

Dear Senator Madigan,

Please accept my submission to the Senate Select Committee on Wind Turbines. I would be pleased to appear at a hearing if required.

As you are aware, I provided submissions to both the 2011 **Social and Economic Impact of Rural Wind Farms Inquiry** and the **Excessive Noise Inquiry** of 2012.

In 2011, I reported chronic sleep deprivation and debilitating adverse health impacts. In 2012, I raised these same serious concerns, informing Senators that the Waubra Wind Farm continued to cause us significant harm and nuisance while operating at excessive noise levels outside compliance with its planning permission.

This 2015 submission is again written in the hope that something will be done to inspire the urgent and necessary reform of the sector.

Current regulatory governance of wind turbines is built on an administrative foundation of inadequate wind farm guidelines, flawed planning processes, lack of monitoring and un-enforced compliance. These limitations must be resolved so that wind farm planning permits issued in the future will be able to adequately protect communities. No other rural family should be burdened to suffer the consequences of unregulated wind farm noise nuisance as we have.

Since the Waubra Wind Farm started operating it has been marred with controversy. There has been a concerning lack of information and limited technical resources available to the council. We encountered a culture of incompetence and/or indifference from the State Planning department.

I hope this Senate Select committee will identify that there is an urgent need to reform the serious, continuing, systemic regulatory failure of wind energy power stations in Victoria. I only hope that this committee will insist that any recommendations it makes in this regard are acted upon.

Yours faithfully,

Samantha Stepnell.

Background

Our Lobbs Road, Glenbrae brick veneer home is located to the far west of the Waubra Wind Farm where 128 1.5mw generators were constructed to our south, south east and north east. The WTGs sited closest to our home were the last to be constructed. They began operating around August 2009.



It was not until the last group of wind turbines closest to us started operating that I started to feel agitated, tired and unwell. Over the course of the next few months, my husband and three children experienced the same sleep deprivation and symptoms that I was feeling.

On 3 June 2010, I signed a statutory declaration ¹ in which I described a series of deleterious health effects that I had not experienced prior to the operation of the wind farm. My symptoms would disappear when removed from exposure to the turbines. Symptoms included severe headaches, intense ear pressure, chronic sleep disturbances, loss of balance, feelings of 'uneasiness' and eventually, depression. My affidavit was given to the former Health Minister and current Victorian Premier, Daniel Andrews. But nothing was done.

On 30 September 2010, my doctor wrote to Acciona ² to describe our symptoms, noting that our symptoms did not exist before the operation of the wind farm, 'significantly improved' when the turbines were off but "worsened again when the turbines came back on line."

"In the last six months the Stepnells have had increasing problems including increased feeling of pressure in their head and ears, a feeling of uneasiness and frequent waking at night. This has led to increased lethargy and inevitably a lowered mood.

¹ Statutory Declaration was signed on 3 June, 2010 and given to former Health Minister, Daniel Andrews. (attached)

² Letter from Dr [REDACTED] to Acciona (also attached)

"....The couple has not had a past history of these symptoms, nor has there been a past history of depression, stress or anxiety.

I also confirm that I have one other patient who lives at Waubra on a 10 acre farm who is distraught with exactly the same symptoms as the Stepnells. I believe from circumstantial evidence that there is a strong correlation between their symptoms and the operation of the wind turbines nearby."

Dr [REDACTED] hoped that Acciona would take these matters into consideration to try to 'come to an outcome that will resolve these symptoms.'

They didn't and still nothing was done.

In 2012, Ballarat Sleep Physician, Dr Wayne Spring told the Excessive Noise Inquiry:

As a Sleep Physician, working in Ballarat in Western Victoria, I have already been seeing patient from Waubra, Leonard's Hill, Glenthompson and Cape Bridgewater who have disturbed sleep which has coincided with the commencement of operation of nearby wind farms. I do not believe that we yet know the full extent of the consequences to these people of their exposure to wind farms or even the cause of the untoward effects which may not just be from "noise".

Nonetheless, assessment of noise is a start in the monitoring of what is going on.³

But despite what these doctors know to be true, the serious complaints that we made of excessive noise nuisance, sleep disturbances and adverse health impacts to our doctor, the wind farm operator, to Pyrenees Shire Council, to the EPA, to the Department of Planning and Community Development (DPCD) and to the Victorian Department of Health, nothing was done that was able to help us.

Without any regulator or agency prepared to support us or to protect our family's reasonable interests, we had no choice but to vacate the family home we loved so we could escape our symptoms and get some quality sleep. We moved into Ballarat on 4 November 2010. We continued, necessarily, working on our farm throughout the day, suffering symptoms there that would desist when we left. At this time we became aware that there was a distinct cause and effect relationship between the adverse health effects we experienced and our exposure to the operation of the Waubra wind farm's wind turbine generators. Carl and I agreed to tell our family's story at the Ballarat hearing of the Community Affairs Reference Committee inquiring into the Social and Economic Impact of Rural Wind Farms after we became aware that there were many others experiencing the same symptoms as we were.

Term of Reference (d): the implementation of planning processes in relation to wind farms, including the level of information available to prospective wind farm hosts.

³ Submission from Dr Wayne Spring to the 2012 Excessive Noise Inquiry (attached).

Carl's family has lived in and farmed the Waubra area for generations. Since the Wind farm was constructed, our small rural community has been split very divisively. We are subjected to public taunts like ***"only the people not getting paid are getting sick."*** Our symptoms weren't the result of being 'jealous' that we weren't getting any income from the Waubra Wind Farm's turbines. We were offered the opportunity to host turbines on our property, we said no. Thank God.

I wondered why stakeholders weren't speaking out about adverse impacts too but it seems that they were.... just not publicly.

I later heard that wind farm lease agreements prevented or even "gagged" hosts from making any adverse comment about the wind farm or the company. To breach conditions of contract would mean that their lease payments (which were supposed to provide adequate compensation for any nuisance) could be taken away. If hosting landholders spoke out against the wind farm they might be in breach of contract and get nothing. If they were to admit there was a potential nuisance they might be sued.

When Windpower came to Waubra to sign up hosts for the wind farm, we were among those that they assured that the wind farm's noise would be negligible. We were told that the turbines were modern and would only make as much noise as a fridge 500m away. We were told *"everyone else is getting turbines"* so we *"may as well too."* We were also told that we must keep any negotiations with the company totally confidential.

We didn't want to industrialize our farm with wind turbines so we declined Windpower's offer. We didn't begrudge anyone that did sign contracts. No hard feelings. But trusting the developer's assurances that there would be no noise nuisance meant that many other well-meaning people signed up to host turbines at Waubra Wind Farm. Unfortunately, I believe that many of those who signed up did so without understanding the severity of the actual nuisance that would be caused by noise and shadow flicker impacts.

In order to understand the level of information provided to hosts it is helpful to consider the terms of contracts in relation to noise, nuisance and indemnity.

The attached 'Meridian' wind farm contract⁴ was prepared in 2006; three years before Waubra Wind Farm began operating and four years before the Waubra Foundation was formed in recognition of our ignored complaints about excessive noise, vibration impacts, sleep disruption and adverse health effects.

*The Meridian contract relates to a wind farm in New Zealand built to comply with the New Zealand standard, NZS 6808:1998.

The terms of the Meridian contract conditioned in the Third Schedule that potential stake holders **could not:**

- 1.1 complain about, raise any objection, lodge any submission in opposition, lodge any appeal or legal proceedings or take any other action relating to the Encumbrancee's use**

⁴ Memorandum of Encumbrance- Contract between New Zealand Forestry Group Limited and Meridian Energy Limited.

(including future use) in respect of the Development and in particular any effects relating to the Encumbrancee's use (including future use) of the Development, including:

- (a) noise levels, odour, glare or vibration;
- (b) electromagnetic frequency or other emissions;
- (c) health effects;
- (d) electrical interference;
- (e) use of vehicles
- (f) site coverage and layout;
- (g) shadowing or blocking of sunlight; and
- (h) use, erection, alteration, extension, removal, reconstruction or demolition of buildings, structures or equipment.

Why would hosts expect to complain about noise levels, vibration and health effects if they had just been told that there was no evidence of adverse health effects associated with wind farms? If there are no harms or nuisances, why does the operator require hosts to not make any complaints?

Meridian, an energy company owned by the New Zealand Government (*which has been given \$50 million of public money by the Clean Energy Finance Corporation to "get out" of the Macarthur Wind Farm, build the Mt Mercer Wind Farm in Victoria and create retail arm, POWERSHOP*), knew in 2006 that nuisances, including noise, vibration and shadow flicker and complaints of health effects could and would occur as the direct consequence of the operation of an industrial wind facility. Even a facility that was to be constructed to comply with the New Zealand standard.

Pacific Hydro admitted that **'The wind industry and Pacific Hydro worked collaboratively with Sustainable Energy Authority Victoria when the Victorian Policy and Planning Guidelines (PPG) were first published in 2003.** This is the same time that the New Zealand standard (NZ6808:1998) was formally introduced as the wind farm noise guideline to be used in Victoria. The principle intention and objective of the New Zealand Standard was and remains, to protect sleep.

