

2 November 2012

Committee Secretary  
Senate Standing Committees on Environment and Communications  
PO Box 6100  
Parliament House  
Canberra ACT 2600

By email: [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Dear Sir/Madam

## **Submission to the Inquiry into the Renewable Energy (Electricity) Amendment (Excessive Noise from Wind Farms) Bill 2012**

Vestas Australian Wind Technology Pty Ltd (**Vestas**) is the local subsidiary of Vestas Wind Systems A/S, the world's largest manufacturer of wind turbines. We welcome the opportunity to make a submission on the *Renewable Energy (Electricity) Amendment (Excessive Noise from Wind Farms) Bill 2012* (the **ENWF Bill**).

Vestas is the world's leading supplier of wind power solutions, having installed more than 47,000 wind turbines in over 70 countries across the globe. Worldwide, Vestas employs almost 20,000 people in the design, manufacture, sales, installation, operation and maintenance of wind turbines. While the home country of Vestas is Denmark, we have significant operations all across the world and we are experienced in comparing policies and regulations in all our markets.

In Australia we have been responsible for the supply of more than half of the wind energy capacity to date, including the 420 MW Macarthur Wind Farm in south-west Victoria, which will become the largest wind farm in the southern hemisphere once it is commissioned in early 2013.

Vestas is a member of the Clean Energy Council (**CEC**), and in addition to our own submission we would also refer Senators to the CEC's submission to this inquiry.

### **Wind energy in Australia**

Over the past decade in Australia, the wind energy industry has grown substantially in almost all states and territories, to the point where well over 2000 megawatts of installed wind capacity is now operating.

Many more wind energy projects are currently awaiting investment decisions or are in the respective planning systems operating in the various states around Australia.

The major reason for the industry's growth has been the 20% Renewable Energy Target (**RET**), which is operates in accordance with the provisions of the *Renewable Energy (Electricity) Act 2000 (the Act)*.

The RET has driven most of the investments in wind energy in Australia since 2001. The decision in 2009 by the Australian Parliament to increase the level of the RET to at least 20% by 2020 will continue that growth.

Wind power is the most cost-effective form of renewable energy, and is forecast to retain this status for many years to come.<sup>1</sup>

## Summary

Vestas does not support the ENWF Bill for a number of reasons.

First and foremost, the ENWF Bill is inconsistent with the objects of the Act. On this basis alone it should be rejected.

The objects of the Act are as follows:

- (a) to encourage the additional generation of electricity from renewable sources;*
- and*
- (b) to reduce emissions of greenhouse gases in the electricity sector; and*
- (c) to ensure that renewable energy sources are ecologically sustainable.*

Unfortunately, the provisions of the ENWF Bill do not contribute to those objectives. In most respects the ENWF Bill detracts from them.

The ENWF Bill is inconsistent with the objects of the Act because it is designed to make it more difficult and expensive to build and operate a wind farm in Australia.

The ENWF Bill seeks to overturn the rights of state governments to design and administer their own planning processes and make decisions on wind farms, and instead seeks to interfere by giving new powers to an existing Commonwealth regulator that is neither qualified nor has ever expressed any interest in exercising such powers in relation to wind farms.

The ENWF Bill adds complexity, additional costs, extra delays and if implemented would be highly likely to add more costs to building wind farms in Australia, which in turn would flow through and cause increases in electricity prices for Australian families and businesses.

---

<sup>1</sup> See, for example, p.206 of *Draft Energy White Paper 2011: Strengthening the foundations for Australia's energy future* (Commonwealth Government, 2011)

The ENWF Bill seeks to apply an arbitrary and unscientific noise limit to wind farms, when existing guidelines at state government level are adequate for ensuring the amenity of the community.

The ENWF Bill would set an unhealthy precedent for all forms of infrastructure which will have significant impacts for ongoing investment in Australia. It is yet another attempt to increase the amount of regulations faced by all kinds of businesses without any need or any tangible benefit.

Finally, the ENWF Bill would increase the costs of the RET for consumers. By making it more difficult for wind farms to be built in Australia, this means that higher cost renewable energy generation would need to be built in order to meet the target. If this was not done, the shortfall charge would need to be paid by liable parties under the RET, and this in turn would also drive increases in electricity prices for Australian families and businesses.

### **No need for new wind farm noise rules**

Despite what anti-wind activist groups might suggest, the fact is that wind farms in Australia already face among the toughest guidelines in the world in relation to their permissible noise levels.

In a technical paper written during 2010, independent noise consultants Sonus found that *“The Standards and Guidelines used in Australia and New Zealand are stringent in comparison to other International approaches”*.

### **Poor drafting and unintended consequences**

The key provision in the ENWF Bill is section 4 which demands that wind farms do not exceed background noise levels near residences, workplaces and in a particularly vague piece of drafting, “any premises where persons habitually congregate” by more than 10 dB(A).

It is important to note that the Act has never sought to address the issue of noise from wind farms, let alone from any other kind of renewable energy generation technology.

