## Representation to the Australian Senate Committee on Windfarms

## **Summary**

Wind generation is expensive, unreliable, potentially damaging to human health, ineffective in reducing CO2, an unacceptable blight on our countryside and grossly unfair to neighbouring property owners. The subsidy systems are distorting the energy market and distracting generators from the realistic future of nuclear, gas and clean coal generation and from research into other energy sources.

Wind generation is nothing more than a highly visible political expedient to mollify public concerns over climate change. Worldwide it has been deployed for this purpose only and so has escaped proper evaluation. In the UK the planning system itself has been distorted in favour of wind farms in a most undemocratic way. Wind energy has been propagandised by the "wind industry" to such an extent that to merely intimate that it may be less than it is cracked up to be will bring down squeals of disapproval and accusations of "climate denial".

In this atmosphere, an international, high level, scientifically credible, clear headed, dispassionate, disinterested and evidence based inquiry is more than commendable and I thank and congratulate the people of Australia for its inception. I am certain that such an inquiry, if not infiltrated by interested parties or hijacked by the "Green Taliban", will conclude that wind generation is not realistic. Perhaps the crucial factor is that, as opposed to wishful thinking, there is now enough real evidence to decide one way or the other.

## Detail

1. Wind generated electricity is expensive. See "The Wind Farm Scam" by Dr J Etherington for detailed explanation of UK costs and subsidies. Capital costs of turbines per MW of installed capacity are very high compared with other generators. This is more so for offshore turbines. There is also a comparatively high cost associated with the connection to the grid. Every wind farm must make its own connection instead of one large connection for a larger conventional generator. Duplication is not sustainable. (Sustainability is an important issue in this context and needs explanation. See 10 below.)

Although, in the UK, the wind generator is paid the same amount as a conventional generator for 1MWh dispatched, he will also receive a Renewable Obligation Certificate (ROC) for that 1MWh, which is worth around the same amount. Current prices are about £50 for 1MWh and £50 for one ROC. Straight away, via the ROCs system, wind energy is about twice the price of conventional energy. The consumer uses a mix of energy, from various sources as secured by the supplier, but the proportion of green energy is not shown on the domestic bill. The UK public is therefore not aware of the subsidy to "renewables". If it were it might hold less enthusiasm for wind farms.

Every consumer, regardless of means, pays this hidden subsidy to the turbine owner. At a time of "fuel poverty" (people not being able to pay their fuel bills, or spending an excessive proportion of their income on just keeping warm) this is inequitable, especially as those individuals who have the land and resources to build turbines are likely to be well off. This is sometimes called the "Reverse Robin Hood". If it were not for the ROCs system of subsidy there would be no turbines in the UK.

Other pressures on costs/prices emanate from high grid connection costs and wastage in transportation from the inevitably remote locations of generation to the consumer living in an urban area.

Electricity lends itself to large scale production far more effectively than small scale production and this simple fact has an affect on costs/prices.

<u>2. Unreliability</u> In the UK the load factor (actual production versus theoretical maximum production under optimum conditions) is about 25%. The wind lobby always exaggerates this figure and we now have real evidence to that effect. Simply put, turbines are idle for 75% of the time. The 25% of the time that they are productive is random.

Most people are aware of this but fail to understand the implication whilst insisting that their supply should be 100% reliable. They do not understand that when wind is productive conventional generation is turning over with the "clutch disengaged" using nearly as much fuel as if it were actually generating. This wasteful "standing by" of conventional generators is essential if the consumer is to enjoy 100% reliability of supply. Without a conventional capacity equal to wind generation there would not be enough electricity when the wind stops blowing. As we have to have this conventional capacity it should be used flat out and as efficiently as possible which is incompatible with the stop-start regime forced upon it by wind generation which does not save a single molecule of CO2.

The argument that "The wind is always blowing somewhere in the UK and so if we build enough turbines we will always have electricity" is unrealistic as it would ntake many thousands of turbines to achieve this and even then there would be no guarantee that enough wind was blowing somewhere! Indeed, it is an unlikely scenario as usually the whole of the UK is covered by the same weather system. Our weather system dictates that when we most need energy we are under a high pressure system associated with still air. It is not possible to ramp up wind energy to meet demand.

The bigger idea of a European Supergrid, or even worldwide grid, is just as unworkable because all of NW Europe is usually under the same weather system and the global grid would lead to fuel insecurity through political differences.

Perhaps a measure of the unreliability of wind energy is that in the recent cold spell in the UK wind energy produce ZERO electricity just when we really needed it and that after all these years, all this money, all this despoliation of our landscape, all these heated local planning battles, all the resources expended, all the tears, all the propaganda and all the anguish of impoverished property owning neighbours the maximum output achieved by UK commercial turbines was 1.86GW in September 2010 when demand was about 39GW and with plenty of paid for, existing, conventional capacity in hand standing idly by burning fuel and producing CO2.

<u>3. Health</u> The health concerns surrounding wind turbines are not fully understood but there is enough *prima facie* evidence to justify caution and more research. The UK government will not entertain a minimum "setback". In fact it says nothing on minimum distances between turbines and houses.

On noise the UK government relies on an out of date noise assessment regulation known as ETSU-R-97 which is widely held as inadequate even by local health officials.

On flicker there is no requirement other than for the applicant to show that it has been considered, that it will not be a problem or that if it is the turbine will be shut down. This is unfair because, as with noise, it relies on those affected making a complaint. The complaint has to be examined which takes time.

Knowing your house may have lost half its value, or become unsellable, because a greedy land owning neighbour has built turbines next door, is not conducive to good health.