Pacific Hydro's submission to the Social and Economic Impacts of Rural Wind Farms reinforced the view that:

"achievement of compliance with the existing standard NZS6808:1998 provides protection against "sleep disturbance", "noise levels" and "health and amenity."

But shortly after the Victorian Planning guidelines were published in early 2003, Pacific Hydro (the Tenant) signed up hosts (Landlords) for its Portland Wind Energy Project with the legal requirement that hosts must fully indemnify Pacific Hydro against any nuisance caused by the wind turbines.⁵

5.12 New Zealand Standard

(a) The Landlord acknowledges that:

- (1) Generators may generate noise on and over the Land which may exceed the New Zealand Standard;**

⁵ Landowners Agreement. Extract of contract between [REDACTED] and Pacific Hydro Portland Wind Farm Pty Ltd.

(2) in particular, the operation of the Wind Farm may affect the use, amenity and development of the Land or the Property for residential or habitable use;

Pacific Hydro has publicly acknowledged that the Cape Bridgewater Wind Farm has reduced quality of life for some residents. Based on this condition of the PWED contract, it would seem that Pacific Hydro anticipated, as had Meridian, that the operation of the wind farm might affect the sleep, amenity and indeed, the habitability of wind turbine impacted homes, despite the (alleged) protections of the New Zealand standard!

And, assuming that Pacific Hydro knew that the operation of the Portland wind farms would adversely affect the amenity and habitable use of homes, including sleep quality, Pacific Hydro also added 5.12 (b):

The Tenant agrees that it must and if required at its own cost, implement appropriate acoustic measures (such as window glazing and insulation) to ensure a reasonable level of acoustic amenity in relation to indoor habitable areas of the dwelling located on the land.

Perhaps the inclusion of 5.12 (a) (2) and (b) in Portland Wind Energy Project contracts is necessary because the beautiful but otherwise uninhabitable heritage-listed homes at Cape Bridgewater can't be bulldozed!

The Waubra Wind Farm contract says at 5. LANDLORD'S RELEASE,

To the extent permitted by law, the Landlord releases the Tenant from any liability for the loss, damage or injury occurring in the Premises or on the Land arising from the Tenant's breach of the Environment Protection Act 1970 (Vic) due to noise emitted from the wind turbine generators.⁶

Section 180 of the Victorian Planning and Environment Act 1987 says that an agreement can't breach a permit or contravene a planning scheme. In order for a power station to be eligible to participate in the LRET, the Renewable Energy Electricity Act 2000 (Comm) says that ALL local state/territory and Commonwealth laws must be complied with. Presumably, this would include the Victorian EPA Act. No matter how prepared the landlord is to tolerate the breach of the EPA Act, there is still the matter of the breach of a state law. If wind farm operators knowingly and wilfully operate wind farms at noise levels which breach state laws they should not be paid RECs!

Section 17.1 of the Waubra contract, DISPUTE RESOLUTION sets out:

(a) (i) If a dispute or difference arises or the parties fail to agree in connection with any matter arising out of or relating to or concerning this Lease, including any matter whatsoever concerning the operation of the Wind Turbine Generators (collectively called "a dispute") then the parties agree to use all reasonable endeavours in to

⁶ (Unsigned) contract between Landlord and Wind Power Pty Ltd.

resolve the dispute through consultation in good faith between the Landlord and the Tenant.

Pacific Hydro's contract allowed for mitigation measures that could make homes habitable and indeed, *sleep-able*. Similarly, Acciona must negotiate with Waubra Wind Farm landlords and stakeholders who complain about the operation of the wind farm.

Perhaps that's why there seems to be more 'heavy draping' and more double glazed windows in Waubra than other areas! Acciona's commitment to ensure that they use '*all reasonable endeavours*' to resolve disputes '*in consultation and in good faith*' has certainly been an expensive one.

On 10 December 2010, the Minister for Planning advised Acciona in writing that:

...the operation of the facility does not comply with the relevant noise standard at several dwellings. I am therefore not satisfied, in accordance with condition 14, that the operation of the facility complies with the relevant standard in relation to these dwellings.

On 15 December, just days later, Acciona "*in good faith*" wrote to a wind farm stakeholder.⁷ The letter was written in response to their complaints about excessive noise and shadow flicker. Acciona offered them 'mitigation measures,' including double glazing of their windows and a split system air conditioner for one bedroom to enable the stakeholders to "*sleep comfortably on hot nights, if you are unable to open the windows.*"

To protect against significant shadow flicker nuisance, Acciona also offered this same stakeholder "*external side awnings or a pergola-type structure*" for the western side of the property.

But nothing was done and their complaints continued.

Despite being fully aware that the Minister for Planning did not hold the view that Waubra Wind farm was compliant, Acciona published the following statement in its December 2010 newsletter:

Acciona is in compliance with all regulations and requirements of the planning permits related to the Waubra Wind Farm.



Twelve month noise monitoring report

ACCIONA is in compliance with all regulations and requirements of the planning permits related to the Waubra Wind Farm.

ACCIONA commissioned acoustics experts to prepare an independent report into the post-construction noise monitoring program at the Waubra Wind Farm covering approximately 12 months from the commencement of wind farm generation, as required by the planning permit. The report was submitted to the Victorian government in October 2010. The independent evaluation showed that, while noise levels do and are expected to vary with weather and topography, ACCIONA has operated the wind farm to ensure that all noise compliance obligations are met.

One of the operational management procedures available to ensure noise level requirements are met, is a noise reduction plan that effectively limits the sound output from specific turbines by limiting the speed of the blades and is a commonly accepted practice. During the noise compliance monitoring period, two properties adjacent to some of the turbines included in the noise reduction plan were made available for sale. To help achieve optimal generation of green energy at Waubra, ACCIONA decided to purchase those properties on commercial terms. These turbines will continue to operate in noise reduced mode until the properties have been vacated.

In mid-September 2011, the Planning Minister wrote to Acciona to again advise:

At this time I am not able to reach a determination that the wind farm is compliant with the performance requirements specified.

Perhaps this statement prompted Acciona to make contact with the same stakeholder, some ten months later and only two weeks after non-compliance was established for a second time. On this occasion, the operator generously allocated \$30,000 to the stakeholder to “in good faith” mitigate against continuing, unacceptable noise and shadow flicker impacts.

In an up-scaled effort to minimise the nuisance at this stakeholder residence, new (double glazed) window glass was installed at a cost of \$8,860.

3 x 2.5KW Mitsubishi Inverter split systems (three bedrooms) were installed at a cost of \$6,738.

1 x 3.5KW Mitsubishi Inverter split systems (master bedroom) was installed at a cost of \$2,482.

*(*That’s four air conditioners with a combined output of 11KW in just one home, all operating simply because wind farm noise prevents the homeowner from being able to open their windows. Assuming these responses are typical, I wonder whether the environmental and carbon costs of all these additional and energy intensive air conditioners are factored in by pro-wind supporters?)*

The remaining \$11,920 was reserved to either construct a pergola or to purchase shade awnings to protect residents against the significant shadow flicker nuisance experienced.

Acciona sent that \$30,000 and correspondence to the stakeholder after the company had been told TWICE by the Minister for Planning that the wind farm was not compliant.

These communications suggest that the accuracy of information Acciona made available to stakeholders was selective and continued to misrepresent fact long after the wind farm was built!

Ironically, Acciona’s expensive efforts were focussed on improving the amenity and sleep quality of residents who were living at a property where noise allegedly complies with NZ 6808:1998.

Given that compliance with the New Zealand standard is supposed to protect against sleep disturbances, if the noise levels at the stakeholder’s property complied with the New Zealand Standard, why were the residents having difficulty sleeping?

As discussed last week, the Waubra Wind Farm noise compliance monitoring results show that the noise levels at your property comply with the New Zealand Standard 6808:1998. However we do acknowledge that despite this compliance you do experience elevated noise levels at your property during certain meteorological conditions, and on these occasions you have difficulties sleeping.

Before the wind farm started operating, assurances were given to the entire Waubra community- both hosts and non-stakeholders- that the wind farm would not cause any nuisance and that planning guidelines, including compliance with the New Zealand Standard, would prevent noise nuisance and sleep disturbance and protect residential amenity.

Can the New Zealand standard be taken to adequately protect sleep at residences without the installation of air conditioners?

The inclusion of nuisance conditions and indemnity clauses in wind farm lease contracts with stakeholders suggests that wind farm operators knew that noise nuisance was likely or at least, a strong possibility –even when wind farms were built under Victoria’s planning guidelines. Therefore, the industry must know that wind farm planning guidelines, including an inadequate wind farm noise standard that doesn’t protect communities from nuisance, were flawed.

The information available to prospective hosts, including information given to us, gravely understated the impacts of wind turbine noise and shadow flicker that are experienced in Waubra today. The advice given before the construction of the wind farm most certainly did not reflect *actual* outcomes for us as a wind farm neighbour or the previously mentioned stakeholder.

Acciona misrepresented the status of Waubra’s non-compliance to the community and its own stakeholders -stakeholders who were complaining of the very same nuisances that we were, at the very same time.

Pyrenees Shire Council was presented with a petition in September 2013. More than sixty signatures were submitted from noise-nuisanced residents who petitioned the council to require the Minister to enforce noise conditions- among those signatures were turbine hosts and wind farm stakeholders.

