Chapter 4

The monitoring and compliance of windfarms

- 4.1 This chapter addresses issues relating to the current standards and processes for monitoring and ensuring the ongoing compliance of wind farms in Australia. The committee has received evidence from several stakeholders that:
- the current standards to monitor noise and environmental impacts are too lax;
- even these insufficient standards are not adequately monitored or properly enforced by the relevant authority in each jurisdiction;
- the Clean Energy Regulator (CER) is potentially in breach of its legislative requirements by awarding certificates to operators that are operating contrary to their planning approval;
- current monitoring and compliance frameworks in some state jurisdictions place considerable pressure on the resources of local councils and fail to utilise the expertise of State Environment Protection Authorities (EPAs); and
- there needs to be a better complaint handling mechanism.

Structure of the chapter

- 4.2 This chapter addresses the following issues:
- the current standards for monitoring noise and environmental impacts wind farms in Australia;
- the current role of State Governments and local councils in monitoring noise and environmental impacts from wind farms;
- the view of local Councils on their monitoring responsibilities;
- the view of State Governments and State EPAs on their monitoring responsibilities;
- wind farm operators' views on the adequacy of current monitoring and compliance arrangements;
- the role of—and the limitations on—the CER;
- the need to ensure independent and competent monitoring of wind farms;
- the case for State EPAs to take prime responsibility for the monitoring of wind farms;
- a fee-for-service licencing system;
- the case for greater transparency in the monitoring of wind farms; and
- the need for a complaints Ombudsman.

The committee's interim report recommends that there needs to be substantive reform in the way that wind farms are monitored in all Australian jurisdictions. These recommendations are in Box 4.1.

Box 4.1: Interim report recommendations relating to monitoring and compliance of wind farms

Recommendation 4

The committee recommends that eligibility to receive Renewable Energy Certificates should be made subject to general compliance with the *National Wind Farm Guidelines* and specific compliance with the NEPM. This should apply immediately to new developments, while existing and approved wind farms should be given a period of no more than five years in which to comply.

Recommendation 5

The committee recommends that the Commonwealth Government establish a *National Wind Farm Ombudsman* to handle complaints from concerned community residents about the operations of wind turbine facilities accredited to receive renewable energy certificates. The Ombudsman will be a one-stop-shop to refer complaints to relevant state authorities and help ensure that complaints are satisfactorily addressed.

Recommendation 6

The committee recommends that the Commonwealth Government impose a levy on wind turbine operators accredited to receive renewable energy certificates to fund the costs of the *Independent Expert Scientific Committee on Industrial Sound*—including the funding of additional research—and the costs of a National Wind Farm Ombudsman.

Recommendation 7

The committee recommends that the data collected by wind turbine operators relating to wind speed, basic operation statistics including operating hours and noise monitoring should be made freely and publicly available on a regular basis. The proposed Independent Expert Scientific Committee should consult with scientific researchers and the wind industry to establish what data can be reasonably made freely and publicly available from all wind turbine operations accredited to receive renewable energy certificates.

Current noise monitoring standards and the need to monitor infrasound

- 4.3 Currently, State Government planning regulations require a noise monitoring regime as part of wind farm development approvals. State Guidelines also set out these requirements at both approval and operation stages.
- 4.4 The Victorian Government uses 'the New Zealand Standard' as the basis for its noise monitoring of wind farm. The Victorian Government's 2015 *Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria* state:

See Australian Wind Alliance, *Answers to questions on notice*, available on the committee's website.

A wind energy facility should comply with the noise limits recommended for dwellings and other noise sensitive locations in the New Zealand Standard NZS 6808:2010 Acoustics – Wind Farm Noise (the Standard). The Standard specifies a general 40 decibel limit for wind farm sound levels, or the sound should not exceed the background sound level by more than five decibels, whichever is the greater. Under section 5.3 of the Standard, a 'high amenity noise limit' of 35 decibels applies in special circumstances. All wind farm applications must be assessed using section 5.3 of the Standard to determine whether a high amenity noise limit is justified for specific locations, following procedures outlined in clause C5.3.1 of the Standard. Compliance with the higher standard can typically be achieved by a change in the location, number of operating mode of the turbines. Planning permit conditions should require post installation noise compliance to be monitored and demonstrated to the satisfaction of the responsible authority...

Certification of a whether a wind energy facility complies with the Standard and other applicable noise requirements must be undertaken by an acoustic engineer. The wind energy facility operator must provide the responsible authority with appropriate documentation signed by an independent, appropriately qualified and experienced person. The certifier must be able to demonstrate to the responsible authority appropriate independence, qualifications and experience to carry out the task. Measurement and compliance assessment methods are set out in the Standard.²

4.5 South Australia and New South Wales use a noise standard developed by the South Australian Environment Protection Authority.³ The Queensland Government's draft wind farm code proposes a noise standard similar to the South Australian EPA's standard.⁴ The 2009 South Australian EPA's *Wind farms environmental noise guidelines* state:

The predicted equivalent noise level (LAeq,10), adjusted for tonality in accordance with these guidelines, should not exceed:

- 35dB(A) at relevant receivers in localities which are primarily intended for rural living, or
- 40dB(A) at relevant receivers in localities in other zones, or
- the background noise (LA90,10) by more than 5dB(A),

whichever is the greater, at all relevant receivers for wind speed from cut-in to rated power of the WTG and each integer wind speed in between.

The background noise should be as determined by the data collection and regression analysis procedure recommended under these guidelines

Government of Queensland, Department of State Development, *Infrastructure and Planning, Wind farm state code, Planning guideline—draft for consultation*, Appendix 5.

Government of Victoria, Department of Environment, Land, Water and Planning, *Policy and planning guidelines for development of wind energy facilities in Victoria*, 2015, p. 29.

³ Mr Steven Cooper, *Proof Committee Hansard*, Portland, 30 March 2015, p. 5.

(Section 3). It should be read from the resultant graph at the relevant integer wind speed. Compliance with the noise criteria should also be demonstrated for the approved developments in the zone adjacent to the wind farm.⁵

4.6 The Queensland Government recently released a draft state wind farm code (see chapter 3) which based noise limits on the South Australian EPA Guidelines.⁶ The New South Wales Government has developed draft noise guidelines for wind farms based on the South Australia guidelines and the New Zealand Standard:

In developing this guideline, consideration has been given to guidelines developed for overseas jurisdictions as well as those used regularly in Australia including the New Zealand and South Australian guidelines. In particular this document closely follows methodologies and practices presented in the 2009 South Australian document Wind farms - environmental noise guidelines and Australian Standard AS4959 – 2010 Acoustics – Measurement, prediction and assessment of noise from wind turbine generators.⁷

4.7 Dr Kim Forde argued in her submission that:

Monitoring on wind farms should be to the recognised international standards. The New Zealand and South Australian standards, that are commonly used, are recognised internationally as being of the highest levels, and therefore should continue to be implemented. Any changes should be justified based on valid research or evidence; or at least compared to one of those two standards, to ensure that it is valid.⁸

4.8 However, the committee expresses its fundamental concern that the current standards for monitoring wind farm noise in Australia are inadequate and incomplete. There are two limbs to the argument. The first is that there are concerns with the New Zealand Standard which many believe need to be reviewed in light of Australian conditions and current wind turbine technology. The second is that infrasound standards must be set and monitored.

Concerns with the New Zealand Standard

4.9 The committee notes that there are mixed views as to the adequacy of the New Zealand Standard. Acoustician Dr Bruce Rapley prepared a submission for the committee titled 'Systemic Failure of a Noise Standard: A Case Study of NZS6808:2010'. In the submission, he argued:

Government of South Australia, Environment Protection Authority, *Wind farms environmental noise guidelines*, 2009, p. 3.

Government of Queensland, Department of State Development, *Infrastructure and Planning, Wind farm state code, Planning guideline—draft for consultation*, Appendix 5.

Government of New South Wales, Department of Planning and Infrastructure, *NSW Planning Guidelines Wind Farms*, December 2011, p. 27.

⁸ Dr Kim Forde, Submission 65, pp 3–4.

In its current form, NZS6808:2010 can in no way protect those who live in standard New Zealand (or Australian) homes in close proximity to industrial wind turbines (less than 10 km). Given also that many homes are within less than 5 km of industrial wind turbines, it is easy to understand why so many complaints of adverse health effects have been lodged. The same situation is mirrored throughout the world, wherever industrial wind turbines have been built in close proximity to dwellings. ⁹

[T]he majority of the power in the acoustic spectrum is concentrated towards the low end. The egregious error that NZS6808:2010 makes is the assumption that this portion of low-frequency and infrasound has no effect on human receivers. Nothing could be further from the truth, yet many standards for wind turbine noise continue to perpetuate this myth. ¹⁰

In comparison to environmental noise at similar sound pressure levels, wind turbine emissions are more annoying and disturbing than aircraft noise, road or rail traffic.¹¹

4.10 Another eminent acoustician, Mr Les Huson cautioned against using the standard of another country:

In Victoria reference is made to a New Zealand standard. The problem with referring to a standard from a different country is that within that standard it refers to legislation from another country. In my view, that is fundamentally wrong because you cannot implement the requirement completely because it is a different set of legislation. More fundamentally, the process is based upon the ETSU-R-97 methodology from the UK. There are any number of references that have shed significant doubt on its ability to protect people from noise nuisance. ¹²

4.11 Victorian witnesses pointed to the need to revise the New Zealand standard given the new breed of larger turbines. Mr Tim Brew, for example, told the committee: 'It is obvious that the New Zealand standards of the 1990s for turbines a quarter of the size of the current ones are not working'. ¹³ Mr Andrew Gabb argued that the New Zealand Standard was not protecting rural residents and is now 'obsolete'. ¹⁴ The Pyrenees Shire Council observed:

Most of the permits issued were prior to the 2011 period, which included standards in the conditions and requirements to comply with the New Zealand standard 6808, 1988, which does have a fairly limited scope and direction on how to assess issues such as special aural characteristics. This has created difficulties and issues for those responsible for enforcing the

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⁹ Atkinson and Rapley Consulting Pty Ltd, Submission 409, p. 34.

