(...)

25 January 2011

Department of the Senate P.O. Box 6100 Parliament House Canberra 2600 Australian Capital Territory

Dear Sir/ Ms

Please find the enclosed submission, of which I have compiled, to be submitted to the Senate Inquiry into the social and economic impact of Rural Wind Farms. In researching the material that I was able acquire to successfully compile the submission I was able to gain an insight into the area of Wind Energy that previously I was not aware of.

I have also drawn on my own knowledge gained.

So in conclusion I feel that the reader of this submission will be able to see that the positive factors out weigh the negative factors associated with Wind Farms and the energy produced.

Yours Sincerely

(...)

DARYL O'FLAHERTY



THE SOCIAL and ECONOMIC IMPACT of WIND FARMS

Submission to the Senate Community Affairs Committee by DARYL O'FLAHERTY

A factor that has been put forward by the so-called landscape guardians and opponents of Wind Farms are the health issues and their side effects on people living in close proximity to Wind Farms and operational turbines.

Prior to a new or expansion to an existing Wind Farm the wind farm developer undertakes studies and research using independent research organizations into various factors that could affect the development of the wind farm. These studies and the data collated are not taken lightly and are used in relation to the site, suitability and efficiency of the wind farm.

Research conducted by the World Health Organization and various other independent laboratory's have shown that arguments put forward by opponents, of Wind Energy, have very little substance and the data published backs this up. Surely the impartialness and professionalism of these organizations, employed by the Wind Farm proponents, is not to be taken lightly. Also this research data, used by the developers to determine the suitability of the site, has been substantiated both here in Australia but also on a global scale so these results cannot be taken lightly.

In fact a of this information and data comes both from numerous studies undertaken overseas and Australia and provide conclusive evidence that Wind Energy has very little if any harmful effects on human health issues.

The opponents put forward a statement of how the wind turbines cause various forms of nausea dizziness and sleep deprivation. Studies have shown that the actual amount of noise and wind motion put out by turbines is generally less than what occurs in nature and also everyday situations. One only has to visit an operational Wind Farm and view it's operation to gain an insight into this.

The opponents have put forward numerous health issues such as low frequency sound effects on nearby residents but this problem has been rectified by alteration to the blade design, the electromagnetic radiation issue, which is also a natural phenomenon, is not a factor as long term exposure to very high levels will cause burning to tissue and this is overcome by placing the cables that link the turbines in the Wind Farm underground.

I am more than certain that the fear and suspicion of this new technology is the overriding factor in this argument the opponents raise. It has happened in the past with new inventions such as the motor car, radio, electricity and medicine.

It's human nature and it will not change but we as a society should not let it inhibit advancement of our way of life and using new technology to assist this lifestyle.

I would like to know where the opponents of these developments get their research and data undertaken by and to the impartiality of the people and laboratory employed. Is the figure being misconstrued so to allow the opponents to hinder Wind Energy?

Also jealousy over turbine location, in a Wind Farm, and payment of royalties to site holders is most likely a more influencing factor in the effect on health and recently one vocal opponent, of a Wind Farm in S.W. Victoria came out and stated that a scheme in which royalties and monies should be pooled in a sharing arrangement between neighboring land owners. It seems that this would alleviate some apprehension and suspicion of the Wind Energy debate.

I myself consider that Wind Turbines do not emit any anymore noise and vibrations than mother nature herself as I'm sure that anyone who has lived in a rural area will back this up. I have taken the liberty to stand and view operational turbines and I consider that one only has to stand and listen to the wind turbine and then compare it to the noise and vibration that a natural storm can bring about and see that the turbine is the quieter of the two.

In relation to the impact on property values this is a contentious and subjective issue. In studies undertaken, overseas in the USA and Europe, data collected found that there is no clear evidence in relation to Wind Farms causing a decline in property and housing values. Actually a study conducted in the USA showed that property values had increased within the view shed of a Wind Farm.