In 2012, Dr [REDACTED] prepared a study of two Victorian wind farms. The report was re-published in 2014.⁸ Dr [REDACTED] noted that there are

‘measurable noise problems at both Waubra and Cape Bridgewater’ and concluded: ‘findings suggest that the individuals living near the wind farms of this study have a degraded Health related Quality of life through annoyance and sleep disruption and that their health is significantly and seriously affected (harmed) by noise.’

Dr [REDACTED] confirms that the New Zealand noise standard used at Waubra and Cape Bridgewater has failed in its purpose both times.

Term of Reference (c): the role and capacity of the National Health and Medical Research Council in providing guidance to state and territory authorities;

⁸ Dr [REDACTED] The Perception and Effect of Wind Farm Noise At Two Victorian Wind Farms - An Objective Assessment - Reissued June 2014

Infrasound/Low frequency noise (ILFN) nuisance is an environmental noise problem. In 2004, EnHealth released a report that found environmental noise was a potential health concern, concluding that 'noise annoyance is clearly a reflection of impaired quality of life.'⁹ The report recognised that exposure to low frequency noise has been found to elicit stress reactions and urged that 'further research is needed to determine the health effects of low frequency noise exposures.'

ILFN related nuisance could be caused by the operation of a wind farm, a coal mine, a coal fire power station, a gas fired power station or from coal seam gas extraction.

In 2004, Snowy Hydro were issued with an interim enforcement order and eventually bought-out Metroll because VCAT found that the Laverton gas-fired power station was causing nuisance that couldn't be remedied. The nuisance was caused by low frequency noise and vibration.

The Doctors for the Environment's submission to a NSW government coal seam gas Inquiry referred to problems with low frequency noise.¹⁰ In its submission, DEA states that noise legislation generally fails to properly consider the problems associated with ILFN noise and noise character. DEA are aware that infrasound and low frequency noise are harmful and responsible for sleep disturbance, impaired concentration and learning. DEA describe that low frequency energy inside the body impacts on the Autonomic Nervous System and affects anxiety. DEA wrote that low frequency noise passes through buildings unaffected by insulation and that noise monitoring must be done indoors to properly consider resonance effects.

Noise disturbs sleep and impairs concentration and learning. Infrasound and Low frequency noise damage (Vibroacoustic disease) is ignored in noise monitoring legislation but is particularly intrusive because it passes unaffected through insulation and can be of a frequency that will naturally resonate inside a living or bedroom or inside the skull (or chest). Machines may be at their maximum intensity at a low frequency that isn't being measured. It is believed by many that such low frequency energy inside the body will impact on the Autonomic Nervous System which controls many body systems including those involved with anxiety.

Noise monitoring invariably is done outside where these resonance effects are avoided.

DEA, PHAA and CAHA, all rely on the NHMRC to form views and to provide advice about ILFN from wind farms. Despite what DEA understands about low frequency noise/infrasound if it comes from coal seam gas extraction, when ILFN noise occurs as a consequence of wind energy generation DEA submits:

There are no known physical mechanisms that could explain proposed adverse health effects of infrasound at the pressure levels generated by wind turbines. There are instead a small number of individuals that have increased sensitivity to audible noise and the symptoms displayed are

⁹ Enhealth: 'The health effects of environmental noise - other than hearing loss'

[http://www.health.gov.au/internet/main/publishing.nsf/content/33165540CB3C78BCA256F1900042E72/\\$File/env_noise.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/33165540CB3C78BCA256F1900042E72/$File/env_noise.pdf)

¹⁰ Doctors For the Environment Submission – NSW Coal Seam Gas Inquiry

[http://www.parliament.nsw.gov.au/prod/parlament/committee.nsf/0/f96d076732225603ca25791b00102098/\\$FILE/Submission%200412.pdf](http://www.parliament.nsw.gov.au/prod/parlament/committee.nsf/0/f96d076732225603ca25791b00102098/$FILE/Submission%200412.pdf)

consequent to the annoyance from this. The focus on infrasound distracts discussion from this real phenomenon¹¹

Why should DEA's perspective about low frequency noise emanating from a wind farm be any different ?

Many people can't accept or just don't want to know that there are serious problems associated with wind energy. Ideologically, wind turbines still enjoy public and political support. Our story has been an inconvenience to many. Our complaints have been dismissed as being part of "an anti-wind farm scare campaign." Our health problems and sleep disturbances have been written off by trusted figures involved in public health as the "nocebo effect." Those of us prepared to speak out about our symptoms have been called "wind farm wing-nuts." An ABC journalist recently referred to us as "Dickbrains." We have been insulted and we have been ridiculed.

Because of Professor [REDACTED] anti-science stance on wind farms, most people genuinely cannot understand how we could feel unwell because of the wind farm. We barely understood it ourselves. But to find those answers we know that we need science, not sociology.

In ***Acciona's Waubra Wind Farm Under Scrutiny; Final Sign off Delayed***¹² [REDACTED] from *Friends of the Earth* said his organisation supported getting to the bottom of the wind turbine issue.

"We are not wind developers so we cannot comment on the design of the Waubra Wind Farm," Mr [REDACTED] said.

"We do understand that some people are getting sick as a result of living near turbines. This is a terrible situation and we support getting to the bottom of the issue.

That was in 2011. Now *Friends of the Earth* are raising money in a direct effort to promote the installation of wind energy facilities in Victoria, despite continuing reports of health problems associated with them. They are also calling this Inquiry a "witch hunt."

Also back in 2011, Mr [REDACTED] (former) CEO of Pyrenees Shire Council, wrote to the Department of Health to request a Health Impact Assessment (HIA) in response to continuing and multiple complaints of noise emanating from the Waubra Wind farm and in an effort to remedy the nuisance it causes.

Dr [REDACTED] letter of reply to Mr [REDACTED] is dated 2 February 2012. A copy of this correspondence is attached for your convenience.

Dr [REDACTED] Acting Director Health Protection and Acting Chief Health Officer of the Victorian Department of Health, refused Mr [REDACTED] request. As justification for her refusal she referred Mr [REDACTED] to the 2010 NHMRC rapid review of evidence of any alleged health effects of wind farms. She told Mr [REDACTED] that the NHMRC review concluded that ***'there is no evidence to***

¹¹ Doctors For the Environment Position Statement on Wind Turbines
www.aph.gov.au/DocumentStore.ashx?id=f26de6bc-7bb6-4b88-8a6a.

¹² Acciona's Waubra Wind Farm Under Scrutiny; Final Sign off Delayed was published in the Ballarat Courier on 3 October, 2011.

support these complaints' adding, ***'I do not believe that a Health Impact Assessment would add anything to this process.'***

The purpose of ***Wind Turbines and Health – A Rapid Review of the Evidence*** was to present findings from a rapid review of the evidence taken from a very select sample of available literature on the issue of wind turbines and potential impacts on human health. In particular, the paper sought to ascertain if the following statement can be supported by the evidence: ***There are no direct pathological effects from wind farms and that any potential impact on humans can be minimised by following existing planning guidelines.***¹³

When considering the potential relationship between wind farm acoustic emissions and health, the NHMRC rapid review consistently found that if guidelines were followed adverse health impacts could be avoided.

Based on current evidence, it can be concluded that wind turbines do not pose a threat to health if planning guidelines are followed. Page 6

Therefore if planning guidelines are followed and communities are consulted with in a meaningful way, resistance to wind farms is likely to be reduced and annoyance and related health effects avoided. Page 8

This review of the available evidence, including journal articles, surveys, literature reviews and government reports, supports the statement that: There are no direct pathological effects from wind farms and that any potential impact on humans can be minimised by following existing planning guidelines. Page 8

In contrast to Dr [REDACTED] comments ***'there is no evidence to support these complaints'*** it is quite clear that the conclusions of the NHMRC's rapid review were made with the expectation that planning guidelines would be followed. In fact, the findings of the NHMRC Rapid Review totally rely on the conditional premise that wind farm planning guidelines -when followed -will protect human health.

At the time that Dr [REDACTED] wrote to Pyrenees Council, she understood that compliance at Wind Farm was still under review and had not yet been established. There was no evidence to support that planning guidelines had been or were being complied with.

The 2010 NHMRC review that Dr [REDACTED] relied upon did not draw any conclusions about complaints of adverse health effects reported by residents who live close to wind farms that operate in excess of the noise standard and outside the protections of the planning guidelines, like the Waubra Wind Farm. The NHMRC review offered no guidance on how to ameliorate our complaints of adverse health impacts under those circumstances and nor did it advise how the council might remedy the nuisance.

The findings of NHMRC's 2010 rapid review should not have been relied upon by Victoria's Chief Health officer to form any view in relation to the health complaints caused by acoustic emissions of the Waubra Wind Farm – a power station which was known at the time to be operating in excess of the noise standard and therefore, *outside* planning guidelines!

Dr [REDACTED] interpretation of NHMRC's rapid review -which ultimately led to her refusal to initiate a HIA at Waubra Wind Farm - prejudiced the Pyrenees Shire Council's ability to have the impacts of

¹³ NHMRC's Wind Turbines and Health – A Rapid Review of the Evidence was published in 2010.

the wind farm properly investigated and denied us the potential to have our symptoms properly investigated and possibly ameliorated.