¹⁰ Atkinson and Rapley Consulting Pty Ltd, Submission 409, p. 35.

Atkinson and Rapley Consulting Pty Ltd, Submission 409, p. 3.

¹² Mr Les Huson, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 61.

¹³ Mr Tim Brew, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 83.

¹⁴ Mr Andrew Gabb, *Proof Committee Hansard*, Portland, 30 March 2015, p. 74.

permits and, in a lot of cases, in determining compliance in that marginal range around the low 30s to 40 dBa noise contour. 15

Infrasound

- 4.12 Chapter 2 discussed in some detail the issue of infrasound (measured below 20 hertz) and the need for independent research into the effects of infrasound from wind turbines on human health. It highlighted the significant findings of acoustician Mr Steven Cooper at Cape Bridgewater.
- 4.13 This chapter highlights the absence of a standard on infrasound and the need for this standard to be introduced if monitoring and compliance activities are to be taken seriously.
- 4.14 The New Zealand Standard relates only to audible noise. As Mr Steven Cooper told the committee:
 - ...there is a wind turbine signature that is generated and that the dBA level which appears in permits, conditions and guidelines-so the New Zealand standard-do not cover infrasound and low-frequency noise. ¹⁶
- 4.15 The South Australian EPA's Guidelines essentially dismiss the presence of wind farm infrasound:

The EPA has consulted the working group and completed an extensive literature search but is not aware of infrasound being present at any modern wind farm site.¹⁷

4.16 However, the committee highlights a study published last year by researchers from the University of Adelaide which showed that, in contrast to the South Australian EPA's findings at the Waterloo wind farm¹⁸:

...there is a low frequency noise problem associated with the Waterloo wind farm. Therefore, it is extremely important that further investigation is carried out at this wind farm in order to determine the source of the low frequency noise and to develop mitigation technologies. In addition, further research is necessary to establish the long-term effects of low frequency noise and infrasound on the residents at Waterloo. This research should

17 Government of South Australia, Environment Protection Authority, *Wind farms environmental noise guidelines*, 2009, p. 3.

¹⁵ Mr Christopher Hall, Pyrenees Shire Council, *Proof Committee Hansard*, 30 March 2015, p. 34.

¹⁶ Mr Steven Cooper, *Proof Committee Hansard*, Portland, 30 March 2015, p. 4.

Government of South Australia, Environment Protection Authority, *Waterloo Wind Farm: Environmental Noise Study*, November 2013.

include health monitoring and sleep studies with simultaneous noise and vibration measurements.¹⁹

4.17 The inadequacy of a wind farm standard based on the New Zealand Standard is well recognised. The Tarwin Valley Coastal Guardians, for example, wrote in its submission:

The noise standard for BHWEF [Bald Hills Wind Energy Facility] is still NZS 6808: 1998. The slightly updated but still deficient 2010 version does not apply to the BHWEF permit. However, neither reiteration of NZS 6808 measures low frequency and infrasound. Both are constrained to the measurement of audible sound – noise, and wholly inadequate to regulate the full spectrum of WEF acoustic emissions. Their testing methodology for audible sound is flawed and neither version addresses the pressing need to specify acoustic monitoring instrumentation. ²⁰

4.18 Similarly, Mrs Theresa Grima of Lidsdale in New South Wales wrote:

Not only is there an issue with noise that the NSW EPA regulates but there is an issue with high levels of infrasound and low frequency noise that the various regulatory authorities fail to measure, regulate, and act upon to prevent serious harm to human and animal health. This needs to be addressed to adequately protect the health of the communities. ²¹

4.19 South Australian resident Ms Mary Morris also argued the need to monitor infrasound:

Currently, low frequency noise is not measured, noise monitoring results are not provided to affected residents, noise monitoring is not a transparent, open and honest process.

A thorough review of audible and inaudible noise measurements and monitoring relating to wind farms is long overdue and should be undertaken immediately by experts independent of the industry to protect residents where wind farms are planned.²²

4.20 The committee has sought evidence on whether emissions in the range of zero to 20 hertz can be monitored. Dr Geraldine McGuire drew the committee's attention to the complexities of measuring the sound of wind farms:

In terms of monitoring, wind farms are complex. I have worked in the mining and oil and gas industry for over 20 years and the monitoring there is complex, but from what I am learning about wind farms it is even more

Hansen K, Zajamsek B, Hansen, C. Noise Monitoring in the Vicinity of the Waterloo Wind Farm. Adelaide, Australia: University of Adelaide; 2014. See Professor Robert McMurtry, *submission 146*, Attachment i

²⁰ Tarwin Valley Coastal Guardians, *Submission 45*, p. 16.

²¹ Mrs Theresa Grima, Submission 374, p. 1.

²² Mrs Mary Morris, Submission 464, p. 3.

complex. It is not just about decibels; it is to do with how we measure the infrasound. It is not just about distances away—because of mountains being the shape they are and wind being the way it behaves, it is much more complicated than just how far away you are from the wind farms. It is really a lot to do with the shape of the mountains and your proximity to that particular aspect.²³

4.21 Acoustician Mr Geoff McPherson told the committee that there are techniques available to conduct this monitoring. The committee asked whether the equipment required would be expensive, to which he responded:

I think you pay for what you get. That equipment is available. The expertise is available, particularly in southern Australia. I do not think you should be looking too closely within Queensland for that...²⁴

4.22 The committee draws attention to the following comment and recommendation of New Zealand psychoacoustician Dr Daniel Shepherd:

A handicap of current noise standards, including the New Zealand standard (NZS6808R, 2010) which is used in some Australian states, is the use of the dBA metric. Zwicker (1999), a recognised global authority on noise measurement and noise abatement, questions the "enthronement" (p. 66) of the dBA scale in noise measurement practice. He demonstrates that, frequently, dBA measures are of no intrinsic use, and can produce misleading measurements. He also warns against the exclusive use of physical sound measures such as dBA in noise control situations.

Current noise standards relying upon dBA measures, such as NZS6808R, are not fit for purpose and should not be utilised. Instead, Australia should embrace the opportunity to produce a gold standard set of guidelines that are in line with modern research.²⁵

4.23 Chapter 6 of this report makes a recommendation along these lines.

The role of State Governments and local councils in monitoring wind farms

- 4.24 As with planning arrangements, there are various State-based arrangements for monitoring and ensuring the compliance of wind farms.
- In Victoria, the State Environment Protection Authority is not permitted to monitor wind turbine noise. This responsibility rests with local councils although the State Government is the decision-maker where there is evidence of a breach of compliance conditions. The State Government is responsible for front-end planning matters including issuing permits for new wind farms (see chapter 3).

²³ Dr Geraldine McGuire, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 62.

²⁴ Mr Geoff McPherson, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 40.

²⁵ E. Zwicker and H. Fastl, *Psychoacoustics: Facts and Models*, Springer, 1999.

- In South Australia, the State EPA regulates wind farms under the general protection duty in section 25 of the South Australian *Environment Protection Act 1993*. There is no licencing system in South Australia although every wind farm in the State has had a noise impact assessment undertaken at preand post-construction phases by independent acoustic consultants. In 2013, the State EPA conducted an extensive study at the Waterloo wind farm in response to complaints from concerned residents.
- In Queensland, the councils are currently responsible for monitoring and compliance although it is not clear whether this situation will remain under the State's new wind farm regime. ²⁶ In certain cases, the monitoring role has been left to an agreement between the council and the company with the company conducting the monitoring (see below).
- The New South Wales Government decided in 2013 to transfer responsibility for regulating large-scale wind farms from local councils to the State EPA. The State's wind farms have been brought within the EPA's established environmental protection licencing regime. The main environmental issue that the NSW EPA regulates via a wind farm licence is operational noise. However, the licence may also address other environmental issues during the construction phase, such as construction noise, dust and sedimentation. Chapter 6 of this report discusses these arrangements in more detail and recommends that all State Governments consider implementing a licencing system to regulate wind farms.

The view of local Councils on current monitoring arrangements

4.25 The committee has received evidence from various local councils commenting on their monitoring and compliance responsibilities. The Municipal Association of Victoria (MAV) emphasised the impost that these responsibilities currently have on its members' precious resources:

Councils have reported that they are receiving noise complaints under the Planning and Environment Act and noise-related nuisance complaints under the Public Health and Wellbeing Act. Compliance with the planning permit is determined by assessing applications against the planning permit conditions and the relevant noise standards.

...Over the past few years it has become clear that community confidence in the assessment of noise compliance is a principal concern for councils. Currently councils are largely responsible for undertaking this task despite its being well beyond the expertise provided by the functions of local government. A council is required to engage an acoustic engineer to peer

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See chapter 3; also, Mr Greg Chemello, Deputy Director-General, Queensland Department of Infrastructure, Planning and Local Government, *Proof Committee Hansard*, Cairns, 18 May 2015, pp 16–17.