Here in Australia as income is earned from the leasing agreement with the operator evidence has shown that property values have increased. Also as the developer puts in place improvements such as gateways, new fencing and lane ways and other infrastructure these have improved the property owner's amenities at no cost to them and these improvements can add a substantial figure to the value of the property.

I am certain that the improvements put in place enhance the value and in cases marketability properties which have wind turbines constructed on them. If you consider the leasing agreement that is in place, with the Wind Farm operators, one already has an income derived from the property.

As most Wind Farms are situated on more than one farm property the improvement of land values are of a broader nature and this is dependent on pre-existing improvements.

In the construction of the Wind Farm access roads on local government land has to be done and in some cases major works carried out . As to if this is to be funded on a local or state level depends on various factors outside of the Wind Farm development. But these improvements benefit the neighboring landowners and also people such as employees of the farmers, transport operators carting produce for the farmers and in cases emergency vehicles of differing types.

In some cases tourism operators conducting tours, of the Wind Farm, could not be able carry out their business if the roads were not improved.

Also society in general benefits from any improvements to the road infrastructure as they are safer for all users.

Much has been put forward in relation to the siting of Wind Farms with regard to livestock and native wildlife. One only has to visit a Wind Farm such as the one at Lake Bonney S.A., Waubra Vic., Snowtown S.A., Codrington Vic. And view that the farmers livestock grazing up to the foundations of the turbines and will come away with the first hand knowledge that the farmers livestock are quite comfortable in their surround. The turbine tower places the nacelle and associated blades well away from the animals thus posing no problem to them. The so-called noise and vibrations do not seem to worry the grazing animals.

If the land on which the Wind Farm is situated on is cropping land then also the turbines poses very little problem other than that the farmer has to work around it. But this also happens with the property having trees, power poles and rocks on it. So the farmers will make allowances to incorporate these changes into their farming program. Nearly all Australian farmers are most adept in being able to change their ways if needed.

The opponents, of Wind Farms, have argued strenuously about how wildlife population will suffer and possibly decline. Wildlife such as birds and bats suffer from collision with numerous types of manmade structure and alterations to their natural habitat. Studies at Codrington in Victoria show that between 2001 and 2003 show that a total of 4 birds and one bat were the result of collision with wind turbines. These measured mortality rates were used to predict that a likely mortality rate would be a likely level of between 18 to 38 birds per year. Studies undertaken on water birds have shown this group is more than adept at avoiding turbine structures. Also as turbine location has to be on a firm and stable ground not wet and swampy ground then this would also assist in the locating of Wind Farms in relation to birdlife of this type. Research undertaken at various other Wind Farms has also found no conclusive evidence of the harmful effects of Wind Farms on native wildlife.

All Australian Wind Farm developers must comply with guidelines set out by statutory authorities and also at the federal level they are accountable under Commonwealth Environmental Protection and Biodiversity Act 1999. Under this legislation which prescribes Australian Commonwealth involvement in

environmental matters where action has or will have significant impact on "matters of national environmental significance".

In 2003 the Australian Wind Energy Association received a grant so as to develop Bird Impact Assessment Protocols and Standards to assist in data recording and analysis in evaluating the level of wildlife impact and mortality at Australian Wind Farms. This supplements recommendations for wildlife assessment AusWEA's Best Practice Guidelines.

Both Commonwealth and State Governments agencies, bird experts and non-government organizations had an input into these guidelines. These help the industry to implement effective monitoring to address issues, regulators in setting impact assessment and monitoring requirements as part of the developmental approval process, consultants in the assessment and monitoring work and also in the involvement of community and environmental groups in understanding the significance of wildlife issues.

Most importantly the outcomes provide a transparent and positive basis for discussion on understanding the significance of wildlife impacts on Wind Farms.

When considering all of the above the Wind Farm developers and associated developments are held accountable more so than some other industry.