Waubra Wind Farm's excessive noise was discounted by Dr [REDACTED] who interpreted the NHMRC's former position and "guidance" in a way that totally failed my family. Her refusal also put the council in a position where it could not reasonably perform its legislated responsibility to remedy the nuisance that the wind farm causes us.

Term of Reference (e): the adequacy of monitoring and compliance governance of wind farms;

In December 2010, Minister Guy knew the extent of the nuisance that the operation of the wind farm was causing not only my family, but the wider community.

A peer review of the Marshall Day post construction noise report was undertaken by an acoustic expert at the request of the Planning Minister. The peer review identified that the wind farm was not operating in compliance with the New Zealand Standard and was therefore operating in breach of noise conditions.

The Minister subsequently wrote to alert the operator of a breach and to advise the operator that he was not satisfied that compliance had been achieved at Waubra Wind Farm.

All this occurred while we were making complaints about the wind farm's excessive noise.

While we were complaining that the Waubra Wind Farm was causing us harm, sleep interruption, adverse health effects and nuisance, the Minister for Planning and his department knew that this power station was operating at excessively high noise levels and in breach of its permit. Turbines were rumbling, whining and whooshing, emitting low frequency noise and audible noise in excess of compliance obligations- right beside our home and farm -as they have been all along.

Our family was displaced as a consequence of the audible and sub audible wind farm noise and its impacts and so were others. In 2010, the Minister was told that eleven homes had **'been vacated with noise cited as the reason.'** As the wind farm proponent purchased eight of these homes and properties, most of the displaced families were gagged from speaking out about why it was that they had to vacate their homes. The truth wasn't being told anywhere.

Pyrenees Shire Council recently resolved to restrict future developments within the shire,¹⁴ reasoning:

'Such developments if not adequately regulated, could potentially expose their residential occupants to serious acoustic and other amenity impacts '

and adding:

¹⁴ MEASURES TO CONTROL HOUSING DEVELOPMENT IN AREAS AFFECTED BY EXISTING AND APPROVED WIND FARMS, File No: 66/22/16 - Author: [REDACTED] Senior Town Planner
www.pyrenees.vic.gov.au/files/.../20130319 - Council Agenda.pdf

‘...there can be no doubt that dwellings in close proximity to wind turbines (within 2 kilometres) have/will have the potential to be profoundly noise-affected – to a point where the amenity of their occupants will be seriously diminished.’

The Waubra Wind Farm has generated complaints of excessive noise and adverse health effects throughout the entire period of its operation. Pyrenees Shire Statutory Planner, Mr. [REDACTED] identified serious limitations with the noise standard and planning guidelines¹⁵:

Council maintains that the current 1998 NZ noise assessment standard specified in the Guidelines for the Assessment of Wind Farm applications is out of date. Noise standard NZ 6808 (1998) is over 10 years old and includes outdated methodologies for the testing of sound emission levels from installed turbines. It should also be noted that the 1998 NZ noise assessment standard does not take into consideration the effects of temperature inversions, infrasound, cumulative impact of turbines, or consider the potential for higher densities of turbines per square kilometre to result in increased off-site amenity impacts.

In 2012, Mr [REDACTED] said:¹⁶

Shortly after the completion and commissioning of ...(Waubra)... both the council and the Department of Planning and Community Development began receiving complaints from landowners living in close proximity to that particular development, mainly in relation to audible noise. There have also been complaints received in relation to sub-audible noise impacts, which I am happy to answer questions on later.

It was only when Waubra started becoming an issue—with the number of complaints that were received—that the department's attitude towards being willing to take on enforcement responsibility seemed to change quite suddenly. They then wrote to us and other councils and indicated that basically they believed —without providing any legal advice, mind you—that they believed that the shires were the responsible authority for administration enforcement, overriding what they have done on the planning permit. It does not override the enabling legislation—that is, (they are) legally unenforceable.

Mr [REDACTED] former CEO of Pyrenees Shires said:

The issue of administration and enforcement is one which Council has previously expressed concern on in regard to the Waubra Wind Farm. In fact, Council raised this issue with the Panel, following which it reported the following:

¹⁵ 2011 Senate hearing of the Community Affairs Reference Committee inquiring into the Social and Economic Impact of Rural Wind Farms;

¹⁶ Evidence provided to the 2012 Excessive Noise Inquiry:

Mr [REDACTED] for DSE in his opening submission To the Panel stated that the Minister was the responsible authority for all facets of the permit including enforcement issues. Mr [REDACTED] told the Panel that DSE had obtained legal advice to this effect/

This view was supported by Councils and the MAV legal advice in December, 2009 and February, 2010 respectively. It is understood that a VCAT determination last year (Woolsthorpe Wind Farm) again reinforced that the Minister was responsible.

Whilst Council does not have written advice from the department indicating the Minister was responsible for Administration and enforcement the Department in December did indicate that the specific Condition 14 of the Planning Permit relating to noise was to be to the satisfaction of the Minister.

Council has not acted as the responsible authority of noise related permit conditions.¹⁷

The Planning Minister continues to avoid responsibility for the Cape Bridgewater Wind Farm. Since it was constructed in 2008, neither the Glenelg Shire Council nor the Minister for Planning has accepted statutory responsibility to administer the Portland Wind Energy Project's Incorporated Document- (planning permission). At Waubra Wind Farm, no responsible authority has enforced conditions attached to planning consent, even when there were recognised breaches. No contravention notices were issued.

Unlike Waubra's planning permits which set out a determined compliance pathway that is triggered by complaints, condition 18 of the Portland Wind Energy Project¹⁸ instructs that complaints are simply to be made to the operator -without the requirement of an external review that would be necessary to establish whether the development is being operated in compliance with its planning permission. As a result, condition 18 of that permit has failed to ensure reported nuisances can be appropriately addressed and remedied.

If neither the Glenelg Shire nor the Planning Minister are prepared to assume responsibility for the enforcement of noise conditions of Cape Bridgewater Wind Farm, it must not be that an authority has ever agreed that the wind farm complies with Condition 13 – much less comply to any responsible authority's satisfaction. In the absence of the full satisfaction of Condition 13, Cape Bridgewater wind farm has not demonstrated compliance with the terms specified in its conditional planning consent.

The lack of a willing responsible authority for that development would indicate that the 'complaints procedure' has never been overseen by any authority other than the wind farm operator itself. In the absence of an effective RA, who will compel Pacific Hydro to follow its protocol and take action to 'mitigate' problems so that the wind farm would and could comply with Condition 13? Consent arrangements allow the operator of the Cape Bridgewater Wind Farm to operate that wind farm to its satisfaction and without review.

¹⁷ Email correspondence from Mr [REDACTED] – 6 November 2013

¹⁸ Portland Wind Energy Project - Incorporated Document, was introduced into the Glenelg Planning Scheme in May 2004

While the Planning Minister has taken responsibility for the administration of the Waubra Wind Farm's permits and the enforcement of noise conditions under the Planning and Environment Act, 1987 (Vic), it is the responsibility of Councils to administer Part 6 of the Victorian Public Health and Wellbeing Act, 2008 (PHWB Act). Part 6 describes council's duty to respond to and remedy complaints of nuisance that occur within the municipal district.

Complaints of operational wind farm noise which causes nuisance are received by Pyrenees Council irrespective of and in spite of the alleged protections of the planning permits and planning guidelines. While it is the Minister who has responsibility for enforcing noise conditions in response to complaints it is ultimately the Council who is burdened with the obligation to resolve and remedy them.

Infrasound and low frequency noise and vibration nuisances that are caused by the operation of the Waubra wind farm are not addressed in the applicable noise standard, NZS 6808:1998 and therefore, these nuisances occur outside the (presumed) protections of planning guidelines and planning permits issued under the Planning and Environment Act 1987 (Vic).

Former Planning Minister Guy's indecisiveness about the Waubra Wind Farm's compliance lasted for the duration of his Ministry. In contrast, new Victorian Labor Planning Minister, Richard Wynne, ticked off Waubra Wind Farm's compliance very early in his term. Minister Wynne determined that compliance had been achieved at Waubra Wind Farm after subjective assessments were made using a SAC testing methodology that Acciona proposed and Minister Guy approved shortly before the election. The methodology that the Victorian Planning Department accepted is not recognised in NZ6808:1998 and is at odds with the New Zealand Standard that the permit was issued under.

Before the SAC testing occurred and compliance was invariably determined, I wrote to Mr [REDACTED] who heads the wind farm division of the Victorian Planning Department to raise my concerns about the scope of SAC testing.

I referred to the correspondence between Minister Guy and Acciona dated 15 January, 2014. In this letter, the Minister advises Acciona's [REDACTED]

Following review of the latest information and when read in conjunction with all other relevant information I have formed the view that there are no noise compliance issues concerning the Stepnell property in Lobbs Road, Glenbrae.

The suggestion that there are 'no noise compliance issues' at our Lobbs Road property is inconsistent with the view of several expert acousticians that have undertaken noise testing at our property. Alarming, it also contradicts earlier advice from the department.