New South Wales Environment Protection Authority, http://www.epa.nsw.gov.au/licensing/windfarmfaq.htm#Q13 (accessed 17 July 2015).

review noise reports at a financial cost ranging from \$8,000 to \$10,000 per assessment.²⁸

4.26 One of the MAV's members, the Moorabool Shire Council, emphasised that council revenue from rates is inadequate for councils to monitor wind farm operations. The Council stated:

The wind energy operators claim that the rate income (or income in lieu of rates) generated for each tower is adequate compensation for Councils that will incur additional costs. The costs for MSC in attracting and retaining staff who are qualified and skilled in town planning interpretation, noise monitoring of noise data and scientific analysis is estimated to cost \$200,000 in year one alone. With the addition of assets repairs mentioned above, the rate income is estimated to be a small proportion of the costs incurred by Council.²⁹

The Glenelg Shire Council highlighted the difficulties inherent in current 4.27 arrangements whereby the local councils have responsibility for compliance and monitoring, but the State Government—inexperienced in compliance—is the decision-maker. In response to a question on notice, the Shire stated:

Undertaking the ongoing enforcement of wind farm permits is problematic for Council where the decision is made by State Government. The decision makers are unlikely to have had any significant experience in ongoing operational compliance of wind farms. In this scenario there is low confidence in compliance of the wind farm being achievable. Further if the rules changed, this would need to consider how existing wind farm permits would be impacted. For example if new rules found the \$1 billion Macarthur Wind Farm (in Moyne Shire Council) non-compliant, would there seriously be an expectation that a small rural Council be taking legal action to shut down such a major private investment? In Council's submission it was stated that having national guidelines would assist Councils in both monitoring and addressing complaints against state legislation. This will provide consistency for industry, residents and responsible authorities in developing and operating wind energy facilities.³⁰

The Regional Council of Goyder explained that while the South Australian 4.28 EPA has the lead role in monitoring and compliance, the council has requested the EPA's involvement where specific complaints have been made:

As far as the enforcement goes, that is basically left to the EPA in South Australia, which—perhaps I should not say it here—seems to me to be fairly poorly funded. I would like to see a lot more monitoring of noise

30 Glenelg Shire Council, Answer to question on notice from public hearing, 30 March 2015, p. 3, (received 5 June 2015).

Mr Gareth Hately, Municipal Association of Victoria, Proof Committee Hansard, Melbourne, 9 28 June 2015, pp 53–54.

²⁹ Moorabool Shire Council, Submission 375, p. [3].

levels at specific points. We have strips of wind farms that run along three adjoining ranges. It would certainly be very interesting to have a lot more monitoring of the noise levels between those wind farms. It is left to the EPA. If we have a problem then we ask them to put a monitoring device in there to try to get some sort of idea as to whether or not the noise levels are being exceeded.³¹

4.29 The Council of Goyder added:

What I would like to see...is that where there are persistent complaints about noise there should be a full-time monitoring arrangement, probably financed by the owners themselves, and where noise exceeds a certain level in certain conditions, then those turbines should be shutdown for a period of time. They do not like that idea, but it is a cheaper way than actually removing or shifting the turbines altogether. ³²

4.30 The Tablelands Regional Council (TRC) in far north Queensland expressed its frustration at the current situation with compliance and monitoring arrangements in the State:

...one of the real concerns we have is about the monitoring and compliance conditions. We know, from our Windy Hill experience, which cost far more than any little council can pay, that the flow-on effect from that is that, if we cannot take them on, how can the residents?

We have complainant residents, which is why Tablelands Regional Council set about its task of trying to make them comply. All of the business you heard about 'We've done so much testing,' is a nonsense. The first testing which we required after the complaints in 2011, when RATCH bought the property—they did six hours of testing. They were supposed to test over a three-month period. Our council said, 'That's not good enough. Do it properly.' In the end, we had to go to the Planning and Environment Court, hundreds of thousands of dollars later. ³³

4.31 The TRC argued that local councils could and should do monitoring and compliance work but that they need to be properly resourced to do so:

...you heard Mr Chemello [the Queensland Government] say he has no acousticians and no experts—just a planning department doing all this important noise stuff. Councils can do that but they have to be funded to do it, and what needs to happen is there needs to be security for costs in the approvals process, so that councils can properly monitor. We hear yet again that this monitoring is probably going to be in the hands of the developer.

32 Councillor Peter Mattey, Mayor, Regional Council of Goyder, *Proof Committee Hansard*, Adelaide, 10 June 2015, p. 38.

Councillor Peter Mattey, Mayor, Regional Council of Goyder, *Proof Committee Hansard*, Adelaide, 10 June 2015, p. 34.

Councillor Majorie Pagani, Tablelands Regional Council, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 28.

We saw what happened there with Windy Hill: it does not work. We need proper funding to enable us to do it.³⁴

4.32 The MAV told the committee that its discussions with the State Government has been through a Working Group:

The working group is made up of two layers. There is the CEOs and mayors group, which is focused primarily around advocacy—the arrangement that we have brokered with the Environmental Protection Authority came from that group—and there is a wind farm officers group, which is really focusing on providing a networking opportunity for officers who are dealing with assessing applications under the previous regime but also dealing with monitoring and compliance issues.³⁵

4.33 The committee's interim report flagged the committee's interest in these discussions and in particular, MAV's proposal of a fee for service licencing system. This issue is covered later in this chapter and again in chapter 6.

State Governments' views on current monitoring arrangements

4.34 The Queensland Government noted that it was yet to develop a system to monitor compliance for infrasound. Mr Greg Chemello of the State Department of Local Government and Planning told the committee:

If we get the state-wide system and the state-wide code, one of the advantages of that is when research gets to the point where we have the evidence, which I think we talked about earlier on—that is, where we have got a much better way of measuring and dealing with it—we can then change that code relatively quickly and then all development approvals need to comply with that code.³⁶

4.35 The Queensland Government told the committee that in terms of the process for monitoring the soon-to-be-developed Mount Emerald wind farm:

We still have to work that through. That is a process where they (RATCH Australia) have to do a report and we need to agree with them on the process of monitoring. I think it gets back a little bit to the issue that you were talking about earlier on—the frequency of monitoring. That has not been specified in the development decision. That is a matter that we will need to agree, 'we' as in the chief executive of my department, who is the planning entity for SARA. The report needs to be done to the satisfaction of our chief executive and those sorts of arrangements should be worked out through that. It may well be a monitoring process of, every year or two or

Councillor Majorie Pagani, Tablelands Regional Council, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 30.

³⁵ Mr Gareth Hately, Municipal Association of Victoria, *Proof Committee Hansard*, 9 June 2015, p. 56.

³⁶ Proof Committee Hansard, 18 May 2015, p. 19.

three, looking at what we have done. In some instances, not wind farms, we have used a scale-back monitoring process: you start monitoring more intensively and then, as the years go by, if there are no issues you scale back on the frequency of the monitoring.³⁷

4.36 The Victorian Government noted in its submission that it has improved its monitoring and compliance framework as part of the recent updating of wind farm guidelines.³⁸ It explained that:

Some older permits for wind farms do not have the ability to compel operators to undertake further testing. In these instances further acoustic testing could be undertaken by the council if warranted to address specific issues or concerns.³⁹

4.37 The South Australian EPA told the committee:

...we regulate wind farms under the South Australian Environment Protection Act, under the general duty provisions in section 25. We use this provision because wind farms are not licensed in South Australia. So our involvement is limited to the technical aspects, particularly around noise. ⁴⁰

4.38 While acknowledging that infrasound is emitted from wind turbines, the South Australian EPA argued that based on NHMRC advice, it is not emitted at levels that can harm human health and that should be regulated. It added:

One of the challenges—and I would be interested to see research in this area—is whether there might be some sort of impact from infrasound below perception levels. With infrasound, the lower the frequency, the harder it is to perceive, and it is generally accepted that you cannot perceive infrasound until 85 dBG, which is the range we tend to use. The levels we are finding near wind farms are much, much lower than that; they are in the order of 30 dBG. So it would be of interest if people did research in that area. 41

37 Mr Greg Chemello, Deputy Director General, Queensland Department of Infrastructure, Planning and Local Government, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 19.

³⁸ Policy and planning guidelines for development of wind energy facilities in Victoria, 2015

Government of Victoria, Department of Economic Development, Jobs, Transport and Resources, *Submission 112*, p. 5.

⁴⁰ Mr Peter Dolan, Operations Director, Science Assessment and Planning, Environment Protection Authority, *Proof Committee Hansard*, Sydney, 29 June 2015, p. 12.

Mr Peter Dolan, Operations Director, Science Assessment and Planning, Environment Protection Authority, *Proof Committee Hansard*, Sydney, 29 June 2015, p. 12. See also: Victorian Government Department of Health, *Wind Farms*, *sound and health: Technical information*, 2013, p. 8, http://www.infigenenergy.com/Media/docs/Wind-farms-sound-and-health-2c38d957-bb49-4d8a-847a-fb84c2d2b3ba-0.pdf (accessed 20 July 2015). This report states that 'like the human ear, the A-weighted network [dBA] is less sensitive to low frequencies. Therefore, the C-weighting [dBC] has been developed to measure sounds with a significant low frequency component, and the G-weighting [dBG] has been developed to measure sounds in the infrasound range."

