

Submission  
No 20

## INQUIRY INTO RURAL WIND FARMS

**Name:** Mr Jule Bierling

**Date received:** 10/08/2009

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**The Director**

**General Purpose Standing Committee No 5**

**Parliament House Macquarie St Sydney NSW 2000**

From

6 August 2337

**Ref: Inquiry into rural wind farms**

Dear Sir

Thank you for the opportunity to contribute to the debate on Rural Wind Farms in NSW. My involvement in this issue are numerous, first as a citizen of the state, then as a local resident, and finally as a property owner, most directly affected by a current proposal to build a windfarm in Scone. This letter is therefore structured as follows:-

1. **Immediate Concern : the Potential Bypassing your Inquiry**  
The Minister for Planning may approve major projects during this enquiry
2. **Reduction Of Green House Gasses**  
The correct objective, windfarms are an ineffective solution
3. **Off Peak & Base Load Power**  
Windfarms are limited in output at best, not reliable, coal fired stations must always be on standby
4. **Optimal Location of Windfarms**  
Where the power is needed, the wind is reliable, minimal impact
5. **Impact on Property values**  
High in developed areas, especially in life style sectors.
6. **Encouraging Local Ownership**  
The profit motive will over ride social costs. State leadership is essential
7. **Renewable Energy Targets**  
Windfarm contribution will be limited, unreliable, and very costly
8. **Any Other Relevant Matter : Alternative Sustainable Energy Technologies**  
Solar Thermal Power encouraged by Federal Government. The Technology is proven. The business is economically and socially sound.

### **1 The Potential Bypassing of your Enquiry**

My most immediate concern is that the current proposal before the Director of Major Infrastructure Assessment, namely the Environmental Assessment prepared by Pamada Pty. Ltd, for the so called Kyoto Energy Park, Scone, could in theory be approved before the Inquiry announced by your General Purpose Standing Committee concludes.

We would urge you in the strongest possible terms, by whatever means at your disposal, to recommend to the Minister for Planning, the Hon. K.K. Keneally, to suspend any decision on this major project, until the findings of your Inquiry have been made public.

This may seem like an obvious procedure to follow, but we know that not all arms of government follow a logical path.

At this time we know that many votes may be gained by appearing to be "Green" .

Hence the rush to windfarms, even though they can be shown to be anything but green. Once this message is understood , voters will resent being misled on such a vital issue.

### **2 Reduction of Green House Gasses**

This is the only acceptable reason for considering alternative energy sources. We know some quarters are debating the need for this, however, we take the position, that if the Climate change, Global warming, is only partly escalated by human energy usage, we must do what we can to reduce the negative by products of worldwide energy usage.

What is needed is reliable, sustainable alternative energy, at acceptable unit prices.

In the long term view of energy production, only nuclear power can hope to replace the present coal based power generation in this state.

But we should do all we can at this time, to significantly reduce emissions on a reliable sustainable basis

It is my contention, and that of many others, including economic and technological experts, that windfarms are by no means a correct answer to the need for sustainable alternative energy.

### **3 Producing Off Peak and Base load Power**

It is now widely reported that Windfarms are less than 30 % effective. Due to the variability in wind speeds, windfarms can never be relied on to supply anything but occasional power. Base load power can never be turned of, the wind may suddenly vanish.

Hence , the reduction in green house gasses will be much reduced compared with other sustainable alternative power generators.

Windfarms have been shown in many areas to be a temporary solution. The life cycle is sometimes less than 15 years, They are not sustainable, and a poor alternative when operational.

The reason for their popularity in Europe is purely economic. Power costs are much higher then here, hence the case for windfarms has been driven by economics, rather than reductions in green house gasses. Not surprisingly, all the proponents of windfarms have trumpeted their green credentials. Turbine manufacturers, steel construction , site owners, all claim to be green. Their bank accounts certainly are.

There are now many voices in opposition to these intrusive projects, the technology is now outdated. Europe has many Nuclear plants, coal is no longer king, yet the dominance of windfarms on the horizons of many countries, has lulled many into believing that these windfarms are the only solution to reducing green house gasses. In Australia, we are fortunate to have a viable alternative, and Spain is well on the way to proving this alternative Solar Thermal.. ( see below)

#### **4 Optimal Locations of Windfarms**

The simple answer is.. nowhere, there are better alternative energy sources ( see below) However, for the sake of this enquiry, the issue is again quite straightforward. Alternative energy windfarms should be located where the power is needed, where the wind is reliable, where the presence of these enormous structures do not adversely affect local residents. And where the best economies are achieved.