In his 15 January 2014 letter to Acciona, Minister Guy referred to a previous letter dated 15 September 2011 in which he had informed Mr [REDACTED] of Acciona that testing should occur as follows:

Testing is to be carried out for the 10 houses listed in my letter dated 15 September 2011, namely houses H16, H26, H41, H49, H64, H68, H76, H85, H153 and H285.

Our property at Lobbs Road, Glenbrae is, in fact, referred to as “H16.” Accordingly, we expected that noise compliance testing should still occur at our property, as recommended several years earlier and consistent with instructions from the Minister and his department to do so.

We were deeply concerned that Minister Guy justified his acceptance of Acciona’s controversial, ‘subjective’ testing methodology by relying on advice from an unauthorised, unpublished draft document which he improperly refers to as “the EPA guidelines.”

We are aware that the incomplete draft was being prepared in close collaboration with DPCD. We told Mr [REDACTED] that in its flawed draft form, the draft document was not approved for publication by the EPA and that the SAC methodology Minister Guy had agreed to was never endorsed by the EPA. It is incorrect for the department to have suggested otherwise.

At any rate, Section 10 of the *draft* wind farm policy for the assessment of SACs refers exclusively to developments bound by NZS 6808:2010. The Waubra Wind Farm permits provide that compliance must be assessed in accordance with NZS 6808:1998. Even if the DPCD/EPA’s unpublished draft wind farm guideline was a credible resource, the methodology proposed for the assessment of SACs (that EPA was not prepared to publish), could not retrospectively apply to the assessment of noise at Waubra Wind Farm.

Further, acoustic experts, the EPA and officers of the Victorian Planning department had already made a number of site inspections of the Waubra Wind Farm. DPCD had raised concern about the ‘likely presence of SACs at some properties,’ (including ours), recognising a number of possible causes including mechanical noise, tonal noise and Amplitude Modulation. I told Mr [REDACTED] that his department’s many observations indicated that subjective assessment had already occurred – and on multiple occasions. Moreover, the draft guidelines that the Minister relied upon to approve Acciona’s SAC methodology reaffirmed that where SACs have been identified the noise standard requires a 5 dBA penalty and 35 dBA limit.

I noted that in BMIN011632 the Minister received expert advice that acknowledged presence of SACs: ***‘the department considers that operating the wind farm in noise management mode will not enable the facility to meet the applicable 35dBA limit.’***

Non-compliance at Waubra Wind Farm was found in 2010, confirmed again in 2011 and at the advice of DPCD commissioned acoustic experts, even in the unlikely event that Acciona was to operate the facility in a noise optimised mode, the department didn’t expect that would enable the wind farm to meet compliance with the appropriate standard.

Condition 16 of the permits specifies that on-off shut down testing and decommissioning should have been the next logical, necessary steps along the compliance pathway. We remain perplexed as to why the Minister and his department spent the last several years avoiding the enforcement of the permit and failing to officially determine the known non-compliance. Without intervention, the Minister allowed Acciona to continue to operate the power station in excess of the prescribed noise standard, outside compliance to the detriment of the community it continues to harm. Minister Guy approved Acciona’s SAC testing methodology which was totally at odds with all the advice he had ever received about SACs at Waubra Wind Farm.

More than 1,500 official complaints have been registered about the Waubra Wind Farm’s noise, including quite a few of ours. These complaints evidence our continuing frustration that excessive noise; including ILFN and noise with special audible characteristics, remains a source of inescapable

nuisance that interrupts sleep, adversely affects amenity, wellbeing and completely destroyed our potential to savour the quiet enjoyment of our Lobbs Road home.

We told Mr [REDACTED] that we remained frustrated that operational noise problems have still not been corrected and nor have our concerns been ameliorated. Under the Planning and Environment Act, 1987, the wind farm's planning permits are supposed to protect the surrounding community from harm. This cannot occur if conditions are never enforced.

We noted that the 'Responsible' Authority had approved the operator's proposed testing methodology which:

- a) Was not specified in the Waubra Wind Farm planning permits;
- b) Referred to unpublished draft guidelines which offered advice about the assessment of SACs in permits bound by a different standard;
- c) Allowed absurd 'subjective' assessment methods previously recognised (by the same Minister) to be an "insufficient."
- d) And specifically avoided testing at our Lobbs Road property where both the operator and the department knew very well that compliance cannot be achieved.

We anticipated that the former Minister's approval of this completely unacceptable yet 'approved' testing methodology would appease no one other than the wind farm operator. Minister Wynne proved our suspicions were correct.

As a requirement of the Waubra Wind Farm's conditionally approved planning permit, Marshall Day Acoustics prepared a pre-construction noise report. Before the wind farm was even built, Marshall Day Acoustics' preconstruction noise modelling identified that fifty of Waubra's 128 wind turbines (39%) would need to be adjusted or 'noise optimised' (operated in a reduced noise mode) in order for the Waubra Wind Farm to fulfil its compliance obligations under the New Zealand Standard NZ6808:1998. The report's author identified the numbers of the turbines which required adjustment.

'to achieve the noise levels presented in Table 4, fifty (50) WTG were modelled in "reduced noise" mode.

These adjusted are 68-1, 68-3, 68-12, 68-14, 68-17, 68-18, 68-19, 68-20, 68-21, 68-27, 68-29, 68-31, 68-32, 68-34, 68-37, 68-40, 68-47, 68-52, 68-53, 68-60, 68-62, 68-64, 68-65, 68-66, 68-67, 68-68, 80-5, 80-6, 80-7, 80-22, 80-24, 80-28, 80-29, 80-30, 80-31, 80-33, 80-34, 80-41, 80-43, 80-46, 80-47, 80-50, 80-56, A 68 3, A 68 4, A 68 5, A 68 7, A 80 6 and A 80 9.'



The pins coloured in red represent the turbines near our Lobbs Road home which are supposed to be noise optimised. The problem is, no one has any evidence that these turbines have operated in a reduced noise mode because the operator will not release the scada data and operational output. Acciona's Jamie McGill told the 2012 Excessive Noise Inquiry that all of that information is provided to the Minister for Planning.

Despite warnings from the former Minister in 2010 and 2011 that Acciona needed to operate turbines in noise management mode in order to meet the New Zealand standard, Acciona's annual electricity generation returns show no meaningful difference in electricity generation in any year since operations commenced.

What evidence is there to suggest that these turbines (WTGs) have ever operated in a reduced noise mode at Waubra Wind farm? Were these fifty turbines adjusted to noise management mode when post construction testing occurred? Have they been noise optimised since?

Someone working within the Victorian Planning Department that *'the facts* (about Waubra Wind Farm's compliance testing) *were being tailored to suit the required outcome: not the other way around.'* He said the required outcome was a determination of compliance. This same person wrote in an email:

As discussed I have concerns with 2 wind farm sites only in Victoria. They are Waubra and Cape.Bridgewater

The outstanding problems with Waubra are:

1 there is no evidence that the wind farm was not in a noise restricted mode when the assessments were made as claimed by Acciona despite earlier predictions that this was the only way that the noise levels could be complied with

2 the SACs assessment was not done properly the first time and the proposed next round of testing will not be as well. It will be a crude, non scientific evaluation that will probably state no SACs . If that is the case then the department/Minister will declare that Waubra is compliant.

How right he was.

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

Some years before Minister Wynne suddenly determined compliance at Waubra Wind Farm, (albeit the result of a crude, non-scientific subjective evaluation that is inconsistent with the New Zealand Standard and was rejected by the EPA), Senator Madigan raised concerns about Waubra Wind Farm's participation in the RET. He asked why Waubra Wind Farm was operating as an accredited power station when the power station's compliance with noise conditions had not been determined and the requirements of a state law had not been satisfied.

In response to Senator Madigan's questions at Senate Estimates, the Clean Energy Regulator initiated a compliance investigation of the Waubra Wind Farm to assess its ongoing eligibility for accreditation under the Renewable Energy (Electricity) Act 2000.

██████████ was the wind farm person from the Planning Department that they dealt with.

Evidence obtained under the Freedom of Information Act documents the CER's investigation and records Mr ██████████ responses.

On 18 February 2013, ██████████ Manager- RET Power stations sent an email to ██████████ CER-RET compliance requesting an investigation into a breach as raised by Senator Madigan.

Later that day, Mr ██████████ asked ██████████ of the Clean Energy Regulator's Inspections and Compliance Team to *"Please have this matter assessed."*

On 21 February 2013 at 9.18am, Ms ██████████ telephoned Paul ██████████ Assistant Director Regional Projects, Statutory Planning Services, DPCD to discuss the status of Waubra Wind Farm's compliance with permit conditions and to form an opinion on behalf of the CER as to whether the Waubra Wind Farm was operating in breach of its planning permits and in contravention of a state law.

1.50pm, ██████████ emailed ██████████ her summary of this telephone conversation about the Waubra Wind Farm's status of compliance with a state law.

My understanding of our conversation is the Victorian State Minister is yet to make a ruling as to whether the Waubra Wind Farm is compliant with the approval conditions applicable to the permit issued.

This is due to the fact that the noise testing methodologies, submitted by the proponent for the Waubra Wind Farm, are still under consideration to determine if any further testing is required.