Residents' view of monitoring and compliance

- 4.39 The committee stated in its interim report that 'it is dissatisfied with the current monitoring and compliance processes which it considers to be a patchwork and which have caused considerable community angst and frustration'. The committee has received many submissions from the residents of nearby wind turbines complaining of the lack of adequate monitoring and compliance and the incapacity of local councils to perform the role. It suggests that there is an overwhelming lack of confidence within communities in how wind farms are required to comply and, therefore, in the findings and transparency of compliance reports.
- 4.40 The following extract, from Ms Anne Gardner, an adjoining landholder at the Macarthur wind farm, gives a sense of the agitation and distress that poor compliance processes have caused:

Monitoring and Compliance governance of wind farms in Victoria has been, and still is AN ABSOLUTE SHAMBLES. No doubt the previous Minister for Planning Matthew Guy wanted to rid himself of this onerous responsibility, so he hand balled it over to local Shire Councils, which DO NOT HAVE THE KNOWLEDGE, EXPERTISE nor the FINANCIAL CAPACITY to handle such complex responsibilities, particularly as they involve people's health and wellbeing, apart from other issues. We all thought our own Moyne Shire would have responsibly represented our best interests. However, not to be...... ⁴³

4.41 Mr Donald Thomas, an adjoining landholder at the Waubra wind farm, also complained of the complete inadequacy of efforts to monitor the wind farm operator's compliance:

The noise monitoring was not done in accordance with the New Zealand Standard NZS 6808:1998. The installation of the equipment was not done by a qualified person. No specification of the equipment was provided. The equipment was not placed within the specified NZ Standard area. The timeframe was inadequate. It should have been there for a week, but was taken away after a few days. Testing should be done under similar conditions to the period of which complaints were made. No background noise data was collected. The Waubra Wind Farm staff members insisted noise compliance obligations had been met. At this meeting I requested that these 2 staff members showed where the test results showed compliance. They could not and conceded that the test results did not show compliance but in their view did not show non-compliance.

⁴² Senate Select Committee on Wind Turbines, *Interim Report*, June 2015, p. 10, http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Wind_Turbines/Wind_Turbines/Interim_Report (accessed 20 July 2015).

⁴³ Ms Anne Gardner, Submission 208, p. 12. Emphasis in original.

⁴⁴ Mr Donald Thomas, Submission 197, p. 1.

Box 4.2: The Victorian State Government's failure to enforce compliance of the Waubra wind farm

The Victorian State Planning Minister was informed by his department that the Waubra wind farm was non-compliant with noise limits as early as 2010. However, the former minister failed to officially determine non-compliance. Additionally, the Minister avoided the compliance pathway specified in the planning permit and instead negotiated with the operator for several years about the development of a new Special Audible Characteristic (SAC) testing methodology. This methodology was neither compatible with, nor executed in accordance with, the applicable New Zealand standard—6808:1998.

These matters were described in detail by Mrs Samantha Stepnell (submission 470):

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 (Department of Planning and Community Development). We told Mr [Paul] Jarman 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 NZ6808:1998. 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 Jarman 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.

The committee has learned that the current Victorian Planning Minister recently declared that the Waubra wind farm is compliant with noise limits. His determination relied upon the SAC testing methodology as described.

4.42 Similar concerns were expressed by Mr Crispin Trist, a local resident in close proximity to the Cape Bridgewater wind farm. In his submission, Mr Trist referred to an acoustic assessment report which identified non-compliance at his property. These memos identified non-compliance at several Cape Bridgewater properties on multiple occasions throughout the noise monitoring period.⁴⁵

Box 4.3: When is a 'compliant' wind operator not compliant?

In his submission, Mr Crispin Trist provided a copy of Marshall Day's noise monitoring memo (dated 31 July 2009) showing non-compliance of Pacific Hydro's Cape Bridgewater wind farm. In relation to House 63 (Antil) of the Cape Bridgewater wind farm as measured between 29 May 2009 and 12 June 2009, the memo stated:

The NZ6808 limits are significantly exceeded for the wind speed range 5–11m/s. (Submission 251, p. 3)

However, Pacific Hydro has provided the committee with a copy of Marshall Day Acoustics' 'Cape Bridgewater Wind Farm Post-construction Noise Compliance Assessment' report dated 23 July 2010. This report concluded:

It was found that noise emissions from the Cape Bridgewater Wind Farm comply with the NZS6808:1998 noise limits at Houses 1, 2, 46, 54, 63 and 70 at all assessed wind speeds. (p. 22)

This is an example that shows how the compliance process can be easily manipulated by operators and the acousticians they pay to get the report they want. It is directly contrary to the evidence of Mr Oliver Yates of the Clean Energy Finance Corporation at a Senate Estimates hearing on 25 February 2015 (pp 60–61):

Senator MADIGAN: Recent acoustic investigation undertaken at stage 2 of Pacific Hydro's Portland project revealed a correlation or a trend between the occurrence of specific infrasound frequency that occurred at various phases of operation at the Cape Bridgewater power generation facility and the residents' reports of adverse sensation and health effects. This could have ramifications under the Public Health and Wellbeing Act 2008. If so, would the facility be in breach of conditions relating to its financial arrangements and contractual obligations with the CEFC?

Mr Yates: All projects are required to comply with the law. Currently it is dependent upon whatever planning permits or requirements are there at that site. If the project fails to meet its compliance obligations, there is typically a right of termination of the funding requirements under the facilities. We do expect people who are borrowing from any financial institution—it is common, whether you are public or private—to use the money in a way which is used for lawful purposes and, if it is not used for lawful purposes, it is unlikely that the money would be available for very long; it would typically be an event of default.

Senator MADIGAN: Did the CEFC make sure that it had appropriate evidence to satisfy that Portland Wind Energy Project's earlier wind farms had met all conditions of planning permit and approval requirements before providing the \$70 million in debt financing to Pacific Hydro for the refinancing of these stages and stage 4? Whose money is at risk here if these projects have not met their planning permit conditions?

Mr Yates: In relation to the first question, there is an extensive due diligence process that we go through. Obviously, every lender does that, because you do not want to lend to a project which is in default. That relies upon detailed legal due diligence and specialist due diligence in relation to any project that we lend to....

Mr Yates: We require external law opinions as well, from external law counsel, who will actually go through and check to make sure that any of those items or representations that the company has made are actually legitimate. Obviously, you do expect companies to make valid representations, but it is not for us to take those representations without due inquiry, to check the validity of whether those representations are actually true.

Later in his testimony, Mr Yates admits that there is a problem:

Senator MADIGAN: This is my final question, Chair: the other day I asked a question of the Clean Energy Regulator. I asked whether they have an unambiguous statement from the Victorian Minister for Planning as to whether the facility was compliant or non-compliant, and they said they have neither.

Mr Yates: Yes.

Senator MADIGAN: They have neither; so, in fact, it is in the demilitarised zone—no-man's land. It is neither compliant nor non-compliant. But you lend money on a thing that they have told me is neither compliant nor non-compliant. There is not a definitive statement as to compliance.

Mr Yates: I think the question goes to legality. The project is legally entitled to operate. I agree with you: it is a ridiculous world where people cannot get clarity in relation to this. This is a planning failure, in my view, and a minister, a government or a responsible entity need to actually draw a line and say whether it is compliant or non-compliant. (Senate Economics Legislation Committee, 25 February 2015, pp61–62)

4.43 Mr Colin Walken, an adjoining landholder at the Windy Hill wind farm in far north Queensland, sought for years to have the operator—Stanwell—meet compliance. As he wrote in his submission:

I have been seeking the assistance of council to enforce compliance of the various operators since 2000. Some 12 years later I continue to suffer; my mental health continues to deteriorate; my living circumstances become less and less bearable as time passes. It is wholly unreasonable to expect a constituent to suffer as I have for 12 years without any or any adequate steps being taken by the council or its predecessor. Council will be aware that the former operator, Stanwell, admitted in 2001 they were non compliant. Stanwell did noise monitoring in 2003. Again in 2007 they acknowledged that the turbines were non-compliant (according to the noise monitoring done in 2003). However, they did not supply me with the data. Consequential upon their admitted non-compliance, Stanwell paid me \$4000 in 2007 to insulate the roof, which had little to no effect. That was prior to the sale of the wind turbine facility to Transfield Services, and then to the current operators. No remedial steps have been taken by the latter. 46

4.44 Mr Roger Kruse noted in his submission that he and his wife had requested that Energy Australia, the Waterloo wind farm operator, conduct noise monitoring at their property. While the company obliged, Mr Kruse questioned whether the acoustic report's findings showed compliance:

Data was apparently not collected for the first 2 months due to equipment failure. This was unfortunate as the windfarm was very noisy on the days that we were home. I have attached the report from Marshall Day Acoustics entitled Waterloo Wind Farm – Kruse Monitoring. I find it interesting that the noise levels can be above 40dB, but the line of best fit is below 40dB (pg11, Marshall Day Acoustics Rp 006 2010277ML). To me this means that the windfarm can be noisy at times, but it is still within the EPA guidelines. It makes me wonder about the EPA guidelines. Are the EPA

guidelines reasonable, especially given that there was no distinction between night and day noise in this report?⁴⁷

4.45 Mr and Mrs John and Sue Dean, adjacent landholders to the Moorabool wind farm, identified a range of concerns with the planning and compliance process, including the equipment used to conduct the noise assessments and the absence of field surveys in the flora and fauna assessments:

Compliance of the proposed Moorabool windfarm is in serious doubt. Reports submitted to the Hearing were inaccurate and faulty, had been conducted under very brief or inappropriate periods and tailored to meet the developers requirements.