<u>4. CO2</u> Wind generation is justified solely on its alleged ability to reduce CO2 emissions. That wind generation fails in this respect is manifest by the fact that not one watt of conventional generation has ever been decommissioned anywhere in the world as a result of wind energy.

The reverse is actually true. Conventional power stations are required in greater numbers the more wind turbines are installed. Moreover, what is the point in pursuing wind energy in the UK if China is bringing a coal fired station on stream every two weeks for the foreseeable future? The feeble and misjudged attempts to reduce CO2 in the UK are dwarfed by the increase in CO2 production in the developing world, and who can blame them for wanting what we already have? The price we pay is the destruction of our country which, ironically, is what Chinese tourists come here to see. (The country that is, not its destruction)

To reduce CO2 we would be far better off reducing consumption and especially waste. We would do better to redirect subsidies to encourage better house building and transport which are the main CO2 producers. Far more CO2 was "saved" by the Icelandic volcano grounding flights in Europe than has ever been "saved" by wind turbines in the UK. Far more CO2 was belched out by the volcano in a couple of weeks than we could ever "save" by fiddling around with wind energy.

Wind generation does not reduce CO2 and since that is its raison d'etre it should be abandoned.

5. Blight on our countryside No part of Europe or the UK is safe from the threat of turbines. Applications are now being considered in or near World Heritage Sites such as Le-Mont-St-Michel. In the UK protection of our Areas of Outstanding Natural Beauty, National Parks and Sites of Special Scientific Interest is being set aside. What is the point of "saving the planet" in one way if in the process we destroy it in another; especially when the chosen method to "Save the Planet" is doing no such thing?

In our overcrowded island we need to protect our wild places more so than ever; not destroy them. The wholesale industrialisation of our landscape in the false name of progress and saving the planet, and by private individuals and companies in pursuit of subsidies, is no longer acceptable.

6. Property values There can be no doubt whatever that turbines have a negative affect on values. Ask yourself "Shall I buy that house next to the wind farm or the one miles away?" This is constantly denied by the pro wind lobby in the face of overwhelming evidence to the contrary. It is obviously unfair that one person should benefit from a bad idea while someone else, who is indirectly and in a small way paying for that bad idea, should lose. The wind farmer has probably taken the precaution of not living anywhere near his "subsidy farm" and so does not care.

People in central England are being offered compensation for blight caused by a high speed train link between London and Birmingham and beyond but there is no such equivalent for those blighted by turbines. The difference is that wind farms are private adventures whereas rail is public. In a fair world it would be the other way round. The private speculator should compensate his neighbour but the state should not on the grounds that what the state builds is for the general good.

7. Subsidies Different countries have different systems but they all add up to the same thing; distortion of the market. Once distorted it is impossible to know the real state of the market. In the UK the system is hidden in the Renewable Obligations system and in the Feed in Tariff system. Neither is accounted for or shown on bills. In the UK the subsidies over the next 25 years add up to the cost of a nuclear power station which would generate more electricity, produce no CO2 and at

the end of the 25 years we would have a 25 year old power station still producing cheap electricity instead of several thousand clapped out turbines in need of re-engineering and further subsidies. The planning "buzz-word" is sustainability. This is not a sustainable policy.

8. Planning System The system is loaded in favour of the applicant. Objectors may not appeal a planning decision but an applicant may. Objectors have small funds to fight against large multi national companies. Prepared applications are sprung upon an unsuspecting public which is then given 21 days to respond to a very complex issue. Planners are faced with targets of so much renewable energy from such and such an area. With other renewables being slow to develop, planners have no option but to allow turbines, or at least encourage them. Normal rules are set aside. In my area a local farmer was refused permission for one mobile home for an agricultural worker on the grounds that it would have been temporary and unsightly but one of the main arguments in favour of a disputed local wind farm of four 325ft turbines is that it would only be temporary; for 25 years!

Another anomaly is that wind energy is encouraged under the banner of sustainability but applicants are not required to show that the scheme is viable, either financially or practically i.e. is there enough wind?

- <u>9. Propagandising</u> The pro wind lobby is publishing one sided literature. It is going into primary schools to influence the wind farmers of the future in a way that would not be open to others. It has been taken before the Advertising Standards Authority over its wild claims for CO2 displacement and been made to reduce them by half.
- 10. Sustainability in the UK All Planning Authorities in the UK are required to show how policies have been assessed for sustainability and that the policy is sustainable. The adopted definition of sustainability is contained in the Brundtland Report of 1989 but is now widely and incorrectly interpreted as "Cut CO2 at any cost". This incorrect, narrow interpretation has empowered the "wind industry" disproportionately. All other aspects of "sustainability" such as preservation of wildlife habitat, wildlife diversity, protection of existing designated areas (World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty, Sites of Special Scientific Interest), protection of groundwater supplies, use of resources to build and install turbines and the irreversible, collateral environmental damage, are ignored. Given its need for constant back-up by conventional generators, its very poor production record, its failure to reduce CO2 and its dependence on subsidies wind generation cannot be described as sustainable within the adopted Brundtland definition.

Wind generation is no more sustainable than the EU's Common Fisheries Policy with its discards of perfectly good dead fish because they are outside a quota. With generation, perfectly good, live electricity is discarded in favour of a "politically correct" version. Both wastages have been going on for years but have remained invisible to the public but now a campaign has been launched against fish discards and the British public has responded in no uncertain terms. At the time of writing Mr Hugh Fearnley-Whittingstall has raised 542,292 signatures against discards in a matter of days. The British public would respond in the same way if it knew what an unsustainable, wasteful, expensive, unjustifiable policy wind generation is.

S C Brown 16 Jan 11