



COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY DEBATES



THE SENATE

BILLS

**Renewable Energy (Electricity) Amendment
(Excessive Noise from Wind Farms) Bill 2012**

Second Reading

SPEECH

Thursday, 28 February 2013

BY AUTHORITY OF THE SENATE

SPEECH

<p>Date Thursday, 28 February 2013</p> <p>Page 1255</p> <p>Questioner</p> <p>Speaker Xenophon, Sen Nick</p>	<p>Source Senate</p> <p>Proof No</p> <p>Responder</p> <p>Question No.</p>
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Senator XENOPHON (South Australia) (10:32): *The incorporated speech read as follows—*

This Bill seeks to amend the *Renewable Energy (Electricity) Act* to give powers to the Clean Energy Regulator that ensure accredited wind farms do not create excessive noise.

Under the Bill, the definition of excessive noise would be background noise plus 10 dBA.

Should a wind farm be found to be contravening the excessive noise provisions of this Bill, it would be prevented from creating and on-selling large-scale generation certificates.

The importance of having a nationally applicable definition of excessive noise has been explained by Dr Bob Thorne, a well-regarded independent acoustician. Dr Thorne said:

" The thing that none of us has is a consistency across all states. That leads to my mind to the most important function of this bill: it gives a consistent approach to excessive noise throughout all of Australia... This is where I would see the benefit of this particular bill in that it provides a certainty of approach to all states, it provides a certainty of approach to the industry and it gives a clear definition to all the different states ' legislation. "

The benefits of a definition of excessive noise that applies to all states and territories will provide clarity and consistency of application throughout Australia.

Those who live close to wind farms can therefore be assured the wind farms are required to operate in accordance with established noise guidelines so that any disturbance caused by wind farm noise is minimised.

Ultimately, this is about empowering individuals and communities who have felt disempowered as a result of these large industrial structures and the excessive noise they create.

The suggested limit of background plus 10 dBA is in fact generous compared with current Australian noise guidelines.

The South Australian Environmental Protection Authority's noise guidelines impose a limit of background plus 5 dBA in cases not involving wind farms.

So we must consider is that, in some areas, noise from wind farms is limited at 40dBA, or background plus 5 dBA, *whichever is greater*. This figure completely fails to take into account the fact that background noise — the sounds we hear all the time — is going to be far lower in rural and regional areas than in metropolitan areas, and instead allows the highest possible level of noise to occur.

The comparative 'noise nuisance' of 40dBA will naturally be much higher in the areas where wind farms are built.

During the Environment and Communications committee inquiry into this bill, leading acoustician Dr Stephen Cooper gave the following evidence:

" The standards say that if a noise is above the background it is likely to be annoying and that exceedances of up to five are of marginal significance. So the concept has been that for general noise you can have noise that is audible but once you get to about five, above the background, it starts to present problems to the community or those people being affected by the noise. So if the background is higher in a city environment, then you can have a higher noise level. If you are near a large industrial estate or near a freeway that generates noise, then you are in a noisier environment and you can have a higher level of noise emission from the industrial sources.

This graph clearly shows that, as you move to quieter environments, then the criteria that apply should also drop down. "

Excessive noise in general has been shown to cause sleep disturbance and disruption, as discussed in the World Health Organisation's 'Guidelines for Community Noise'.

There is so much information flying around in this debate that it is important that independent research into the potential health effects of excessive noise from wind farms is undertaken.

I note that the Coalition has circulated amendments which, if enacted, would require the NHMRC to cause research to be conducted into the possible effects of noise from wind farms on human health.

I thank the Coalition members who have spent a significant amount of time working with Senator Madigan and me to construct some workable amendments. While I do have some concerns about their other amendments, I strongly support the need for more research.

Unfortunately the wind farm debate has been tarnished to some extent by certain individuals who choose to attack those who complain that their health has been adversely affected.

Allowing for independent research is something we should all support, no matter which side of the debate you are coming from.

A unanimous report from the Community Affairs References Committee in 2011 into the social and economic impact of wind farms in regional areas recommended that independent research be undertaken into the reported health effects.

And at this stage it's appropriate to pay tribute to the late Judith Adams and her tireless work in this area.

The committee also recommended that further consideration be given to the separation distance between wind farms and residences, and that further research be done on the noise effects of wind farms, including infrasound.

I want to take this opportunity to discuss some of the arguments that have been raised against this bill.

Some, including Senator Milne, have claimed this bill is 'anti-wind farm' and part of a campaign against renewable energy.

With respect, this bill is not anti anything except excessive noise.