The equipment used to measure sound was not supposed to be used below 30dB (manufacturers specifications), the monitoring equipment was not calibrated as required by the New Zealand Standard referred to by the Victoria Planning Guideline and no confirmation was provided to confirm the loggers were not outside the calibration/verification use by date.

. . .

Shadow flicker reports were questionable. This report was peer reviewed resulting in contradictions to the number of shadow hours for neighbouring properties. In some cases the shadow hours were identified as exceeding the allowable.

The fact that these studies were not sufficient will place a huge reliance on the council to ensure compliance in all areas is met. We very much doubt they will have the resources or capabilities to do so. It also brings into question the application of and integrity of the national wind farm guidelines. Our experience has been that the windfarm developers select the parts of the guidelines they wish to adhere to and discard the rest. 48

4.46 Some residents have taken matters into their own hands, conducting their own monitoring. In New South Wales, *Residents against Jupiter Wind Turbines* was established in the Tarago area to oppose the Jupiter wind farm. Mr Mark Tomlinson described the group's efforts to monitor background noise:

A subcommittee was formed, now known as the noise committee, and members of this committee are tasked with investigating various aspects of wind turbine noise. Some of these areas are noise propagation and the effects of topography and geographical spread, the relationship between multiple turbines and wind shear relating to international standards—just to mention a few.

My role as a member of the noise committee is to investigate the background noise monitoring process as outlined in the various wind farm guidelines used in New South Wales. This role involves monitoring equipment set-up, data collection, data analysis and preliminary findings

⁴⁷ Mr Roger Kruse, Submission 231, p. 2.

⁴⁸ Mr and Mrs John and Sue Dean, *Submission 63*, p. 1.

reports. This has also led into the investigation into wind turbine infrasound. The committee purchased industry standard class 1 noise monitoring equipment and use the current New South Wales draft wind farm guidelines and the 2003 South Australia wind farm guidelines as guiding documents, as used by the Department of Planning and Infrastructure.

In January 2015, we commenced a monitoring program to ascertain the ambient environmental background noise at six properties around the proposed wind farm. We have currently completed five and, as a result, have discovered numerous deficiencies within the guidelines used for wind farm approvals. The major deficiencies include removal of extraneous noise; wind over microphone; position of monitoring equipment; checks and balances as to the accuracy of noise monitoring reports submitted by developer-paid acousticians; ongoing compliance monitoring; and others listed in our submission...

We believe the current wind farm guidelines are in no way adequate and must be amended as a matter of urgency.⁴⁹

The view of wind companies on monitoring and compliance

4.47 Unsurprisingly, wind farm companies themselves have no quarrel with current monitoring and compliance arrangements of their operations. Trustpower told the committee:

...we believe that wind farms in Australia are governed by well-established robust compliance requirements—and some states are amongst the most stringent in the world—and that the monitoring and governance arrangements currently in place are adequate. ⁵⁰

4.48 Trustpower explained to the committee that it conducts its own monitoring:

Part of the conditions of approval at our Snowtown Wind Farm—again, I can talk from our South Australian or Australian experience—is that we have ongoing monitoring, some of it actually voluntarily and not necessarily strictly according to planning approval conditions. We do annual surveys of, for example, wedge-tailed eagle breeding sites and mortality. There is an obligation to report on any mortality findings. ⁵¹

4.49 AGL recognised that where turbines had not been compliant, they were stopped until a solution was found. Generally, however, it emphasised that the results showed its compliance with noise monitoring standards:

Mr Clayton Delmarter, Engineering Manager, Trustpower Limited, *Proof Committee Hansard*, 10 June 2015, p. 24.

⁴⁹ Mr Mark Tomlinson, *Proof Committee Hansard*, Sydney, 29 June 2015, pp 46–47.

Mr Rontheo van Zyl, Trustpower Ltd, *Proof Committee Hansard*, Adelaide, 10 June 2015, p. 27.

...over 40,000 hours of noise monitoring was conducted at AGL's Macarthur Wind Farm with the results demonstrating the compliance of the project with the acoustic requirements of the Planning Permit. In the event of exceedance of limits, the developer is obliged to make good and retest. AGL has in the past restricted turbine usage at another project with underperforming turbines until a solution was sourced and retesting conducted. In addition to regulatory noise monitoring, AGL also undertook a voluntary investigation into the infrasound levels at the Macarthur Wind Farm (with results released in 2013) to further alleviate community concerns around noise. The research measured infrasound and low frequency noise at residences located 2.7 and 1.8 kilometres from the nearest turbine before any turbines were operating, when approximately 105 of 140 turbines were operating and when all 140 turbines were operating. This research demonstrates that there was no measurable change in the infrasound levels measured before and after construction of the Macarthur Wind Farm. 52

4.50 Infigen drew the committee's attention to monitoring in New South Wales:

In NSW, the Government decided to conduct an additional follow up noise audit of their wind farms in 2012 despite all of their wind farms successfully passing noise compliance audits undertaken just after each wind farm was commissioned. The NSW Government chose an independent acoustic engineer who had appeared on behalf of wind farm opponents in two environment court cases to conduct the audits. After the additional noise audit was completed and the data analysed, all three wind farms, including two operated by Infigen Energy, were found to be compliant with their noise criteria. ⁵³

4.51 The committee finds the evidence of wind farm operators on their fulfilment of monitoring requirements entirely unconvincing and notes that wind farm operators do not have the authority to comment on noise compliance audits which are not their own.

The Clean Energy Regulator and its legislative requirements

- 4.52 The terms of reference of this inquiry ask how effective the Clean Energy Regulator (CER) is in performing its legislative responsibilities. Submitters and witnesses to this inquiry have expressed strong concerns about the need for the federal government to give the CER increased powers to suspend a wind operator's accreditation and penalise the company for breaching its approval conditions. The committee share these concerns.
- 4.53 The CER oversees the operation of the Renewable Energy Target. Part 2 of the *Renewable Energy (Electricity) Act 2000* (REE Act) sets out the CER's functions

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⁵² AGL Energy Ltd, Submission 83, p. 5.

⁵³ Infigen, Submission 425, p. 12.

and powers. The CER has responsibility for accrediting power stations as part of the RET scheme, which enables power stations to receive certificates. The CER does have powers (Part 2, Division 8, section 30) to suspend accreditation if a power station is not operating in accordance with a planning approval.

4.54 In its submission to this inquiry, the CER explained how it administers the law:

...the Regulator accredits power stations that meet the eligibility requirements set out in the REE Act and the REE Regulations. It monitors and facilitates compliance with that legislation, primarily by conducting its own investigations and working with relevant Commonwealth, State and Territory authorities where appropriate (including the police). The Regulator has always exercised, and will continue to exercise, its monitoring and enforcement powers in accordance with the relevant legislation and Australian Government Investigations Standards. The agency has assembled a team of appropriately qualified and experienced investigators to whom all allegations of breaches of administered legislation are referred.⁵⁴

... Where the Regulator has any potential concerns over the creation of certificates [Renewable Energy Certificates (REC)], it may undertake on site monitoring visits. As stated earlier, any such visits are not for the purpose of assessing other jurisdictions' approval conditions. ⁵⁵

A reactive regulator dependent on state authorities' monitoring systems

4.55 The CER is not a proactive investigator. It is not responsible for conducting compliance and it does not independently assess specific compliance with the conditions in planning approvals. Rather the CER is reliant on approval from the relevant state authorities that a wind farm operator is compliant. In the case of Queensland, for example, the wind farm company would reach an agreement with the State Department of Infrastructure and Planning in terms of the frequency of monitoring. It is the obligation of the company to conduct the monitor and produce reports to the State Government. There are penalties if the company breaches the conditions of the development approval.

4.56 The Regulator's own submission gave the example of the appeal against the Gullen Range wind farm in New South Wales. The Planning Assessment Commission

⁵⁴ Clean Energy Regulator, Submission 93, p. 12.

Clean Energy Regulator, Submission 93, p. 7.

⁵⁶ Clean Energy Regulator, submission 93, p. 5.

Mr Greg Chemello, Deputy Director General, Queensland Department of Infrastructure, Planning and Local Government, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 22.

Mr Greg Chemello, Deputy Director General, Queensland Department of Infrastructure, Planning and Local Government, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 23.

(PAC) in NSW issued a draft order to the operator (New Gullen Range Wind Farm Pty Ltd) requiring that it show cause why nine turbines should not be relocated to the originally-approved location or removed. The operators then commenced 'Class 4 Proceedings' in the Land and Environment Court (NSW) challenging the PAC determination. Despite the finding of the PAC, the CER states that:

...it cannot be reasonably satisfied that a contravention of the law is occurring. The Clean Energy Regulator has had regard to a number of matters in coming to its preliminary conclusion, including:

- (a) there is a genuine dispute as to whether the turbines are in unapproved locations and what constitutes 'minor' movement;
- (b) the NSW Department has not progressed to issuing a final order;
- (c) the PAC determination was only in relation to a modification of planning approval, rather than a finding of non-compliance with the original planning approval;
- (d) there has been no admission of any contravention of the law by the operators of the power station; and
- (e) the matter is currently before the Land and Environment Court in what appears to be a genuine, rather than frivolous dispute.

