

Senate Select Committee on Wind Turbines

Response to Terms of Reference

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*The application of regulatory governance and economic impact of wind turbines, with particular reference to:*

- a. *the effect on household power prices, particularly households which receive no benefit from rooftop solar panels, and the merits of consumer subsidies for operators;*

South Australia has the highest electricity prices in Australia, and among the highest in the world. The state is struggling to attract and retain investment because it has become a very expensive place to do business in; part of the problem is high electricity prices. Domestic consumers in the state have been suffering under punishing prices levied by profiteering power companies for more than five years and publicly available records show that wholesale power prices in South Australia spike when there is no wind as a result of profiteering at times of supply shortfall.

South Australia is a microcosm of what the entire country could become if more wind power is connected to the national grid elsewhere in the country. At present, the eastern states do not have a high proportion of wind generated electricity in their mix, so the fluctuations in supply due to the vagaries of wind do not overly influence the wholesale power price. However, South Australia produces an amount of electricity equal to around 30% of its power consumption (but generally not at times of peak demand) from wind power. When there is no wind, the shortfall in capacity is covered by peaking generators that can “name their price” for electricity. In some cases, these peaking generators are owned by the same companies that own wind power stations – so a calm day is actually a good thing for those companies because it presents an opportunity for large profits. We have seen wholesale power prices bid to the maximum allowed under the electricity market rules when a high pressure system sits over the continent and the wind output falls to less than 5% of its rated capacity.

- b. *how effective the Clean Energy Regulator is in performing its legislative responsibilities and whether there is a need to broaden those responsibilities;*

Give the Clean Energy Regulator something to work with: amend the Clean Energy Act so that renewable energy providers have the same reliability of supply obligations as base load generators. This would encourage innovation and foster base load zero or low carbon electricity, instead of the present mess that guarantees a market to any form of renewable power, irrespective of how unreliable it is.

- c. *the role and capacity of the National Health and Medical Research Council in providing guidance to state and territory authorities;*

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- d. the implementation of planning processes in relation to wind farms, including the level of information available to prospective wind farm hosts;*

Planning processes are the remit of state governments. The disconnect between whole of power network systems engineering and convenient planning arrangements in various parts of the country has caused wind power stations to be constructed in almost arbitrary locations, with no thought for economy of power transfer or locations of the largest electrical loads. We have seen expansion of grid interconnect capacity and new grid connection infrastructure around the country, but especially in South Australia and Victoria, the existence of which is dictated more by state planning rules that favour wind power in some areas, than sound engineering.

- e. the adequacy of monitoring and compliance governance of wind farms;*

Monitoring of environmental impact, including noise, seems to be the responsibility of state environmental protection agencies. There are examples of wind power station operators whose equipment exceeded noise limits, at great detriment to residents in the vicinity, yet no responsibility was taken for follow up by the operator or the EPA. In one case (Waterloo, South Australia) a complainant sought their own noise monitoring and took the wind power station operator to court, where the finding was in favour of the complainant. This is an unacceptable situation – a member of the public should not have to engage their own consultants and fight a court battle in order to have a noisy wind turbine shut down or repaired. Existing monitoring is inadequate and enforcement of regulations, including planning regulations, is almost non-existent. The renewable energy certificates granted to wind power station operators should be tied to planning and environmental compliance.

- f. the application and integrity of national wind farm guidelines;*

- g. the effect that wind towers have on fauna and aerial operations around turbines, including firefighting and crop management;*

I am a resident of the Adelaide Hills, where we recently endured a bushfire that burnt over 12000 Ha around the township of Kersbrook. I observed, many times, the awe-inspiring bravery and tenacity of firefighting aviators who placed their machines at tree top level to deliver water or fire retardant to fires and homes with pin-point accuracy. They flew through smoke and in tight quarters, under the guidance of aerial observers and/or ground crews; witnesses saw the dangling water tubes from fire fighting helicopters drag through the treetops on departure from some drops, so low was their flying.

While some homes were lost to that blaze, losses would have been much higher without the support of aerial fire fighters.

Wind power has become a contentious political issue and fire fighting agencies (perhaps beholden to pro-wind state governments) seem reluctant to talk about the impact of large scale wind turbines on firefighting activities.

However, after witnessing the recent demonstration of aerial firefighting in the Adelaide Hills, there is no doubt in my mind that large wind turbines (up to 165 m high or more) would

seriously compromise and probably prevent aerial firefighting in the vicinity. Wind power stations create no-flying zones around them of varying size depending on topography and wind conditions; merely turning them off does nothing to alleviate the greatest danger, collision, during a bushfire.

Firefighting aircraft cannot operate too close to structures that create a risk of collision. Wind turbines, the height of which far exceed the altitude of aerial firefighting operations, together with the additional overhead power distribution wires that almost invariably accompany them, restrict aerial firefighting. There is no escaping that fact.

- h. the energy and emission input and output equations from whole-of-life operation of wind turbines; and*
- i. any related matter.*

The only winners from wind power are the wind power industry itself and the construction industry. While South Australia's Premier Weatherill proudly states an aim of achieving 50% of the state's consumption from renewable power, he fails to mention that South Australia accounts for something like 5% of the national electricity demand, and that demand has been falling in recent years, not rising.

The environmental benefit of the plethora of wind power stations installed, approved and proposed for South Australia is highly questionable. To date, no demonstrable reduction in the coal consumed nationally in the course of producing electricity has been attributed to wind power. This is a technology that does not deserve the captive market ensured by the current version of the Clean Energy Act and it does not deserve the red carpet of planning regulations that the South Australian state government has rolled out for it.

The economic impact of widespread wind power on Australia can only be deleterious: even Denmark, one of the homes of the wind turbine manufacturing industry, recognises this, and a detailed economic report (CEPOS 2009 "Wind Energy – The Case of Denmark") states that, even allowing for the benefits that flowed directly into the wind power sector, overall the Danish economy was worse off than it would have been without wind power. Wind power stations in Australia are installations that make extensive use of imported hardware, so the economics of our situation do not even have an offset due to a domestic wind power design and manufacturing industry. The result can only be worse than that experienced by the Danes.

This submission may be placed on the public record and I am willing to speak to the committee if required.

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