I would like to touch on the argument of loss of visual amenity when one considers the existing forms of energy generation such as coal nuclear power stations and the impact they have on the surrounding environment and with the associated pollution, from them, then this is a very frugal argument. AusWEA has in place recommendations standards to be considered in relation to the siting of the Wind Farm. Both Federal and State Government take into consideration the fragility of our environment and no responsible developer will contemplate putting forward a proposal which could harm the environment.

On the issue of employment prospects this is of a wide nature such as manufacturing, supply, construction, operation and maintenance.

In the manufacturing area this creates a wide range of specialist trades people being needed to manufacture and assemble components needed for the turbine in the area of electrics, steel of various type, paint and nuts and bolts. Then we have companies using the above in producing the components. One only has to view the Keppel Prince operation, in Portland Vic and the RPG operation in SA and Queensland to gain an understanding of the employment created in this area of manufacturing.

Although specialist components such as Nacelles, Rotors and Blades are presently being produced overseas but this creates employment on the harbors, of Australia in the stevedoring, storage and crane area.

In the transport field you have specialist operators and their specialized transports carrying out this task. There are truck drivers, escort vehicle drivers and yardmen, who are highly skilled in their field, employed.

On site there are crane drivers, riggers, dogmen, fitters and supervisors. Also specialist trades persons are require for the fitting out procedure. On site O, H&S reps are in place to see that Work Safe guidelines are adhered to.

But even before all of the above planning, site works and construction has to be done of a varied nature and needs a workforce to be put in place. This workforce could consist of state and local government employees and also private contractors. I would not like to guess on how many are employed in the development of the Wind Farm prior to works starting on site.

All employees of the Wind Farm development no matter what level possess specialist skills but also people are being trained so as to have these skills for the future. These skills can be used in other areas for the improvement of Australia so that we will have in place people possessing skills of varying nature. This then I think will improve the Australian economy.

In the case of people being employed this gives them a wage for them to live on. Taxation is paid on their salary and this goes to the Federal Government revenue for the use and improvement of all Australia.

Superannuation is paid by companies and individuals and in the future this takes the pressure of the government in relation to retirement and pensions.

If people are earning money then they can afford to buy goods and services of a wide variety.

Companies and individuals will buy necessary items such as fuel, tyres, parts and new and secondhand vehicles and machinery.

This all has a flow on effect for the economy in that money is changing hands and creating employment in the economy of Australia. As most Wind Farm projects are in a rural area this improvement in the economy, on a local scale, is critical to keeping communities functioning and in cases surviving. Also the social implications are of great importance for these communities.

The land owners on which the turbines are located will derive an income which added to their farm income will in cases ease their financial burden. There are cases where the land owner in conjunction with the Wind Farm operator has put in place facilities for the tourism industry.

On a personal note I was very fortunate to view at close hand the Wind Farm developments in Southern England some 10 years ago and thought what a great way of harnessing a natural resource for our benefit. The resource is finite and available at a relatively low cost.

Since then I have kept up to date with what is happening with regard to Wind Farm developments worldwide both on a work related perspective, brochures and through the media. We have Europe, North America and China expanding their reliance on alternative energy with a great emphasis on wind generation. Every year a greater percentage, of their requirements, is being produced by wind turbines. Recently Egypt announced that they are going to put in place Wind Farms for generating a percentage of their energy requirements.

From a work related perspective, through my work qualifications, I have been employed in the Wind Farm industry as a Certified Pilot Vehicle Driver for escorting the oversize loads being transported to various sites and also the placing in position, prior to erection, of the turbine components and then being able to view the operational turbines. When on site I am able to talk to the various people, involved with the turbine erection, and through this gain more knowledge.

Through this I consider that I possess firsthand experience and knowledge and do the opponents?

So in conclusion, of this submission, I like to think that the Senate Inquiry into Wind Farms will take into account what I have put before them and can see that the benefits of Wind Farms and the energy they produce far outweighs any arguments and statements that groups opposed to these developments have raised. It has been working overseas for many years without any major problems.

We do not want to be left behind in regard to the rest of the world in this form of energy generation.