The Regulator continues to monitor the matter and will, if new evidence or information comes to light, further consider exercising the power to suspend accreditation.⁵⁹

- 4.57 This 'wait and see' approach seems entirely inadequate. The committee is aware that the regulator believes it is constrained in its capacity and possibly its willingness to suspend the accreditation of a wind farm operator. It can only impose a penalty once non-compliance is established. At that point, the operator adjusts its behaviour, become compliant and a penalty can no longer be applied. The CER needs to have the ability to retrospectively say, 'You have done something wrong and you are going to pay a penalty'.
- 4.58 Some submitters expressed their disappointment at the lack of assistance provided to the CER in cases where an operator had breached approval conditions. Put simply, how can the CER perform its role effectively when there is inadequate monitoring and compliance of approval conditions? Dr Robert Thorne wrote in his submission: '[T]o the best of my knowledge, no wind farm in Victoria or South Australia employs continuous monitoring to ensure compliance with planning approval conditions'. He gave the example of the Cape Bridgewater wind farm operated by Pacific Hydro:

The Cape Bridgewater approval conditions issued by the Council (Glenelg Planning Scheme 2004) has...conditions [that] are subject to the "satisfaction of the Minister for Planning" and apply to four wind farms.

I am advised by residents who have sourced all the approval documents from Glenelg Shire Council that there is no "satisfaction" document from

⁵⁹ Clean Energy Regulator, *Submission 93*, pp 14–15.

the Minister and there is no formal complaint process as required by the conditions. I have reviewed the approval documents and cannot see any document that establishes acceptable noise limits for the wind farms.

In my view, therefore, the following outcomes follow:

- The wind farm operator cannot say the wind farm is in compliance with its approval conditions relating to noise as no approval conditions exist in fact.
- Therefore a compliance certificate cannot be given to the Clean Energy Regulator.
- Therefore the power station cannot be accredited.

Consequently the failure of the authorities responsible for checking compliance with planning approvals have failed in this statutory duty and have failed the duty of care that they owe to the affected residents. Further the planning authorities including the Minister have failed in their duty of care to the Clean Energy Regulator. ⁶⁰

4.59 The committee received evidence on the need for the federal government to act to correct the passivity of the CER. Mr Bryan Lyons of Wind Energy Queensland told the committee:

Given the problems created by the federal legislation, on any 'fair go' argument the federal government must bear the responsibility to fix it. The system that must be set up for the protection of the Australian citizens and interests must cover at least the following: accreditation approvals with adequate conditions to protect ordinary Australian citizens such as the Walkdens and the Newmans; adequate, competent, independent, regular monitoring and testing of compliance at the cost of the operator; effective enforcement of compliance at the cost of the operator, including removal of the subsidy by removing accreditation for serious or repeated breaches of conditions; adequate and effective conditions for removal of the wind turbines at the end of their economic life; and reinstatement of the land at the cost of the operator. ⁶¹

4.60 Even the CER indicated that improvements could be made to the compliance process:

...the Select Committee might consider whether the Regulator's current legislative tools could be enhanced to ensure that only compliant activity is rewarded, and that economic disincentives are commensurate with any contravention. ⁶²

4.61 One suggestion, for a national wind farm noise regulator, was flagged by Wind Industry Reform Victoria (WIRV). As it told the committee:

61 Mr Bryan Lyons, Wind Energy Queensland, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 57.

⁶⁰ Dr Bob Thorne, Submission 155, p. 7.

⁶² Clean Energy Regulator, Submission 93, p. 16.

There is a school of thought that they become the national turbine noise police and be clearly instructed to issue RECs only to those wind facilities which are on a very regular basis shown by their testing and auditing to be compliant. That would be a noise policeman with real teeth and a big improvement. It should also be a reference point for the Clean Energy Finance Corporation's lending activities. If not the CER then let there be a stand-alone national noise policeman, which must be referred to before RECs or loans are issued.⁶³

4.62 WIRV described as 'highly significant' that the Australian Wind Alliance is now advocating improved monitoring and compliance regimes. It stated:

It is critical that monitoring and compliance of wind farms is robust and responsive to community concerns.

Compliance of wind farms with applicable regulations is in many cases devolved to the local council level, who are often under resourced and lack the appropriate skill base to execute this work properly.

Postconstruction noise monitoring is generally done by acoustic consultants retained by the developer. Submission 111 to this Inquiry from Glenelg Shire Council has suggested that postconstruction and ongoing monitoring work be done at arms' length from developers.

AWA sees merit in this idea and would welcome it as a way to increase the community's trust in the process. ⁶⁴

The need to ensure independent and competent monitoring of wind farms

4.63 In addition to setting appropriate compliance standards, an important theme of this inquiry has been the need for wind farms to be monitored competently and independently. Currently, the evidence strongly indicates that this is not the case. The nature of the problem was put well by Dr Michael Crawford in his submission:

One of the fundamental problems with existing arrangements for approval and regulation of wind farms is the extensive discretion, in matters large and small, given to officials who frequently have no relevant expertise about those matters. This is in the context of pressure at the political level often to wave proprosals [sic] through. 65

...there is very little effective monitoring of wind farm noise – even in relation to the ineffective noise conditions imposed on wind farms. No doubt other submissions will deal with the fundamental deficiencies in typical regulatory wind farm noise conditions. But there is no systematic monitoring to ensure adherence to those conditions.

If permanent, full spectrum, noise monitoring equipment was appropriately installed near at risk homes, ensuring compliance with the (inadequate)

Wind Industry Reform Victoria, *Committee Hansard*, Melbourne, 9 June 2015, p. 66.

⁶⁴ Mr John McMahon, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 66

⁶⁵ Dr Michael Crawford, Submission 316b, p. 8.

conditions would have some chance. Without those, effective operational noise monitoring is essentially "too hard". 66

4.64 Mr Hamish Cumming also argued that a lack of political will and the undue influence of wind farm companies have compromised an effective monitoring system. He wrote in his submission:

The monitoring and compliance of wind farms is an area that lacks any real support or desire for the truth from Government departments. The wind farm companies seem to have geared the monitoring approach to suit themselves, and are generally unopposed by regulatory authorities.

For instance bird and bat mortality monitoring is structured to find minimal dead birds. AGL Macarthur employed a consultant to assess the mortality records, and they highlighted the fact that by the time the people looking for the dead birds once a month, most had been carried away by predators and scavengers. Also they highlighted that only a small percentage of turbines are searched around anyway. The consultant recommended that searches be done weekly and over more turbines. AGL did not adopt the consultants [sic] recommendations and has not changed their collection method. The consultant showed the actual mortality rates were likely to be 10 times higher than what AGL originally claimed in their permit application. The Moyne Shire is supposed to put conditions in place as part of their responsibility as Responsible Authority to limit the bird deaths, and the AGL wind farm should be shut down at peak bird times. However the Mayor and CEO are so supportive of wind farms that they will not even respond to letters making this request.

The Victorian Ombudsman has followed them up, and now the Council appears to be making false claims to the Ombudsman. This is now being looked into.⁶⁷

The folly of self-monitoring and the need for independent monitoring

4.65 It is clear to the committee the inadequacy of arrangements whereby companies self-monitor their operations in response to complaints and councils' resources are employed to adjudge whether the company's actions are adequate. Take the following example of how RATCH Australia self-monitored:

We did have a noise complaint in relation to the Windy Hill wind farm...As soon as that complaint was brought to attention...we contacted that person to find out what the problem was and to find out what we could do to try to address it. The complaint was also brought to our attention by the Tablelands Regional Council in I believe September 2011. Once those complaints were brought to our attention, what ensued was a process where we sought to conduct noise monitoring on the relevant property to find out if we were operating in a way which was interfering with the property

⁶⁶ Dr Michael Crawford, Submission 316b, p. 8.

⁶⁷ Mr Hamish Cumming, *Submission 31*, p. 5.

owner's enjoyment of the property or if we were in breach of our development consent.

That process became quite a prolonged process for a range of reasons. During the process of us conducting that noise monitoring, Tablelands Regional Council did seek to bring legal action against us. We challenged the basis of that legal action. In short, the basis upon which we challenged it was that the notice under which the council claimed that we had breached our development consent did not actually say what the breaches were, so it was quite difficult for us to work out how to address the problem. The council did seek orders in relation to the wind farm, but those orders were not granted by a court.

What ensued after that was that we continued our discussions with the council and with the relevant landowner. We were then able to complete the noise monitoring on the landowner's property. At the end of that, the results of the noise monitoring were presented to Tablelands Regional Council and they then found that the operation of the wind farm had not been in breach of its development consent. ⁶⁸

4.66 Ms Lee Schwerdtfeger, a prominent community organiser against the Mount Emerald wind farm development, argued that RATCH had devised its own complaints management plan. She questioned whether this favourable framework was a creation of political convenience:

The approval conditions have no mandatory process for dealing with noise complaints. RATCH writes their own complaints management plan, and this does not have to be approved by the state government. So why do other approval conditions all require that management plans be submitted and approved, not merely submitted? Is this a deliberate oversight by the state government to favour the developer? We can be sure that noise complaints will never be properly dealt with if this project is ever built. This will just be more of the same from RATCH.⁶⁹

4.67 Mr Walkden told the committee that RATCH was ordered by the Council to conduct the monitoring, which was done by MWA environmental consultants. However, MWA received its instructions from the company and:

...only did audible noise. They were not required, as far as I am aware, to do infrasound. One of the first times that Stanwell monitored, they did not do it to the standard required. It was supposed to be a certain distance from the house and things like that in their conditions, and they did not do that. One lot of measuring was taken at the back fence and that was not according to the New Zealand standard either. They did all these little monitorings, yes it all sounded good, but it was not what they were

⁶⁸ Mr Simon Greenacre, RATCH Australia, *Proof Committee Hansard*, Cairns, 18 May 2015, pp 4–5.