If such farms are needed, they should be close to current main power plants, and power lines. In NSW , such plants are in high wind areas, Bayswater & Liddell are typical ideal sites.

There are no residents close to these plants, there enormous open spaces, ideally suited for these turbines.

Placing them on top of some of the most scenic hilltops of the Upper Hunter, close to many residents, is far fro ideal.

The costs of building these plants on such remote, inaccessible ranges, is only attractive because the State Government has agreed to pay enormous prices for so called "Green Power". These rewards are sufficient to attract large overseas investors, who will be guaranteed adequate returns , there is enough incentive to pay contractors and manufacturers large sums of money, for construction of such enormous projects, there is ample returns to reward land owners with large sums of money, simply for having these towers erected on otherwise un profitable virgin bush.

Optimal locations are NOT in the Upper Hunter, not on the ecologically sensitive pristine ranges, parts of the Great Divide, parts of the main wildlife corridor.

Placing windfarms near power stations, on coal waste heaps, makes economic sense, makes social sense, assuming they are the only solution.

In Europe, many windfarms are now located out to sea, to minimise visual and noise impacts. This is especially true for the huge turbines planned for the Upper Hunter

#### **5 Impact on Property Values**

There will never be a positive impact, the arguments that exist, centre on how much the negative impact is. In the EA submitted by Pamada, the claim is some 2 to 3 %, which vanishes after some years. This is based on some American "Expert" advise.

The evidence we have is some 20% for "lifestyle" properties in close proximity to windfarms. The impact will increase with a) the size of the wind turbines, b) the number of turbines c) the proximity to the property d) the visual impact of the turbines e) the noise generated in the otherwise quiet rural environment.

A direct example is the reduction in value of our property, which was confirmed by two local real estate agents to be some 20% of value prior to the proposed Kyoto project. Any mention of eventual compensation for loss of property value ( as done with coal mines), has been met with scornful refusals.

This particular projects impacts directly on some 60 properties, many are called "Life style " Properties, they are to small for serious farming, but people, like ourselves, have chosen to live here, because the idyllic beauty of the Upper Hunter. Now under threat from an indefensible project, based on greed, using green power as a front.

### **6 Local Ownership & Control**

Local ownership encourages greed, seeking personal gain above all other considerations. Any justification for these projects reverts to profit. Profit for landowners. Profits for developers. Profits for windfarm owners.

Losses to the state, paying exorbitant prices for bogus green energy, losses to all the voters of state, being forced to pay hefty surcharges on their power bills.

A state led consortium, regulating development, costs and profits, would prevent this rush to windfarms all over the Hunter. The state could have a token ownership, or assume regulating powers, where there are none at present. It is open slather for developers, the residents be damned.

There are fine studies presented on flora, on fauna ( bird kill will be "Managed" it is claimed in the Pamada EA). The EA admits the locals are against this project. The Visual impact will be high for huge areas. The noise impact will be large.. etc. But the profits to the local landowners will also be huge, hence the reason for this project. The benefits to the state, to you and me, are minimal. That is of no concern to local "Owners"

### **7 Role of Windfarms in Aust. Renewable Energy Target.**

Even if we were to build 1000 windfarms of the size proposed by Pamada for Scone, in every conceivable location in NSW, we would still need coal fired stations. ( Based on current electrical usage ).There are prolonged wind still days, weeks, all over the state, when little or no wind power available.

It is claimed that diversity would ensure some wind power somewhere. A recent study of wind patterns in SE Australia ( Tas. SA, Vic & NSW ), has however shown that there are large prolonged low wind periods all over the East continent.

Windfarms can not contribute a significant, reliable, sustainable contribution to a renewable energy target. Fortunately, there are alternatives which can do this.

### **8 Other Relevant Matters**

Your Inquiry has terms of reference which centre on Windfarms. However, under point 6, Any other relevant matter, I would like to stress the importance of considering alternative sustainable energy..ie: is there a better solution.