*I would appreciate it if you could confirm my understanding of the current status of the Waubra Wind Farm, as detailed above is correct. I would also be grateful if you could advise me when a decision is made in relation to the noise testing methodology, and the ongoing compliance status of the Waubra Wind Farm.*¹⁹

On 21 February 2013 at 3.24pm, ██████████ replied:

Your summary of our conversation is accurate. It was no problem to set the record straight given recent reports.

*I am not anticipating a decision to be made for several weeks given the need to agree on a testing scope, undertake it and assess it.*²⁰

To arrive at her understanding of the Waubra Wind Farm compliance issue, Ms ██████████ prepared a detailed record of the telephone conversation which outlined Mr ██████████ advice. This record was captured in CER FOI Document 94.

Ms ██████████ correctly understood that a noise testing methodology was currently being decided upon to assess SACs but there is no record to suggest that Mr ██████████ took any opportunity to explain why a revised testing methodology was necessary and why the department was undertaking further noise assessments. If he had, Ms ██████████ may have understood that the need for further testing was

¹⁹ CER FOI doc 92

²⁰ *ibid*

due to the fact the Minister had- on multiple occasions – alerted the operator of permit breaches and expressed his concern that noise compliance had not been achieved at Waubra Wind Farm.

As the CER's RET market entry branch compliance officer, it would seem that Ms [REDACTED] was not told of the specific breaches of conditions 14, 15, 17 and 18 of the Waubra Wind Farm's planning permits. Additionally, the FOI documents reveal that the term 'testing methodologies' has been wrongly employed. The misuse of the term 'testing methodologies' materially affected Ms [REDACTED] understanding of the matter and confused her understanding of the Waubra Wind Farm's (then) status of non-compliance.

Why didn't Mr [REDACTED] disclose to the CER the fact that breaches of several conditions had occurred? Did he intentionally withhold information and subsequently mislead the CER's investigation into the status of compliance at Waubra Wind Farm and its eligibility for accreditation?

A section of Ms [REDACTED] telephone record is reproduced below in bold text.²¹ Information obtained from FOI documents is in italics and my comments follow in plain print.

[REDACTED]
Record of Telephone conversation

Date/Time 20/2/2013@4.19pm (AEST) and 9.18am 21/2/2013 (AEST)

Conversation with: Mr [REDACTED]
From: Dept of Planning and Community Development, Victoria
Contact Number/s: [REDACTED]
Subject: Waubra Wind Farm

- **Post construction noise testing done and submitted (8/10/2010)**

On 8 October 2010, the proponent (Pyrenees Wind Energy Developments) submitted a report entitled 'Waubra Wind Farm Post Construction Noise Compliance Assessment' by Marshall Day Acoustics (MDA) in accordance with condition 18 of the permit. This report was reviewed by the Department of Planning and Community Development (DPCD) with expert assistance from SLR Acoustic Consultants Pty Ltd and the Environment Protection Authority (EPA).²²

- **Testing results reviewed by EPA (Vic) and an independent noise expert**

SLR Acoustic consultants prepared a scathing review of the MDA report which has been withheld from public access at the instruction of [REDACTED]. This review is known as the "Heggies Report." Heggies now forms part of SLR Acoustic Consultants.

SLR Acoustic Consultants identified a number of limitations in the MDA post construction noise assessment report. These have been communicated to the wind farm operator, who has advised you that it has purchased two additional dwellings and made a commitment to operate the wind farm in noise management mode. Noise management mode allows certain

²¹ Extracted from CER FOI Document 94

²² BMIN011632

*turbines to be selectively modified to reduce rotation speed or to shut down turbines by sector.*²³

*These actions have not prevented the continuation of noise complaints and the Department considers that operating the facility in noise management mode will not enable the facility to meet the applicable 35 dBA noise limit.*²⁴

- **Minister responded outlining concerns with testing methodologies (10/12/2010)**

The Minister's concern was not about testing methodologies but that the MDA acoustic report had itself identified non-compliance!

Mr [REDACTED] failed to reveal to Ms [REDACTED] the Minister's concerns of non-compliance as outlined in his letters of 10/12/10 and 15/9/11 (attached) and as described in his Ministerial briefings BMIN01076 and BMIN011632.

Instead, by wrongly advising Ms [REDACTED] that the Minister's letter was '*outlining concerns with testing methodologies*' Mr [REDACTED] misrepresented the nature of this particular communication. It is possible that this then skewed Ms [REDACTED] understanding of the matter which impacted on the CER's investigative process.

*Following the advice in BMIN01076 you wrote to the proponent on 10 December 2010 outlining concerns and issues with the MDA post construction report.*²⁵

On the basis of the advice I have received, I am not satisfied with the independent post-construction noise monitoring program required by Condition 17 of the relevant planning permits.

Further, the report details that the operation of the facility does not comply with the relevant standard at several dwellings.

*I am therefore not satisfied, in accordance with Condition 14 that the operation of the facility complies with the relevant standard in relation to these dwellings.*²⁶

*PWED, as the operator of the Waubra Wind Farm submitted the report to the Department of Planning and Community Development on 8 October 2010.*²⁷

*On 13 October 2010, DPCD provided a copy of the report to the Environment Protection Authority (EPA) for preliminary comment. Preliminary advice from EPA indicated several concerns with the report.*²⁸

*On 15 October 2010, DPCD commissioned Heggies Pty Ltd to prepare an independent technical review of the noise compliance report.*²⁹

²³ ibid

²⁴ BMIN011632

²⁵ ibid

²⁶ Letter from Minister Guy to Pyrenees Wind Energy Development -10/12/2010* Pg 2.

²⁷ BMIN01076 para 7

²⁸ ibid

²⁹ ibid

*On 1 December 2010, the final peer review was provided to DPCD*³⁰

*DPCD understand that approximately 11 dwellings located within 1.5 kilometres of the Waubra Wind Farm have been vacated with noise cited as the reason. The wind farm proponent has purchased eight of these properties.*³¹

*A recent site visit by the 'Joint Municipal Association of Victoria and DPCD working group on wind farms' to the Waubra Wind farm reported significant audible noise impact on an adjacent dwelling. The occupiers of this dwelling have recently vacated the premises due to this noise issue. This dwelling is not assessed as part of the noise compliance report.*³²

- **Proponent provided supplementary information (11/1/2011)**

The proponent responded to you on 11 January 2011 with a supplementary MDA report. This report was also reviewed by DPCD assisted by SLR Acoustic Consultants Pty Ltd and the EPA.

*A number of site inspections of the Waubra Wind Farm have also been made by DPCD and EPA officers who have raised concern about the likely presence of special audible characteristics (SACs) at some properties.*³³

The cause of SACs may be due to

A Mechanical noise due to maintenance and/or manufacturing issues with the particular model and components of the turbines, bearings and blades,

B Low frequency noise, impacted by turbine type, wake and turbulence effects from turbine spacing, synchronising turbines, local atmospheric conditions and terrain influences known as 'Van den Berg Effect' (increased noise propagation and travel during inversion conditions in still, cold weather) and low housing insulation,

C Tonal noise, from an inherent design character, and/or maintenance or manufacturing flaws,

*D Modulation noise, also known as Amplitude Modulation or blade swish, from the passing of the blades past the tower.*³⁴

- **Proponent supplied additional testing methodologies (15/9/2011)**

This information is completely inaccurate and reflects another misuse of the term 'testing methodologies.' On this date, after being briefed by DPCD legal, SLR Acoustic Consultants and EPA, the Minister wrote to the proponent advising them of his continuing concern that compliance had not been achieved at Waubra Wind Farm:

On 15 September 2011, Minister Guy wrote to the operator:

I refer to my letter to you dated 10 December 2010 and your response dated 11 January 2011.

³⁰ *ibid*

³¹ BMIN01076

³² *ibid*

³³ BMIN011632

³⁴ *ibid*

The Waubra Wind Farm Planning Permits, PL-SP/05/0150 and PL-SP/05/0152 were issued on 26 May 2005 by the Minister for Planning as responsible authority and specify compliance requirements for operational noise at conditions 14-18.

In the attachment to this letter I outline my consideration of the information you have provided to date. At this time I am not able to reach a determination that the wind farm is compliant with the performance requirements specified.³⁵

My letter of 10 December 2010 outlined a number of concerns with the Report and the Post-Construction Noise Monitoring program to which the report related. I indicated in the letter that I was not satisfied that Conditions 14,15, 17 and 18 of the permits had been or were being complied with.³⁶

Accordingly, I am not satisfied that Condition 14 is being complied with in relation to property 263.³⁷

On the basis of the concerns outlined above, I remain unsatisfied that compliance with the permit conditions relating to noise has been achieved.³⁸

- **Letter from proponent 16/8/2012 – they had issues with new proposed methodology and asked that the new methodology not proceed with current working – concerns about the agreement with what the testing methodology should be**

Acciona submitted a revised report and then advised that it was not happy with parts of its own methodology.

We are now consulting with the EPA on the scope of further testing. As such the Minister has not yet signed off on any noise compliance associated with the Waubra Wind Farm.³⁹

However, Acciona's Managing Director refuted Mr [REDACTED] advice, sending this letter to the Editor of the Weekly Times:

Complying on wind noise

I WISH to clarify statements made about ACCIONA's Waubra wind farm in "Doubt on wind farm noise," (WT February 20).