⁶⁹ Mrs Lee Schwerdtfeger, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 61.

supposed to do. And I was not confident that they would continue to do that. 70

4.68 The need for an independent monitor is recognised by a broad cross-section of stakeholders. WIRV told the committee:

The most urgent thing is to ensure that whatever noise regulations are in place are actually policed truly, independently and competently. So many of the problems we have heard about are the result of wind companies absurdly being allowed to effectively self-police. Suffering neighbours must be able to complain to somebody who wants to listen and who they know will act promptly, fairly and properly.⁷¹

4.69 Significantly, the Australian Wind Alliance agrees on the need to improve regulatory arrangements. It highlighted the Glenelg Shire Council's proposal for an independent body to monitor and enforce compliance:

It is critical that monitoring and compliance of wind farms is robust and responsive to community concerns. Compliance of wind farms with applicable regulations is in many cases devolved to the local council level, who are often under resourced and lack the appropriate skill base to execute this work properly. Postconstruction noise monitoring is generally done by acoustic consultants retained by the developer. Submission 111 to this Inquiry from Glenelg Shire Council has suggested that postconstruction and ongoing monitoring work be done at arms' length from developers. AWA sees merit in this idea and would welcome it as a way to increase the community's trust in the process.⁷²

4.70 Mr Richard Sharp proposed a reform to create a national wind farm monitoring framework based on current arrangements in NSW:

I note that in NSW, the Department of Planning and Environment achieves this by requiring wind farm developers to engage a qualified and experienced person to independently monitor environmental compliance during construction and operations.

I consider that this approach taken by the NSW Government should be applied nationally to all wind farms and should take the form of the following 'standard condition' as part of an approval:

Prior to the construction of the wind farm, or as otherwise agreed by the approving authority, the wind farm developer shall engage a Registered Environmental Professional1 or a Certified Environmental Practitioner2 who shall:

• be independent of the planning, design, construction and operation personnel;

⁷⁰ Mr Colin Walkden, *Proof Committee Hansard*, Cairns, 18 May 2015, p. 55.

⁷¹ Mr John McMahon, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 67.

⁷² Mr John McMahon, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 67.

- oversee the implementation of all environmental management plans and monitoring programs required under this approval and advise the wind farm developer upon the achievement of all project environmental outcomes;
- consider and advise the wind farm developer on its compliance obligations against all matters specified in the conditions of this approval and any other approval, permits and/or licences; and have the authority and independence to recommend to the wind farm developer reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts; or
- recommend to the wind farm developer that relevant activities are to be ceased as soon as reasonably practicable if there is likely to be a significant risk of an adverse impact on the environment, until reasonable steps are implemented to avoid such impact.

The wind farm developer shall act on all recommendations made by the Registered Environmental Professional or the Certified Environmental Practitioner as soon as practicable, unless otherwise agreed by the approving authority. If the wind farm proponent chooses not to implement recommendations, it shall provide written justification of the alternate course of action to the satisfaction of the approving authority within 7 days of receiving the recommendation.⁷³

The need for adequate resources to conduct monitoring effectively

4.71 The committee understands that establishing a system that monitors wind farms systematically and scientifically will require both expertise and resources. Dr Crawford explained the resource-intensive nature of a proper wind farm monitoring system:

...wind farms [are] spread out over a large area and so proper monitoring activity requires multiple, geographically dispersed, stations with noise monitoring occurring over an extended period, since the problem depends on weather conditions which may change between the time of complaints and any monitoring action. This has to happen in the country (where the wind farms are located) whereas the relevant staff are generally city-based, so mobilising them is a significant effort. And if the wind farm operator is aware of the monitoring they can reduce the noise output in various ways, including changing the pitch of turbine blades. Doing so diminishes their electricity output and costs them some money but is worthwhile to frustrate a noise monitoring effort.

What actually exists is a mechanism for operational regulatory agencies to go through the motions of regulating without having the ability to do the job properly, or indeed regulating against the criteria which really matter, i.e. the harm being caused to individuals.

If regulatory agencies persist with regulating according to noise standards, there should be a requirement for fixed noise monitoring, paid for but not controlled by the wind farm, at all at risk locations, and that noise monitoring should take account of new developments in the understanding of wind farm noise impact, such as the recent work of Steve Cooper at the Cape Bridgewater Wind Farm.⁷⁴

4.72 Other submitters also highlighted the need for the effective deployment of resources to undertake effective monitoring:

The main enforcement problem is that the local impact of wind farm noise depends on multiple changing factors, such as wind direction and speed, atmospheric conditions, and operater [sic] action in controlling the turbines. Consequently any attempt to monitor in response to complaints may well occur when the problem has temporarily subsided, relocated (because of different wind direction), or been diminished by operator action during monitoring.

The only effective solution is permanent noise monitoring, located at multiple points around a wind farm, under the control of parties with a strong motivation to quickly prosecute any breach of noise conditions to deter such occurrences. This should be paid for by the wind farm as a safety measure, just as many industrial operators are required to pay for facilities, mechanisms and practices that increase the safety of their operation. The cost of such safety provisions would be very small, typically amounting to less than 0.1% of a wind farm's capital cost. ⁷⁵

The case for State EPAs to take over wind farm monitoring

4.73 The committee notes that there have been proposals to shift responsibility for monitoring and compliance of wind farms to the State EPAs. The Victorian Parliamentary Environment and Natural Resources Committee's final report for the Inquiry into the Approvals Process for Renewable Energy Projects in Victoria was tabled on 25 February 2010. The report stated:

Local councils advised that they do not currently have the capacity, expertise and resources to act as the responsible authority for wind farm projects of less than 30 megawatts. Councils identified the cumulative impacts of wind farms and monitoring and enforcement arrangements as significant issues.⁷⁶

4.74 The report recommended that:

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⁷⁴ Dr Michael Crawford, Submission 316b, pp 9–10.

⁷⁵ Ms Sharn Ogden, *Submission 275*, pp 6–7.

Inquiry into the Approvals process for renewable energy projects in Victoria, p. xv, http://www.parliament.vic.gov.au/images/stories/committees/enrc/renewable_energy/report/Executive_summary.pdf (accessed 13 July 2015).

The Minister for Planning be responsible for the monitoring and enforcement of conditions set out in all wind farm permits and post development plans.⁷⁷

4.75 The Tarwin Valley Coastal Landscape Guardians drew the committee's attention to the following recommendations of the 2004 Bald Hills Wind Energy Facility's Planning Panel:

'Recommendation 19: In the medium term, consideration should be given to the establishment of a role for the EPA in monitoring and enforcing acoustic conditions.

'Recommendation 20: In the medium term, consideration should be given to the use of a SEPP or other relevant Victorian standard to define the specific application of NZS 6808 and or the forthcoming Australian standard to wind energy facilities.' ⁷⁸

The Panel's report also stated that:

The absence of an independent entity charged with acoustic condition compliance monitoring adds considerably to difficulties in assessing operational performance in the face of noise complaints. ⁷⁹

4.76 Landholders, such as Ms Jane Robson of Mt. Helen in Victoria, also proposed a prominent role for the State EPA in monitoring and compliance:

Adequacy of monitoring and compliance is of a very low standard at this time and I believe there needs to be independent noise monitoring done and that the EPA should be given the role and the funds to fulfil this role so there is a better avenue for complaints by neighbours. Noise testing should occur regularly and randomly at lots of different times of the day and night and under all conditions to get an honest view of Wind Turbine noise. 80

4.77 However, it is important that any proposal to shift responsibility for compliance to State EPAs comes with a commensurate shift in resources and expertise to the EPAs. Mr Les Huson has indicated that the Victorian EPA may not currently have the capacity to fulfil the lead role in monitoring and compliance of wind farms.⁸¹

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⁷⁷ Inquiry into the Approvals process for renewable energy projects in Victoria, p. xvii http://www.parliament.vic.gov.au/images/stories/committees/enrc/renewable-energy/report/Executive_summary.pdf (accessed 13 July 2015).

⁷⁸ Tarwin Valley Coastal Guardians, *Submission 45*, p. 17. See page 210 of the Panel report. A full list of recommendations is provided in Appendix A of submission 45.

⁷⁹ Tarwin Valley Coastal Guardians, Submission 45, p. 17.

⁸⁰ Ms Jane Robson, Submission 144, p. 2.

Mr Les Huson, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 60.