We already have laws in place to control noise levels around airports, major roads, and other significant infrastructure.

How is this any different?

Yes, there are state and territory laws in place that put noise limits on wind farms. But these vary from region to region, and can't be enforced anyway because there is no real-time noise data available.

Senator Milne also spoke at length against the reported health effects of wind farms. She went so far as to claim that 'where people have a financial interest in the wind farm... these people do not get sick'.

Firstly, I'd like to mention the case of David and Alida Mortimer in the South East of South Australia. They are turbine hosts — they get a financial benefit from having a turbine on their property — but they have been very vocal about the negative impact this has had on their lives.

This bill is not about the purported health effects of wind farms. This bill is about excessive noise — something that is widely acknowledged can have an impact on sleep and quality of life.

But where is the harm in commissioning research into possible health effects? If there is no link, then what is there to fear?

Senator Milne also said she believed Senator Madigan and I were 'part of a campaign against wind energy and renewables in Australia'.

I repudiate that in the strongest terms.

Professor Simon Chapman, whose work on the plain packaging legislation and tobacco advertising I greatly admire, also accused me of being an "anti-wind farm zealot", adding that my interest in this cause brought about a "sad decline of a once admirable independent."

At least he thought I was admirable *once*.

Professor Chapman is of course welcome to express his opinion, and I am pleased to be able to express mine.

I am not anti-wind farm.

In fact, I am pro-renewable energy. It is on the public record that I believe it is important that we have a mandated renewable energy target of 20 per cent by 2020.

I also believe that we have a very long way to go to achieve that.

My issue is not with that target but with the way the target is achieved through an over-reliance on one specific form of technology — wind turbines.

Wind farms do not provide a reliable baseload power, which means dirty coal-fired power stations need to be kept on standby.

We need to be investing in baseload reliable renewables, and I worry that our reliance on wind energy is in fact stifling investment in other areas, such as geothermal, solar thermal and tidal power.

So I am not anti-wind power.

But I do believe that wind power is only one part of the solution, and we shouldn't focus on it to the exclusion of everything else.

In September last year, *The Australian*'s environment editor Graham Lloyd wrote about a two year analysis of Victorian wind farms, undertaken by mechanical engineer Hamish Cumming.

Lloyd wrote:

" [Cumming 's] analysis shows that despite receiving hundreds of millions of dollars from green energy schemes driven by the renewable energy target, Victoria 's wind farm developments have saved virtually zero carbon dioxide emissions in the state. "

He goes on to describe how, despite the feed of wind-generated power into the grid, fossil fuel generators do not reduce their rate of coal consumption.

In South Australia, Cumming estimated that the cost of greenhouse gas abatement was at \$1484 a tonne.

I believe climate change is real and must be addressed urgently. We must do everything we can to mitigate the damage it has and will cause to our environment and our economy.

Part of that challenge is reshaping our economy to move towards less carbon-intensive ways of operating across all sectors. It is a fine balance between using a carrot and a stick.

We are not striking that balance.

For example, the structure of the current carbon tax could act as a positive disincentive to investment in other forms of renewable energy.

So, while I of course commend this Bill, I believe we also need to look at our over-reliance on wind energy and the repercussions for investments in other innovative forms of renewable energy.

I note that the Government does have upcoming legislation to extend a tax rebate to geothermal exploration activities.

This is certainly a step in the right direction.

But geothermal projects still struggle to get access to funding, even when specific amounts have been set aside.

For example, in a response to an estimates question I placed on notice last year, the Department of Resources, Energy and Tourism stated that the Government had committed a total of \$899 million to renewable energy projects.

Of this, only \$302 million was for solar projects and \$205 million was for geothermal.

And, even worse, only \$104 million had actually been received by grant recipients.

This shows a serious neglect in funding alternative forms of energy.

We put all our eggs in one basket with coal-fired power, and we're now paying the price. Let's learn from that and not make the same mistake again.

I understand there is a lot of controversy about wind farms, and that these arguments make some people uncomfortable.

But ultimately, this is a question about excessive noise. It is fair and reasonable that there be a national standard for noise, and that wind farms publish live information to show their compliance with this standard.

In the end, communities must be empowered. They must have access to real-time information on the noise generated from these turbines, because right now they are fighting legal battles with one hand tied behind their back.

In the same way that aircraft noise near airports is publicly available, the same approach should be taken to wind farms.

Surely in the interests of transparency, the industry should not object to this information being made available to local communities.

As I said before, this is no different from noise restrictions in place elsewhere.

I indicate my support for this bill, and I hope this is only the beginning of the debate on these issues.