SPRING RANGE COMMUNITY LANDSCAPE GUARDIANS ASSOCIATION Inc

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Committee Secretary
Standing Committee on Industry and Resources
House of Representatives
PO Box 6021
Parliament House
CANBERRA ACT 2600

Inquiry into the development of the non-fossil fuel energy industry in Australia

Dear Secretary

I am writing on behalf of the Spring Range Community Landscape Guardians Association Inc (SRCLG) to make a submission in this inquiry.

Our particular concern involves the development of wind energy, which we have been involved with in our area. We have grave concerns about the way the wind industry is being developed across Australia, in particular where such developments are contrary to the wishes of local communities.

We trust that our submission will be useful for the Committee to take into consideration for this energy source and, where relevant, for other non-fossil fuel developments.

We encourage you to look at our website for more information about our Association: www.springrange.org.au.

Yours sincerely

Douglas Rutherford
Public Officer
For SRCLG

Submission to the House Standing Committee on Industry and Resources Inquiry into the development of the non-fossil fuel energy industry in Australia: Case study into selected renewable energy sectors

Introduction

Spring Range Community Landscape Guardians Association Inc (SRCLG) is an association formed of residents and individuals opposed to the installation of industrial wind turbines on Mt Spring and adjoining hills between Hall and Murrumbateman in the Canberra region. SRCLG encourages the development of renewable energy and energy conservation measures whilst safeguarding Australia's landscapes from unsustainable industrialisation.

SPCLG opposes the development of industrial wind turbines in locations which are not well suited to the local landscape or appropriate for the community. In our community 11 wind turbines were proposed to be located along the Mount Spring Range reaching a height of approximately 120 metres.

This proposed development was a great concern to us as we live in a rural-residential area. We calculated that there were approximately 38 dwellings within a 2km radius and 120 dwellings within a 5km radius of the turbines. In this proximity large numbers of residents would suffer ill effects of noise, shadow flicker, visual impact, significant property price losses, and fire risk. In addition we had concerns about the risk to the wedge-tailed eagles living around Mt Spring.

We consider this kind of industrial development to be inappropriate in our area. At present we understand that the development is not going ahead. The message we sent during our vocal opposition to the project appears to have been received by the developers. That is, the community must be consulted and be on side for an industrial wind turbine development to proceed. Without proper regulations and guidelines for developing this industry, these issues will continue to arise across the country.

In this submission we outline some key principles that we believe should be considered if wind energy is to be considered to be a significant part of the framework of the non-fossil fuel energy industry in Australia. We draw from our experience with wind energy and are not qualified to speak on the other industries. However, some of these principles can be applied to other forms of non-fossil fuel energy development that have an impact on residents sharing the landscape.

1. Balanced input when developing 'best practice guidelines'

The industrial wind turbine industry provides dominant input to government policy on wind energy. Wind turbine development companies have every incentive to recommend the most profitable route when devising standards, to ignore or minimise unfavourable scientific results, and to downplay concerns of affected residents.

SRCLG considers that there is a need for 'best practice guidelines' for wind energy developments to reflect a consensus of all stakeholders. The viewpoint of special interest industry organisations, such as the Australian Wind Energy Association (AusWEA) whose members have much to gain from wider deployment of wind energy, needs to be balanced by the community hosting wind turbines. As a minimum AusWEA input should be balanced by equal representation from interested community groups.

International best practice should be drawn from in this process. Restrictions on the development should include proximity to existing landholders. Without such standards the true cost to the community cannot effectively be measured.

Consideration should be given to federal best practice guidelines that can be consistently applied across the country. Consideration could be given to developing guidelines for each non-fossil fuel energy source to minimise the effect of their development on the landscape. Such guidelines would provide certainty when decisions are elevated for a federal decision. Communities should have a chance to input into the development of such guidelines.

2. Local representatives should be part of the decision process.

Where a wind energy development is approved, those granting the approval need to be answerable at the ballot box to the community affected.

The approval process attenuates electoral responsibility by removing the decision from local hands and placing it in the hands of the Minister for the Environment (federal) or a State Minister for Planning (in NSW) whose electorate is distant from the site of the proposal. Unfortunately the local federal member, the local State or Territory member, and the local council do not have responsibility in this decision-making process. They can only lobby for or against the proposal.

3. Noise standards - science.

Turbine noise is at the heart of most residents' concerns.

