Submission to the Senate Select Committee on Wind Turbines

Select Committee on Wind Turbines
PO Box 6100
Parliament House
Canberra ACT 2600

Phone: +61 2 6277 3515
Fax: +61 2 6277 5829
windturbines.sen@aph.gov.au

To the Secretary

The following submission is made to the Committee with particular reference to points "d" and "i" of the Terms of Reference.

We own and operate approximately 2000 hectares of pristine grazing land in the Southern Tablelands of NSW. We are substantially affected by a number of windfarms in our area.
.

1. Summary

Wind Farms have large costs to adjacent landowners who suffer significant financial, emotional and aesthetic detriments. There is little or effectively no compensation for these costs. Wind farm hosts receive direct benefits which leads to community tension.

2. External Costs of Windfarms- Construction

During construction windfarms generate significant heavy vehicle traffic on rural roads. The base of each wind turbine is a large concrete block which is poured in Situ and requires approximately 40 cubic metres of concrete as well as steel, formwork and so on. This involves at least 6 to 8 truck loads of concrete and in total approximately 10 truck loads per turbine. In addition the towers and the blades of the turbines are all shipped in by truck. There are additional truck movements associated with the transport of cranes, electrical substations, cabling and control equipment. A 70 turbine farm such as Grabben Gullen implies at least 1000 truck loads of concrete and equipment to be shipped in to the site.

As result rural roads are usually severely damaged. Even if the wind farm operator provides some compensation to the local Council for repair to the roads I am not sure if this investment and the associated carbon footprint is included in the calculation of the so called net carbon benefit of wind turbines.

The windfarms need to be connected to the grid. This requires the construction of potentially long, large power lines which further damage and upset the rural

communities through which they pass. Again the visual impact and the effect on property values is not limited to the owners of land over which the lines pass. It can sometimes by more of a problem for neighbours directly in front of the power line. These lines also generate various magnetic fields which have largely unknown impacts on residents.

3. External Costs of Windfarms- Operations

During operation wind farms generate significant impacts on neighbours. Many of these are well accepted and some are disputed.

a. Health
   There are claims on the health impacts of the turbines. It is not clear to me that these are major provided one is at least 2 kms from the turbines. If this distance is respected the health damage may be less definitive. This is not an area where I have any significant expertise. I do know that the noise is very clear and imposing as one gets closer to the turbines.

b. Visual
   The turbines are extremely visible in most circumstances. We purchased our land in 2001 and were very much interested in the possibility of a rural escape. We are now faced with over a hundred turbines imposed on us and visually extremely dominant of almost every part of our property. This has seriously limited the enjoyment of our land.

c. Opportunity Cost
   Land values are impacted by the existence of the turbines.

   Land values in our area have moved with other rural values but the existence of the turbines has severely limited the premium which we would have expected to see for land which is less than 3 hours from Sydney and just one hour from Canberra. In particular we have approximately 400 hectares which is unsuitable for grazing but which would make ideal tree change accommodation for people who wish to make this step. Unfortunately there seems to be a marked difference between the people who support windfarms and those who wish to live next to them.

4. External Costs of Windfarms- Decommissioning and Rehabilitation

A subject which seems to get very little attention is the specific legal and contractual obligations of operators and hosts of windfarms for the eventual dismantling of this infrastructure.

Like all infrastructure windfarms, will eventually be no longer required. This will occur because technology will advance and render them even less relatively cost efficient than today or because they simply wear out. In either case they will need to be removed. It is not clear that the towers, the nacelles, the blades, the substations, the cabling and the access roads can be removed. The financial arrangements covering this are not usually specified in public documents. Questions to the promoters do not suggest that there is a robust system of sinking funds held in third party escrow or trust accounts to pay for this work. Even if there is a significant financial arrangement such as a sinking fund in place there will still be the problem of the large blocks of concrete dotting the landscape like so many concrete bunkers after the war in Europe..

Given the relative inefficiency of windfarms this issue is likely to be relevant much sooner than is currently anticipated.

5. Recommendations

a. Construction

There should be a requirement that windfarm promoters and hosts provide clear and thorough information about the actual process of construction. Local Councils should have access to standard costs of rehabilitation of rural roads damaged by this activity. This will allow councils to have better negotiating power when discussing the establishment of new windfarms in their area.

This should also be part of the overall evaluation of windfarms in terms of the net contribution to carbon production.

b. Operations.

A regime should be implemented which provides for neighbours to be compensated for the opportunity cost of the loss of land values as and when the land is sold. This could be implemented by an independent authority which would determine values using comparable sales. The differential in value for all land sales within a 5 km radius of the turbines should be paid to owners. The promoters of the windfarm should be obliged to put aside capital to fund these costs.

c. Decommissioning

Windfarm promoters should be obliged to put aside capital in escrow for the decommissioning of the windfarm at the end of the lease period. The estimate of the amount of capital required should be updated regularly, say every 5 years to insure that the balance of the escrow account is sufficient to cover the costs incurred at the end of the life of the windfarm. This could be done by forcing windfarm owners to make depreciation a cash charge which goes into an escrow account. This will cover the normal life of the wind farm and will make it consistent with tax calculations.

In the event of rapid technological change we are still likely to be left with significant wasted resources which will be very hard to dismantle.