We are firmly convinced that there is a much better sustainable alternative energy technology available, which has none of the problems widely associated with Windfarms.

Before I detail this alternative, some personal matters

A brief mention of my credentials. I am a ( retired ) Electrical Engineer ( Syd. Uni. 1963) I have been involved with energy issues at many times in my career, incl.

Co-Generation Studies for Unilever in the seventies, and have also dealt with many

major environmental matters, in the USA, and specifically with the elimination of Asbestos in Australia.

I am now retired , a partner in a 4 ½ star guest house 10 km west of Scone. We chose this location, for its exceptional scenery.

We certainly wish to invite your committee to visit this location, to appreciate the enormous impact the proposed windfarm would have on this beautiful Upper Hunter location.

I am an active member of the Upper Hunter Landscape Guardians, a group of residents formed to state the case against this particular project by Pamada Pty. Ltd., called the Kyoto Energy Park, as loudly as possible.

I fully endorse all their objections, as detailed in an exhaustive submission to the Director of Major Infrastructure Assessment. However, I am convinced that the arguments against windfarms are much broader than those voiced against this particular proposal.

The reason for the current surge in Windfarm proposals is not difficult to discern. Windfarms are perceived by many to provide Green energy, a way to work towards a reduction in Global warming. Windfarm developers have convinced the press, and certain sectors of the government, that windfarms are the only practical proven technology to achieve this, in spite of the overwhelming negative impact on the local environment of such windfarms. The press has convinced the voters of this state (correctly), that green power is vital to our environment. The Government wishes to do appeal to voters, (needs to appeal ?) , hence our Premier has decided ( unilaterally), to make the Upper Hunter a windfarm precinct. It is the wrong answer, the wrong technology, in the wrong location

### **9 The correct alternative Solar Thermal Power.**

The Prime Minister has recently announced that the Federal Government has \$1.4 Billion for developing solar power.

Solar thermal power differs from Photo voltaic, in major ways. The energy of the sun is used to heat special fluid , in pipes set in long parabolic troughs. This energy is used in two ways. A portion is used to drive normal steam generating plant when the sun shines. Another portion is stored by the fluid, then used to drive the same generators when the sun has gone.

This is not science fiction, or "future" technology. Such plants are operating in Spain, the complex is called Andasol. ( some details attached).

The output is reliable, energy can be stored, the economics are favourable when compared with the 30% output of Windfarms..

Australia has much "Better" sunshine than Spain ( closer to the equator helps),

We have enormous open spaces, close to the power grids already in place.

If all the funds the proponents of windfarms in the Upper Hunter appear to have at their disposal, were combined to build such a plant, returns on investments could be guaranteed.

The expertise is available locally. Leightons helped build the Spanish plants.

The manufacturing skills are locally available, no need for Chinese steel, or turbines.  
The profits could stay in Australia.

There are many more decisive arguments against windfarms, and for solar thermal plants. Please ensure your Inquiry comes to the same conclusion.

Conclusion

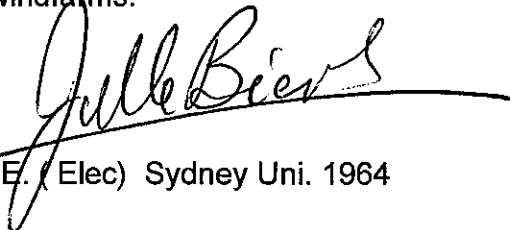
I make no apology for the length of this submission, the Inquiry is of vital importance to the future needs of this state.

I repeat my invitation to members of the enquiry to visit the Upper Hunter, and my residence and Guesthouse LeCamah Hill, at [redacted] to visualise the intrusive nature of this outdated and ineffective project, to learn about the disaster that awaits local fauna, etc. etc..

I would also be happy to attend any hearing you may have as part of this inquiry. If desired, I can bring many references to all the issues I have raised, there is an overwhelming volume of literature available on the web.

Please acknowledge receipt of this submission, it is vitally important to ensure that the Minister for Planning awaits the findings of your inquiry, before deciding on current applications for windfarms.

Sincerely Yours



Julie Bierling B. E. (Elec) Sydney Uni. 1964

Encl. Andasol Solar Thermal Power Plant  
( from web search Andasol Solar Thermal  
much more information available, incl. Photos)