The ENWF Bill also neglects to describe or define the methodology of such a measurement. The selection of a measurement distance of 30 metres is totally arbitrary and unscientific.

Existing noise guidelines for wind farms typically set a baseline permissible noise level (measured at a dwelling) of around 35 or 40 dB(A) as suited by the region the wind farm is located in. For cases where the background noise level is higher than this limit, the wind farm may emit noise up to the background level + 5 dB(A). This allows the wind farm to operate when the background noise is extremely low.

It is unclear whether this was intended by those who drafted the ENWF Bill, but the provisions of section 4 will actually allow wind farms to be louder than they would be permitted to be under existing noise guidelines at times of high background noise. Such a rule will also restrict wind farms to unreasonable noise levels when background noise is very low.

The ENWF Bill does not describe the methodology or frequency for noise measurement, or the length of time for which the wind farm must exceed the noise limit for it to be considered in breach of the requirements. Worse still, the ENWF Bill does not describe for how long the wind farm must be compliant before accreditation is reinstated.

### **Role of state governments in planning policy and regulation**

Subject to limited exceptions such as environmental assessments in line with international treaties, planning policy and decision-making for infrastructure projects resides with state governments rather than the Australian Government.

Each state has its own planning policy and regulations that are best suited to the unique requirements of their community, industry, and land use configurations. It is rare for the Australian Government to play any role in such matters.

It is also unlikely that the two Senators who have proposed the ENWF Bill have bothered to consult with state governments on the issue of whether they are happy to cede any of this power to the Regulator of the RET.

In relation to wind farms, planning rules at state level simultaneously consider various technical and social issues. Noise guidelines sit among these other guidelines as a part of a complete planning regime.

State governments should be left to design their noise requirements as a part of their broader planning policies. This is already achieved with regard to wind farm noise by state-based noise guidelines.

### **New regulations to compel publication of detailed and irrelevant data**

Section 5 of the ENWF Bill seeks to impose a requirement for wind farm owners to publish information prescribed by regulations relating to:

- a) noise attributable to the wind farm
- b) wind speed and direction at the wind farm
- c) weather conditions at the wind farm; and
- d) “power output” of each turbine at the wind farm.

Under this power, the regulations may also specify requirements for how the information is to be published, for example in “real time” i.e. as the relevant information is collected.

It is unclear what purpose this requirement is supposed to serve, other than to impose a new and unnecessary administrative burden on the business community.

It also seems unrelated to the desired outcome of the ENWF Bill, which itself is unclear but a generous reading may presume it is aimed at protecting the community from “excessive noise”.

However, the data from individual wind turbines in a wind farm is irrelevant to this outcome and should not be included in any attempt to regulate noise.

Section 5, like most of the ENWF Bill, is also poorly drafted. For example, why should wind farm owners be compelled to provide the public with information on “weather conditions”?

The “power output” of individual wind turbines is commercially sensitive information and accordingly tends to be closely guarded by the project owner as well as the wind turbine manufacturer. Other power stations are not required to publish commercially sensitive operational data and applying this precedent across all energy generation technologies would be complex and expensive.

The generation output of wind farms (rather than individual wind turbines) is already publicly available from the Australian Energy Market Operator’s website and so does not need a new form of regulation to compel this.

Similarly, information on wind speeds and weather conditions is publicly available from the Bureau of Meteorology.

In light of this, section 5 looks to be another part of the ENWF Bill that does not advance the objects of the Act and instead looks to be aimed at increasing the administrative burden and costs for wind farm owners.

### **Sovereign risk from retrospective application of the ENWF Bill**

One of the hallmarks of low quality legislation and regulation is any attempt to give it retrospective application, which often has a negative impact on the liberty of people or the viability of investments.

Unsurprisingly, the ENWF Bill does exactly this by seeking to have retrospective application to existing wind farms which were designed and planned in accordance with the relevant noise guidelines set by state governments at the time.

This particular aspect of the ENWF Bill is totally unacceptable. It is an example of the type of regulation that any modern democracy should avoid, and it is also an example of the kind of sovereign risk that would threaten Australia’s reputation as a safe and predictable destination for investment.

## Conclusion

Wind power will play a crucial role in Australia meeting its renewable energy target and reducing carbon emissions from the electricity sector. Effective policies are required to support the development of all forms of renewable energy and Australia stands to gain significant economic benefits from wind.

The ENWF Bill would undermine the operation of the RET scheme and would impose additional costs and risks on investors, which in turn would be paid for by electricity users. It would challenge state planning policies and it would add uncertainty for all kinds of stakeholders including the broader community.

Vestas would be pleased to meet with Inquiry members or staff, or indeed appear before any public hearing to discuss this submission and answer any other questions. Contact details are on the covering email for this submission.

Yours sincerely,

[signed]

**Ken McAlpine**  
**Director, Policy and Government Relations**  
**VESTAS - AUSTRALIAN WIND TECHNOLOGY PTY LTD**