Developers have relied on outmoded computer models when predicting noise. In general these models have disregarded meteorological effects such as temperature inversion, ignored noise modulation effects cause by blade rotation, and incorporated wind velocity profiles which have been shown to be in error. See, for example, F Vandenburg, "The sound of high winds: the effect of atmospheric stability on wind turbine sound and microphone noise", available on the Internet at http://irs.ub.rug.nl/ppn/294294104

The result has been noise estimates which are up to 15 decibels too low and wind velocity estimates which have been in error by more than 100%. Better science exists and its use should be mandatory in development proposals.

4. Noise standards - health

Current World Health Organisation standards specify that detrimental noise pollution health effects (disturbed sleep etc) occur where noise levels exceed 30 decibels over an 8 hour period per day. Current wind turbine installation standards permit noise levels at 35 Db and more.

Noise pollution is an integral part of our environment and a legitimate concern of the Department of Environment and Heritage. Standards need to be brought in line with WHO recommendations. The WHO has made clear recommendations about noise standards, for example, see 'Occupational and community noise' available on the Internet at http://www.who.int/mediacentre/factsheets/fs258/en/

5. Scrutiny of standards

Standards for wind turbine developments are often adapted from drafts supplied by the wind industry with too little independent scrutiny. For example shadow flicker is deemed to be unacceptable where a dwelling is subjected to 30 hours of flicker per year. The standard emanates from a single court ruling under German law. A quick astronomical analysis will show that flicker exposure exceeding the "standard" is only possible where the dwelling is within 300 metres of a turbine. Yet residents living more than a kilometre from turbines have reported annoyance from flicker.

In this case the "standard" contains an underlying assumption that a person needs to be actually living in the shadow before it is a problem. A better standard might be developed by regarding a static landscape as the baseline and then assessing *all* the implications of flicker.

Widespread use of wind energy means large rotating shadows on landscapes and dwellings will become a part of our environment. It is a legitimate concern for the Department of Environment and Heritage and standards are needed.

Bodies developing standards need to be independent of wind industry influence.

6. Time to respond to proposals.

Resident groups often get little more than a month to assess an industrial wind turbine proposal which has taken years to develop. The degree of complexity embodied in proposals is not commensurate with the time allowed to residents to adequately assess and respond to them. Three to six months for community assessment should be a minimum, with the longer time appropriate where developers have not involved residents at an early stage.

7. Expertise to respond to proposals

Resident groups have little expertise to adequately understand the underlying science behind environmental impact statements associated with wind energy proposals. In the Netherlands residents can turn to "Science shops" which assist citizens in dealing with such questions. Such a resource is needed to assist Australian communities dealing with industrial wind turbine development proposals.

8. Landscape changes

The visual impact of wind turbines on the rural landscape is an issue which affects all Australians, some positively, some negatively. For better or worse wide scale introduction of wind turbines and other forms of non-fossil fuels will fundamentally change the Australian landscape in the vicinity of the development. Protecting the landscape should be a relevant factor to be taken into account, particularly where significant numbers of residents will be impacted.

Tranquil Australian landscapes have been the subject of art for centuries. The theme is often predominant in many community art competitions. Superposition of wind turbines on a ridgeline affects a locality for many kilometres. Visual impact assessments to date have used architectural criteria and largely ignored the effect of blade movement.

Better assessment of the distracting effect of rotating blades on an otherwise tranquil vista is required. The aim should be, where possible, to balance preserving the restfulness of our scenery with the benefits arising from a non-fossil fuel industrial development. This can only occur if design requirements mandate a minimal landscape impact approach.

9. Scrutiny of cost benefit

The benefits of wind power are used to justify the cost of industrial wind turbine developments to communities. These benefits need greater independent scrutiny.

The benefits of industrial wind turbine developments are usually expressed in terms of megawatts of clean energy generated, or number of houses powered. Such statements ignore the real purpose of installing industrial wind turbines - displacement of greenhouse gas emissions. Although at this stage the non-fossil fuel energy industry is still developing, thought should be given to the best way to harness our natural resources in the most appropriate and efficient way.

Our concern on wind energy is to ensure comprehensive planning is undertaken on power consumption requirements as against other non-fossil fuel developments. If an industrial wind turbine development introduces a variable component of load to the electricity grid, if that variable component is compensated by other non-fossil fuel sources of power such as hydro-electricity or solar, the wind energy may simply displace other non-fossil fuel power.

In short, independent and critical scrutiny of non-fossil fuel industries, in particular wind energy, needs to be part of the assessment process for development approvals. The benefits of such developments need to be stated in terms of greenhouse emissions abated and synchronicity with other non-fossil fuel sources of energy, not simply electricity generated. The analysis needs to account for the electrical generation process in its entirety (including grid stability issues) and not just the source non-fossil fuel energy plant when benefits are assessed.