A fee for service system

4.78 The MAV discussed with the committee a proposal to establish a licencing regime. Under this scheme, wind farm operators must pay an annual licencing fee for an independent authority to undertake ongoing monitoring and compliance. An annual certificate or licence is then awarded to the operator to verify compliance with the relevant standards and conditions. In MAV's view:

Such a regime would provide a number of benefits, including community confidence that noise is appropriately the regulated, regulatory certainty for the wind farm industry, equity between different types of electricity generators and removing the noise compliance and monitoring impost on councils. Recognising that the above requires time and political will to progress, the MAV, in partnership with the Victorian Environment Protection Authority, has brokered an arrangement that will provide councils with access to EPA accredited noise auditors on a fee-for-service basis. While the service comes at a cost and the monitoring compliance burden still rests with council, the auditors are certified as independent by the EPA. This arrangement should remove any doubt regarding the independence of the noise compliance assessment and should provide an authority of advice on the wind farm's compliance with the relevant standards. These services will also be made available to the wind energy industry providing additional certainty to the local government and community that the application complies with the relevant New Zealand standard as part of the planning permit process. Ideally, under this arrangement, we would also like to see any new and existing wind farms being required to submit an annual compliance certificate to verify ongoing compliance.82

4.79 The committee believes that a fee for service licencing system would offer these, and other, benefits. Chapter 6 presents the committee's recommendation on how this system should be framed and developed.

The case for greater transparency in monitoring and compliance

4.80 Some submitters and witnesses to this inquiry have emphasised the need for monitoring and compliance processes to be more transparent. Ms Kay Smith, for example, argued:

The EPA's involvement in monitoring turbine noise emission would provide a more transparent avenue for dealing with complaints/claims from neighbours re experiencing adverse effects.⁸³

4.81 Mr Tony Edney from Ballarat raised questions about the power of local councils over wind farm operators:

Mr Gareth Hately, Municipal Association of Victoria, *Proof Committee Hansard*, 9 June 2015, p. 54.

⁸³ Ms Kay Smith, Submission 72, p. 2.

Councils probably at the moment do not have the power to compel turbine operators to turn off their machines, to enable proper base level sound recordings, without which it is very difficult to make a useful comparison with operating sound levels. Neither would they be able to force operators to provide mast head information about wind speed and direction from the turbine nacelle, data necessary to correlate with in home recordings, to obtain an accurate take on sound energy present in a dwelling.

Wind farm operators are effectively in control of the data that is necessary to properly investigate complaints against them. Government presently, at whatever level, does not have the legislative capacity to force this information out of them, to have them stop the turbines, for any purpose. Wind companies are safely at liberty to go on causing damage to people, to drive some from their homes, in the comfortable knowledge no one can do much about it.⁸⁴

4.82 The difficulty accessing critical data has also been raised by several acousticians. Mr Les Huson is one acoustician who has expressed his disappointment that wind farm operators have not made wind speed data publicly available. He told the committee:

I have been involved in the measurement of noise emissions from the Leonards Hill wind farm and the Macarthur Wind Farm. For the past three or four years I have been hampered in my attempts to complete an independent compliance assessment of the Leonards Hill wind farm. I have gathered all the acoustical data but do not have the corresponding wind speed data that is required to complete the analysis. This wind speed data has been promised by Hepburn Wind but as yet has not been made available.

4.83 Mr Huson also told the committee of significant flaws in the peer review process for compliance assessment:

Recently I was asked to provide comment on the compliance assessment and two peer reviews of an assessment done for the Macarthur Wind Farm. I prepared a report summarising my findings, but the report was refused to be accepted by the local shire council, even though it showed serious flaws in the analysis process which skewed data to the benefit of the wind farm operator. The analytical flaws were presented but ignored. The data giving rise to the flaws was not provided to either the authors of the compliance report or the peer reviewers of that report. Effectively what was happening there was that data was being withheld from the people doing assessments on noise compliance, which effectively made it easier to comply. 85

Mr Les Huson, *Proof Committee Hansard*, Melbourne, 9 June 2015, pp 59–60.

⁸⁴ Mr Tony Edney, Submission 214, p. 4.

Commercial-in-confidence considerations

- 4.84 The committee questions the basis on which wind farm companies claim that there are commercial-in-confidence considerations relating to their operating data. The committee has not received a convincing explanation from these companies as to why its recommendation to publish wind speed and basic operation statistics would harm commercial interests.
- 4.85 All wind farm data should be publicly available and published where all citizens can scrutinise the operation of turbines. In its interim report, the committee recommended that the data collected by wind turbine operators relating to wind speed, basic operation statistics including operating hours and noise monitoring should be made freely and publicly available on a regular basis. The committee argued that the proposed Independent Expert Scientific Committee (see chapter 6) should consult with scientific researchers and the wind industry to establish what data can be reasonably made freely and publicly available from all wind turbine operations accredited to receive renewable energy certificates.⁸⁶

The need for a wind farm Ombudsman

4.86 This committee has gathered a volume of evidence from citizens with complaints about the operation of wind turbines, and who have relayed to the committee their annoyance and frustration that these complaints not having been heard. The following is an excerpt from a submission made by Mr Gunter Wilhelm of Evansford in Victoria. His account is, unfortunately, not uncommon:

Acciona's complaint procedure is entirely unsatisfactory. When we and our neighbours began making complaints, no Incident Report Reference Number was provided. Initially we made phone complaints but when we realised that Incident Report Numbers were not being issued, we proceeded to complain via email so as to have an official record of our complaint. On 1 June, 2010, my partner requested an official complaint form and an outline of the complaints procedure, only to be told there was no complaints procedure – just to respond within 48 hours to a complaint. Yet in the Operational (stage 2) Environmental Management Plan (OEMP) Version1.1 February 2008 of Acciona's Permit, there is a Complaint Procedure outlined. It was not until I requested and continued to request that an Incident Report Number be provided that it was.

On 6 June, 2010, I was sent an email by Acciona's Community Liaison Officer, in response to my request for an official Incident Report Reference Number. I was issued Incident Report Number 1 (email available on request). I emailed back and asked if this was my personal complaint log and was told that this Incident Report Reference Number was not personal and applied to all complaints lodged. What had happened to all the complaints lodged by phone or email from April 2009 – June 2010, all prior

⁸⁶ Senate Select Committee on Wind Turbines, *Interim Report*, June 2015, Recommendation 7.

to Incident Report Reference Number 1 being issued? We know that many of our neighbours either complained by phone, or dropped into the Acciona office. They were not issued Incident Report Reference numbers. No wonder Acciona could claim so few complaints!

At no stage has Acciona made any attempt to site visit our property to evaluate, monitor for noise or discuss health concerns. ⁸⁷

4.87 Waubra resident Mr Noel Dean had similar frustrations in dealing with Acciona, the local council and the Victorian Planning Department. He noted the different complaint mechanisms at local and state level and his annoyance at the State Government's handling of his grievance:

...when I first made a complaint, I went to the state office in Ballarat. They said, 'We've got no-one here to know how to force compliance', and we got the same statement from the council that it is the department of planning's problem. So the department of planning put out a thing in 2009 to say that the council is responsible for it. They said, 'We can't do it'. All the council had to do at Waubra was to issue an enforcement notice that said to comply. The problem is that the laws by the planning department are different from those of the council. With the council, if any one person makes a complaint or a degree of a complaint, they have to investigate it. The planning department only has to satisfy probably 90 per cent of people, and the planning department has not got the force to force compliance like the department of health and wellbeing and the council do. The council has our report, and the report that is in our submission, with letters from the planning minister, went to the council. The council have been hearing that for four years. They have known that Waubra Wind Farm is noncompliant for four years and would not put enforcement notices in. What happened in the planning department is the planning cabinet was corrupt in that its condition 17 was changed to be commissioned by the proponent who is the owner of the information. Therefore they said to us, 'We don't have to give the thing to you' because they have got no obligation. They were given the permission to commission the report, so they got the report. It was the planning minister's responsibility to commission the report, and someone in the office has changed it around so that means we have got no protection. They have got a legal right and they have said to us in legal letters: 'We have no obligation to give you the report.' They commissioned a report through Marshall Day and kept it, and we cannot get it off them until we have a court case.⁸⁸

4.88 Similarly, another Waubra resident, Mr Donald Thomas told the committee:

There is desperate need for a proper complaint system, because nothing is done anyway. Most of the time the worst part of the noise issue is that it happens in out-of-office hours, so you are not going to get someone to

Mr Gunther Wilhelm, Submission 198, p. 3.

Mr Noel Dean, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 20.

come and listen at three o'clock in the morning. They come the next day, and that is very little use. ⁸⁹

- 4.89 The committee's interim report recommended that the Commonwealth Government establish a National Wind Farm Ombudsman to handle complaints from concerned community residents about the operations of wind turbine facilities accredited to receive renewable energy certificates. The Ombudsman will be a one-stop-shop to refer complaints to relevant state authorities and help ensure that complaints are satisfactorily addressed.
- 4.90 The committee is pleased that the federal government has agreed to establish a National Wind Farm Commissioner to resolve complaints from concerned residents about the operation of wind farm facilities. The Commissioner will publish documents on:
- the location of existing and proposed wind farms in Australia;
- planning and environmental approvals in place for each wind farm;
- RECs received by each wind farm; and
- data on wind farm operators including operating times, wind speed, power output and sound monitoring.

Committee view

4.91 The evidence presented in this chapter strongly points to the need for regulatory reform in the way that wind farms are monitored and forced to meet compliance standards in Australia. Chapter 6 of this report presents a number of recommendations relating to these issues. Fundamentally, there is a need for rigorous and uniform sound standards that form the cornerstone of National Wind Farm Guidelines. There is also need for a State-based system that licences all large-scale wind farm operators and enables the State regulator to suspend and cancel an operating licence if the company breaches compliance conditions. As chapter 6 discusses, the eligibility of wind farm operators to receive renewable energy certificates should be based on their satisfying ongoing compliance checks.

⁸⁹ Mr Donald Thomas, *Proof Committee Hansard*, Melbourne, 9 June 2015, p. 14.