ACCIONA submitted extensive, independent noise assessments to the Victorian Government back in 2010, as required under the planning permit. These reports demonstrated that the wind farm complies with the noise conditions specified by the planning permit issued by the State Government.

Contrary to media reports, at no point has ACCIONA told the Victorian Government nor the Department of Planning that it does not stand by its noise compliance reporting. Since submitting its compliance report in 2010, ACCIONA has responded to requests from the Minister for Planning for additional information. We have also worked collaboratively with the Department of Planning throughout the process and will continue to do so should they require further information.

[REDACTED]
*Managing director
ACCIONA Energy*

³⁵ Letter from Minister Guy to Pyrenees Wind Energy Development dated 15/9/11

³⁶ Attachment to Letter

³⁷ ibid

³⁸ ibid

³⁹ CER FOI document 76

- **Met with Acciona Dec 2012 to discuss concerns with methodology.**
- **DPCD/EPA/ ind expert currently reviewing new methodology to determine what further testing is required**

At the time of Mr [REDACTED] conversation with Ms [REDACTED] SLR Acoustic Consultants had already submitted its DPCD commissioned peer review **40 2022 R2 1 December 2012. Waubra Wind Farm Noise Compliance Report with 6 Recommendations.**

Mr [REDACTED] withheld this information from Ms [REDACTED] Mr [REDACTED] and the DPCD, refuse to publicly release this report claiming that release would be against public interest. A copy is held by the CEO of Pyrenees Shire Council – who was also instructed by Mr [REDACTED] not to release it.

- **Minister not signed off on any decision as to whether the wind farm is compliant**

The Waubra Wind Farm's planning permits outline a specified compliance pathway. On-off shutdown testing and decommissioning of turbines where noise exceeds the standard should have already occurred. The Minister has had multiple reasons and opportunities to properly enforce the permit and to determine whether the wind farm is compliant, having first identified non-compliance in 2010 and confirming it again in 2011.

- **Letter drafted for DPCD Secretary to write to Senator Madigan and Mr Alby Schultz (MP) to address the quoting of advice of the DPCD and confirm Minister's status**

On 15/02/13, [REDACTED] Acciona's Senior Manager of Institutional Relations & Media sent an email to [REDACTED] and [REDACTED] Director, State Planning Services, DPCD which read:

*Hi [REDACTED]
See the comments from Senator Madigan at Senate Estimates this week on page 42 and 43 of the attached re DPCD and noise compliance at the Waubra Wind Farm.
[REDACTED] I will give you a call about this.
Regards,
[REDACTED]*

Five days later she emailed Senator Madigan's office advising staff:

The comments that Senator Madigan made below at Senate Estimates are misleading and incorrect. If you see the top of page 43 of the attached pdf, Senator Madigan has stated at Senate Estimates:

Senator MADIGAN: *My office has recently received a communication from a Mr [REDACTED] who is the Assistant Director of Regional Projects in Planning Statutory Services at the Department of Planning and Community Development, Victoria which confirms that the Waubra wind farm is noncompliant with Victorian planning legislation.*

The above statement is incorrect and I understand that DPCD is in the process of writing a letter to Senator Madigan to clarify this. As a result of Senator Madigan's comments at Senate Estimates, I have received numerous telephone calls, including from Members of Parliament, political staffers and media outlets asking for clarification.

I am sure you would not want to be in a position where Senator Madigan is making incorrect and misleading statements in the public domain. So could I ask that you ask Senator Madigan to refrain from making such statements about our company, until you receive the letter of clarification from DPCD.

If you would like to discuss further, you will find my contact details below.

On 4 April 2013, in response to the investigation lodged by the CER, [REDACTED] sent an email to CER's [REDACTED] in which he thanked him for meeting with him and attached copies of correspondence relating to Waubra Wind Farm:

As agreed here are the letters from our Secretary about compliance at Waubra. ⁴¹

However, eight days earlier, [REDACTED] had compliantly provided Acciona's [REDACTED] with advanced copies of those letters. On 27/03/2013, - (the same day that the Secretary's letters were dated and sent by post to Alby Schultz MP and Senator Madigan), Mr [REDACTED] emailed Ms [REDACTED] from a different DSE email address (*Paul [REDACTED]/DSE/VICGOV1*), attaching electronic copies of the letters Acciona's Ms [REDACTED] had forewarned Senator Madigan's office to expect. Of course, the intended recipients of the secretary's letter, Mr Schultz and Senator Madigan, did not receive this letter until several days later.

[REDACTED]
I promised you a copy of the letters once sent. Here they are. ⁴²

Proponent is liaising with DPCD and has provided information as requested.

Acciona's [REDACTED] and DPCD's [REDACTED] had definitely been 'liaising.' Did Acciona assist in the drafting of the secretary's letters to Senator Madigan and Mr Schultz which advised?:

You have quoted an e-mail from an officer of my department purporting to claim noncompliance with noise requirements at the Waubra Wind Farm.

The Minister for Planning has not determined whether the wind farm is or is not compliant with the relevant planning permit. The Minister or the department have never stated that the Waubra Wind Farm is not compliant with the current planning permit.

It cannot be assumed or inferred from the departmental advice that Waubra Wind Farm is not compliant with the relevant planning permit and I seek your cooperation in correcting the public record.

⁴¹ CER FOI document 66

⁴² *ibid*

It was his Department's advice that confirmed the Waubra wind farm was not operating in compliance with the relevant planning permits!

On 18 April 2013, [REDACTED] [REDACTED] recorded another telephone conversation with [REDACTED] [REDACTED] confirming the closeness of the relationship between Mr [REDACTED] and Ms [REDACTED]

[REDACTED] *contact in the proponent for the permits (Acciona) is Ms [REDACTED] [REDACTED] (at the Southbank office) and he can provide contact details if required.*⁴³

- **Comparison of pre-construction noise monitoring with post construction noise monitoring – some areas are no longer relevant (owners or residents have signed a document stating they have no issues with the wind farm).**

The documents which Mr [REDACTED] referred to are known as Section 173 Agreements.

The proponent proposed compensatory 173 agreements with owners of properties where noise and/or shadow flicker exceeded the prescribed standards.

In signing, residents agreed to be adequately compensated by the operator for their exposure to increased shadow flicker and/or noise as set out in the NZ standard, in breach of the permit conditions 14 and 24. However, in order to fulfil the requirements of the Planning and Environment Act, 1987, Section 173s must also be entered into and signed by the Responsible Authority.

As neither the Minister nor the relevant councils (at the advice of their respective legal departments) have entered into or signed any such agreement with the operator *excusing* non-compliance with conditions 14 and 24, these Section 173 Agreements do not meet the requirements of the Act. Therefore, post construction noise monitoring remained relevant and necessary at all properties where the operator knew that the New Zealand Standard was exceeded. Without valid 173 Agreements in place, the residents' preparedness to tolerate the non-compliance is irrelevant and inconsequential.

Department staff were advised by DPCD Legal in October 2010 that the Minister should not enter into the agreements.

Acciona has requested that you agree to enter into seven separate agreements that relate to conditions on the planning permits for the Waubra Wind Farm. All of the agreements are signed by Acciona company directors, as Pyrenees Wind Energy Development Pty Ltd and the registered proprietors of the affected land.

The other five agreements relate to property owned by parties who are not stakeholders in the wind farm. One of these agreements relates to conditions 14 and 24 on the Pyrenees permit. The other four relate to condition 14 of the Pyrenees permit.

Conditions 14 and 24 enable the proponent to enter into agreements with landowners who accept a decreased level of amenity in relation to noise and blade shadow flicker than the standards stipulated in the planning permit.

*It is recommended that you do not enter into any of the agreements.*⁴⁴

⁴³ CER FOI 65

- **A total of 3 - 4 impacted dwellings remain where the residents have not signed such a document**

This indicates Mr [REDACTED] awareness that there are a further 3-4 'impacted' dwellings exposed to excessive noise where compliance cannot be achieved

- **References to the 'Dean Report,' Mr Dean – lives in the area and has turbines on 3 sides of his property – had an independent noise testing done and this document is referred to as the Dean Report.**

Mr Dean of House 263, abandoned his Evansford property and workplace due to unacceptable impacts and health effects attributed to the excessive noise experienced from wind turbines. (Minister Guy told Acciona that he was not satisfied that Condition 14 was being complied with in relation to property 263 in his attachment to his letter dated 15/9/2011.)

The Dean Report was prepared by psycho-acoustician, Dr [REDACTED] of Noise Measurement Services. Dr [REDACTED] is referred to as an acoustic expert in a Ministerial Briefing State FOI document BMIN011632 (para 11).

In addition to the results in the MDA report, the findings in the Dean report were considered as a further evidence of non-compliance at Waubra Wind Farm.

Condition 14 (b) requires a 5dBA penalty for the presence of special audible characteristic, which would have the effect of causing a breach in compliance.