10. Openness of information

The acquisition of leases for land on which industrial wind turbines are sited is conducted in secret. Issues of liability affecting the entire community are buried in confidential contracts.

Such contracts need to be open to community scrutiny. A community that accepts the costs of wind energy should also have access to the electrical generation records that are used to justify that cost. The track record of wind operations needs to be available for all to see. Although the commercial interests of industrial wind turbine operators may lie in keeping the records confidential the greater public interest is best served by making them public.

Where a developer installs a wind-monitoring tower as a part of a industrial wind turbine proposal then the data gathered would be used to support a decision that affects the entire community and that also should be open to public scrutiny. Although the developer incurs the cost of gathering the data, the greater public interest in openness predominates.

11. Compensation for impacts and land devaluation

Currently only the landholder hosting wind turbines is compensated for turbine proximity but the effects spill well beyond the host property. Land devaluation is particularly difficult to assess and might only be reckoned after properties change hands.

SRCLG considers that a fair and equitable way of assessing and compensating non-host property holders needs to be devised. Effects on property values cannot be shown until turbines are installed and statistics accumulated over time. It may be some years before the effects on property values in any particular case are known.

One option to address this issue could involve imposing requirements on industrial wind developments requiring the developers to compensate affected non-host residents and landholders. Such a scheme could be put in place within a radius of two to five kilometres from the development. This area causes the most pertinent effects to residents.

One way to approach a scheme could be to use a proportion of profits made from the wind development. This equation could be dependent on the number of residents and landholders within that vicinity. The greater the number of residents and landholders within the radius, the higher the proportion of the profits from the turbine development would need to be given to the affected residents and landholders.

Such a scheme could discourage industrial wind turbine developments in areas with significant numbers of residents and landholders, whilst ensuring that host and non-host properties are financially compensated, to some extent, for diminished property value and loss of enjoyment.

12. Completeness of proposals

Wind turbine development proposals need to be complete in their entirety before approval is granted. Instances exist in NSW where approval has been granted subject to later approval of the route of transmission lines. With transmission line routes omitted, residents cannot judge the full extent of how the development will affect them.

By separating transmission line approval from the rest of the project the full impact of a proposal is obscured, the decision is made piecemeal and the community is subject to creeping encroachment on their environment.

This is an area where federal requirements could be put in place to ensure that non-fossil fuel development applications are considered consistently across Australian jurisdictions.

13. Clear and public lines of accountability

It is vital that liability associated with industrial wind turbines remain the responsibility of the developer and operator and not be passed on to the landholder hosting the installation. There is great uncertainty over liability issues concerning industrial wind developments, leaving questions such as:

- Who carries liability for fire caused by the turbine (specifically where fire escapes the host property)?
- Who is responsible for turbine removal?

- What about insurance premiums on non-host properties?
- Who is liable for land devaluation compensation?
- What health effects are attributable to turbine development or materials used in their installation?

Wind turbine approval conditions need to ensure adequate and continuous financial backing exists to discharge all potential liabilities which may arise over the life of a project. It would be unusual for a landholder to have the resources to cover the risks listed above and it is imperative these risks remain with the developer.

In recent NSW determinations, liability issues remain undisclosed in confidential contracts between turbine developers and landholders. We understand that the NSW Department of Planning has sought and accepted assurances from developers that liability issues are covered. This practice does not allow the public to judge whether their interests are adequately represented. It also implicates the Department in future cases where developer assurances are found to be invalid. The issue can be simply resolved by opening all liability clauses to public scrutiny.

14. Truth in development submissions and teeth for legislation

Regulation must produce a climate that encourages truth in industrial wind turbine proposals and integrity in their operation. It is essential to avoid an approach which assigns resident complaints to a system which "manages" the complaint after turbines are installed rather than addressing the underlying cause during project planning.

Legislation to regulate wind energy operations must be backed with adequate sanctions or penalties to secure the attention of developers to community factors and command developer respect in a competitive commercial environment.

Conclusion

In this submission we have expressed our concerns about the current approval system and the ways in which industrial wind developers are able to manipulate the system to favour their developments.

Non-fossil fuel developments need to be based on sound science, be cost effective, and appropriate for the location of the development. Consideration should be given to how these fuel sources will complement each other, not just how they contribute to the total output of the energy grid. Questions of liability and compensation need to be effectively addressed where these industries have the potential to cause loss to others.

Although our submission focuses on our experience with the NSW development approval process, we consider it is time for the Federal Government to regulate the industry consistently, fairly, and inclusively with local communities across the country. This approach should be consistent with other non-fossil fuel industries that are also developing across the country, some of which may also have significant impacts on communities.