them. Many of her subjects had already serious physical and mental medical illnesses (pages 42 + 51) before the study commenced. But what about the health effects of those people, who continued to live close by the same turbines that effected the 10 families so badly or all the other people living in close proximity to WTGs?

3. Even in her own work, Dr. Pierpont clearly states that her sample is a 'case series of affected families' (p. 38), which is far removed from the usual medical scientifically required 'double-blind' research method to eliminate bias.

4. Dr. Pierpont's paper has not been peer-reviewed or published in any reputable scientific publication. There are a few supporting opinions on her website.

Despite the published pros and cons on the health of people living in close proximity of WFs, we acknowledge that some people get sick living there – but others having improved health effects. As it might be with people living anywhere, where they don't like nearby developments, e.g., close to factories, airports, major roads or railways, some of those people impacted get ill health effects. As WTGs in close proximity are clearly visible and therefore a permanent reminder of their unwanted presence, people with negative attitudes (mental health) towards them get constantly reminded and re-enforced and over time can develop negative impacts on their immune system and physical health.

From our anecdotal evidence we conclude that very few (if any) people who have WTGs on their land report any negative health impacts, but that these reports of ill health almost exclusively come from those residents who do not have any direct financial benefits from their operation.

b. Concerns about excessive noise and vibrations emitted by WFs

As with the previous point, there are plenty of independent research papers available, which address this concern in far greater depth, than most of the submission, including ours, might be able to. Among others, this concern is also addressed in the 3 publications mentioned under point a).

In addition to those, we would like to refer your attention to the bi-annual WF Noise conference http://www.windturbinenoise2011.org/ , which is a well established forum in Europe to debate these very issues. Presentation papers from the previous three conferences can be ordered online under the 'Proceedings' tap and potentially the Enquiry could get confidential access to the papers provided to this currently planned conference in April of this year. The usual publication date of these papers may well be after the submission for this Enquiry closes.

We also would like to bring to the Enquiries attention a recent research paper and publication on low-frequency or infrasound noise. This particular noise is often quoted as having very negative impact on people's health, because no-one can hear it.
This paper, Infrasound Measurements from Wind Farms and other Sources; prepared for Pacific Hydro by Sonus, November 2010;
http://www.pacifichydro.com.au/media/192017/infrasound_report.pdf ,
clearly shows that infrasound is 'everywhere' and it can't be detected by the human ear. The infrasound near WFs is below the acceptable standard of several countries which have legislated for it and it is lower that that on a beach. Few people complain about infrasound noises on beaches as compared to the lower and with the human ear undetectable levels near WFs.

In general, there are currently noise level restrictions in all planning guidelines for WFs that keep that noise well below the noise most city dwellers will endure on a daily and nightly basis.

If modern WTGs are properly installed, they don't have any noticeable vibrations. This is clearly a non-issue, as in our understanding there are no rules, regulations or measurements in WF planning guidelines place that need to be adhered to. May be the regulations for new tram and/or railway lines, which clearly create a lot of vibrations, should be adopted and explicitly incorporated into WF development guidelines.

c. The impact of rural WFs on property values, employment opportunities and farm incomes

    a. Impact on property values
    There should be no doubt that WFs enhance the values of those rural properties, on which they are located and therefore make positive contributions to the 'wind' farmer.

    For nearby farmed properties the impact should be neutral, because there is no direct impact on land use of the properties.

    However, we also often hear complaints of people living on 'lifestyle' farms. These farmers bought those properties primarily for re-creation and secondary for farming. There is a good likelihood that the values of those properties suffer as those 'often Collins Street' farmers perceive a significant reduction in enjoyment of their lifestyle on their farm.

    We as NewEn are looking to stay away from those areas, where there are lots of lifestyle farmers and rather develop WFs in real rural areas, where WFs are beneficial to the involved farmers.

b. Impact on Employment Opportunities

We will need to differentiate three different development phases of WFs on local employment

i. Planning and Development Phase

During this phase, there are a lot of visits of WF developers, planning and other consultants to the WF area required. These visits boost the local economy by creating additional demand for food, drinks, accommodation, petrol and other services.

There are a number of local services required to develop and finalise planning applications. Most WFs are required to engage Regional Aboriginal People for assessment of the proposed area under a Cultural Heritage and Management Plan.

ii. Construction Phase

During this phase major local employment opportunities are created. Even if many of the major contracts are handled by national firms, these often look to engage as many as possible local subcontractors to conduct the work. Furthermore, there is significant influx of out-of-town people, all of whom need accommodation, nourishment etc during the time of construction.

iii. Ongoing Operating Phase

After the construction, there is an ongoing need for service and maintenance for the WF. Sometimes local people are trained to perform these services for the 25 years of operation of the WF.

c. Impact on Farm Income

Income from WFs for local farmers are very significant. Therefore most farmers are interested to participate in WF developments on their properties. Unfortunately, all this demand for rural WTGs cannot be satisfied, because of stringent noise and environmental guidelines that often place more importance on birds, lizards, moths and grasses than on the needs of the local rural community.

It would be very helpful, if the Enquiry could encourage all levels of government (federal, state and local) to develop clear guidelines that consider the economic value and interests of the environmental versus the human needs.

Most WF developers also make now contributions to the local community, which as a whole will benefit from the development of WFs.

d. Any other relevant matters

One major positive contribution of rural WFs in Victoria is that they have to pay substantial amounts of rates/taxes/fees to the councils on which land they are located. These fees amount for each financial year to:

a. For each power station on the land of the council $40,000; and
b. For each Mega Watt (MW) of nameplate rating of the power station: $900.

Another big positive social and community side effects of rural WFs is that the electricity grid and production in major states is becoming more balanced and not so dependent on a few major generators in a few locations. Furthermore with the decentralisation of electricity distribution capabilities, local distribution and transmission lines get upgraded and become more stable and reliable for the local communities.

It has been a pleasure providing this paper and we hope that it will be of use to assess the social and economic impacts of rural wind farms. Please do not hesitate to contact us for any clarifications you may require.

Yours sincerely,

Ernst Weyhausen
Managing Director