Two assessment days are listed covering 12 properties on 67 September 2009 and 9 properties on 31 August 2010. Noises identified include turbine swoosh, high frequency noise, turbine brakes, low frequency hum and mechanical noise. Subjective assessment is insufficient to rule out that these noises are special audible characteristics. ⁴⁵

ISSUES

The nature of the noise complaints from property owners near the Waubra Wind Farm are detailed in two reports by acoustic experts

A) *The Marshall Day Acoustics (MDA) post construction noise report commissioned by the wind farm operator and*

B) *The _____ (Dean) Report by Noise Measurement Services Pty Ltd, commissioned by _____ (Noel Dean) (a complainant).* ⁴⁶

The two reports indicate the likely presence of SACs which may be occurring at different times from different sources and may be potentially overlapping.

On the basis of the uncertainties in the supplementary MDA report, including the conclusions about SACs and the potential consequences for the marginal nature of compliance for a series of properties, DPCD and EPA remain concerned that noise compliance has not been achieved. ⁴⁷

⁴⁴ BMIN009222

⁴⁵ Attachment to Minister letter 15/9/11 p2

⁴⁶ BMIN011632

⁴⁷ ibid

The Clean Energy Regulator sees itself as an economic regulator and says it encourages scheme participants to “voluntarily comply” with all local, State/Territory and Commonwealth laws and approval requirements without Commonwealth oversight.

The CER accredited the Waubra Wind Farm before it was fully constructed and without any regard to post construction approval requirements with applicable state laws.

Minister for Planning, Richard Wynne eventually announced Waubra Wind Farm’s (doubtful) compliance six years after it started operating. But before his determination, full satisfaction of all state laws and requirements had never been satisfied. In the last six years Acciona has received more than \$100 million dollars-worth of Renewable Energy Certificates to which it was perhaps never entitled. All costs associated with the issue of those certificates have been wrongly passed on to electricity consumers.

How many other LRET accredited wind farms are operating while at odds with their planning permits? How many of these are getting RECs while they shouldn’t be?

At present, the CER simply asks scheme participants to tick a box to say whether they comply with laws or not. Even if undertaking a compliance investigation as it did at Waubra Wind Farm, the CER simply accepts the advice of the relevant state department and does not do its own due diligence. The Waubra investigation demonstrates how easily information can be distorted and misinterpreted, particularly when referring to matters of complex technicality like the very acoustic assessments necessary to determine compliance.

In order to protect the integrity of the RET scheme I believe there is a need to broaden the CER’s responsibilities to include annual audits of eligible renewable energy power stations to monitor any breaches and to ensure that accredited power stations do comply with all local, state/territory and Commonwealth laws. If the CER does not wish to broaden its responsibilities, the government should set up an independent authority to do so, on its behalf.

Term of Reference (i): Any related matter

In 2013, the Australian Financial Review published an article that claimed:

‘Rural landholders may face a disappearing pool of buyers and plummeting values of up to 60% because of neighbouring wind farms.’⁴⁸

‘Hearing voices: A narrative analysis of the Senate Inquiry into the Social and Economic Impacts of Rural Wind Farms’ identified three groups; local, (Neighbourhood); regional, (Region) and metropolitan,(distant) and examined their attitudes toward wind farms. The study found that those who live in the closest proximity to a wind farm were more likely to oppose wind farms.⁴⁹

⁴⁸ Wind farms win few fans -Oct 14 2013 <http://www.afr.com/real-estate/residential/wind-farms-win-few-fans-20131013-jgy9a>

⁴⁹ Hearing voices: A narrative analysis of the Senate Inquiry into the Social and Economic Impacts of Rural Wind Farms’ was written by Cathy Wagg, Mexie Butler, Sean MacDermott, Mary Johnson, Kaye Scholfield <http://researchbank.rmit.edu.au/eserv/rmit:15953/n2006032074.pdf>

The identifying data and its relation to proximity to wind farms are shown in Figure 1. The N group, those who also live adjoining or in daily contact with wind farms, were more likely to oppose the developments. The R group, people who also live in western Victoria but in regional towns, were more likely to express positive views. The D group, those living remotely from any Australian wind farms in cities or internationally, were split fairly evenly in this dataset between opponents and supporters of wind farms.

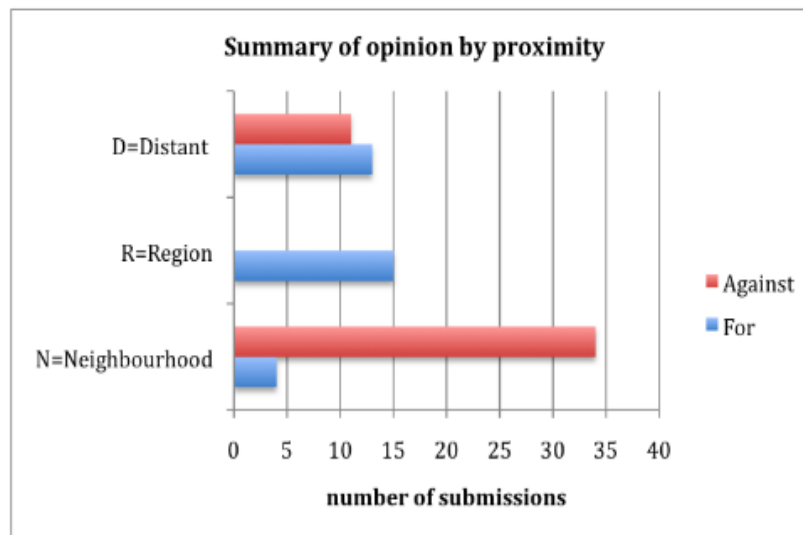


Figure 1: Summary of data by proximity and stance

Wind energy helps people feel happy about the transition from fossil fuels and comfortable about renewable energy's potential to stave off global warming.

Co-founder of wind farm-loving Greenpeace, Dr Patrick Moore has said that the wind industry is **"a destroyer of wealth and negative to the economy,"**⁵⁰

Moore, who now refers to himself as the "sensible environmentalist," cautions that the wind bubble is about to burst, commenting:

the (wind) industry destroys more jobs than it creates and causes energy prices to climb for all users;

The industry is a destroyer of wealth and negative to the economy;

They are ridiculously expensive and don't work half the time;

And no matter how many are built, they won't replace coal, gas or hydro or nuclear plants, because they are continuous and wind is not always reliable;⁵¹

⁵⁰ Wind farms blasted was written by Bob Boughner and published on January 5, 2012
<http://www.lfpres.com/news/london/2012/01/05/19203361.html>

⁵¹ ibid

More than a decade ago, environmentalist and founder of the Greens, Dr James Lovelock was asked about "global warming" and the potential of wind energy to form part of the solution. Dr Lovelock said:

At the best, wind power cannot provide more than a tiny fraction of the energy needs of civilisation. It's a nice idea. It looks good. It's showy. I think it's one of those things politicians like because it can be seen that they're doing something. But in practice, it's not really a useful remedy. ⁵²

The reality is that the Waubra Wind Farm power station is responsible for terrible community division, excessive audible noise, annoying shadow flicker and harmful low frequency/infrasound vibration impacts that cause intolerable sleep disturbances and a range of very real wind turbine related adverse health effects.

No matter what you might read about Nocebo nonsense or hear about 'positive engagement' strategies reducing complaints, I can assure you that the symptoms I have described are not imagined. Our complaints of adverse health effects and sleep deprivation are real. They are not due to scaremongering. We are not part of any fossil fuel backed anti-renewables lobby. We are not liars.

Because Waubra's turbines operate too close to homes we were just one family who has been forced to abandon our home. Our beautiful Lobbs Road is empty, uninhabitable.

These are the facts as we have lived them alongside an industrial power station- at ground zero and on the front line.

We recently built another, (with extra insulation, double-glazed, hush-glass windows and heavy draping and airconditioners). Our new house is at the very edge of our farm in Lexton, about seven kilometres away from the closest wind turbine. We don't mind the look of the wind farm, we are just grateful that we no longer suffer its impacts.

We are fortunate that we were in a position to be able to build another home. Others are not.

While Acciona's stakeholders are given heavy drapes, double glazed windows, pergolas and airconditioners to mitigate the undesirable impacts of the industrial noise caused by the Waubra Wind Farm, other non-stakeholders like us have left the area or purchased second homes to sleep and find respite.

I am worried about members of the community that have nowhere else to go. What happens to those who are seriously adversely impacted by wind farms but who cannot afford to relocate away from the turbines? Who will buy their homes? The picture below tells the real story in Waubra where there is a tough market trying to sell acoustically toxic homes. Many houses neighbouring the Waubra Wind Farm are uninhabitable. Several homes are worthless and unsaleable.

⁵² Wind Storm, reported by Charles Wooley aired on 60 Minutes on Sunday, November 14, 2004
<http://sixtyminutes.ninemsn.com.au/stories/charleswooley/259238/wind-storm>



Waubra

Only by acknowledging its significant problem with noise, particularly ILFN, can the wind industry hope to find a potential solution, achieve a social licence to operate and enjoy a viable future in Australia. A commitment to support transparent, consistent and robust regulation of all wind farms is also necessary if the wind industry and its supporters are to gain the confidence of communities approached to host future wind developments.

To deny noise and ILFN problems and dismiss sleep deprivation and adverse health impacts that we experienced while living too close to turbines achieves nothing. The more wind farms that are built without fixing the problem will only guarantee more complaints and increased community opposition.

Those who dream up or would tolerate nocebo theories are clearly not living and working alongside industrial wind turbines.