



Submission Re The Victorian Changes to the Regulation of Wind Farm Noise

25th February 2021

RE-Alliance

RE-Alliance, formerly known as the Australian Wind Alliance, is a community based organisation of around 500 financial members, with an extensive online and social media following. Our members include landholders, farmers, small businesses, climate campaigners, environmentalists and members of the community. Our vision is helping to deliver a renewable energy transformation in Australia filled with sustainable, long-term benefits for regional communities.

Key Points

- We note that noise regulation is changing as a result of the Environment Protection Amendment Act 2018 not because of any deficiency of the current regulatory regime that has been largely effective
- We note that wind energy in Victoria has enjoyed widespread community support and low and decreasing levels of complaints and enjoys widespread community confidence

- We commend the work completed by the Department of Environment, Land, Water and Planning regarding how to best regulate wind farm noise most effectively under the Environment Protection Act 2017.
- Re-Alliance (formerly known as the Australian Wind Alliance) has been advocating for many years for the Environment Protection Authority (EPA) to have a compliance role over wind farm noise
- We suggest *Option 1 Direct regulation* based on the New Zealand Standard is the most effective option. It meets the criteria of community confidence, It also has less cost and more certainty for all stakeholders and is closest to the current effective regime, with the important improvement that EPA will take over compliance.
- We note there is no evidence to support a universal periodic noise testing regime. There is no evidence that a 5 yearly noise testing regime would positively influence community support of wind farms and it may have the opposite effect. The EPA can manage noise compliance on a case-by-case basis.
- We commend that individuals and Councils can trigger the EPA to conduct an evidence based risk based assessment. In addition, we welcome the annual statement, it is a good measure for the community and more transparency is a welcomed step.
- The evidence suggests community support can be improved by proactive community engagement, community education and community benefits. An arbitrary frequency of a testing regime may decrease community acceptance of wind energy.

Question: Please rank the three options in order of

- **how effective they are likely to be at regulating noise from wind farm turbines.**
- **clear and easy to understand they are,**
- **how fair they are for wind farm operators and the community.**

We suggest *Option 1 Direct regulation* based on the New Zealand Standard is the most effective option. It meets the criteria of community confidence, It also has less cost, more certainty for all stakeholders and is closest to the current regime except that EPA manages compliance.

The *Regulatory impact statement - Noise and wind energy facilities* (RIS) Prepared by Deloitte Access Economics on behalf of the Victorian Government shows that Option 1 had the highest score in the Multi Criteria Analysis when factoring in:

1. Costs to industry and government
2. Avoided complaints and disputes
3. Avoided investment uncertainty
4. Avoided search costs and over compliance

In the RIS Option 1 Direct regulation was the optimal choice followed by Option 2 and the Base Case. This aligns with Re-Alliance ranking.

The *Base Case* would be confusing and create uncertainty within the sector. Industry would individually interpret the GED where it would cause a lack of certainty in the community, as the RIS noted. The *Option 2 - Permits* likewise would cause a lack of certainty in the community, unnecessarily inviting a new intervention every 5 years.

Please give your reasons for how you ranked the options in order of fairness, or note if you think none of these are fair.

We believe the *Option 1 Direct regulation* is the fairest option for community, councils and industry. The EPA has the in-house expertise and resourcing to manage complaints and conduct whatever noise testing is required, relieving councils of this complicated work and giving more clarity to community members. We have been [advocating](#) for many years that the Environment Protection Agency (EPA) should be the body to look after post-construction noise compliance, a position shared by the National Wind Farm Commissioner. The Environment Protection Agency in South Australia, a state with many wind farms, has been effectively managing complaints, as have [other states](#). The EPA is a trusted authority, with a clear process for the community to access their services.

Do you have any comments about the proposed requirements for wind farm operators, or other suggestions about how to regulate noise from the operation of wind farms? Please provide evidence for your views where possible.

The *Regulatory impact statement - Noise and wind energy facilities* (RIS) outlines noise testing regimes to accompany option 1 and 2. The RIS outlines 5 different testing regimes, the first 3 of which have periodic background noise testing of all wind farms. These options are shown to be cost prohibitive and un-practicable.

The 4th and 5th testing regimes in the RIS are outlined below:

Testing regimes 4 and 5 utilise the existing background noise level measurements from pre-and post-construction assessments. They would provide an adequate assessment of compliance in a situation where background noise levels do not significantly change over time from the pre- construction measurement levels.

They both have periodic noise testing.

We disagree with Deloitte's recommendation of Regime 4 and support a regime with no further periodic testing. This would improve certainty, confidence and compliance unnecessarily with the cost imposed on industry.

We agree that there's a need for a Noise Management Plan, Complaint Management Plan and Annual Statements. In addition to having the EPA manage compliance, we see this improving community confidence. However, there is no evidence to support 5 yearly periodic noise assessments. Our concern is that rather than reducing community confidence, it may have the opposite effect. We see annual statements and noise management plans as adequate measures to demonstrate to the public that any emerging issues will be managed and reported transparently.

Periodic noise assessments are an expensive and inherently difficult process. The complexity of the process and results may not satisfy a non-technical layperson. In addition, there may be practical constraints such as access to properties that may limit the ability to do testing with ease.

As the RIS shows there are wind farms in victoria that have had no complaints since operating and others have had very few and when they do they are from "a handful of stakeholders" (RIS: 64).

The National Wind Farm Commissioner notes in his [2019 Annual Report](#) that there has been a decline of complaints regarding wind farms and that the majority of complaints are in the planning phase not the operation phase.

...the data indicates an ongoing trend in reduction of complaints about operating wind farms each year.

"Given the large number of wind farms that have commenced operating in the last few years, this data could suggest that community concerns are significantly diminished once a project commences operation,"

Along with reduced rates of complaints there has been an increase in support nationally for wind according to the [report](#) 'Climate of the Nation 2020: Tracking Australia's attitudes towards climate change and energy.'

There is no evidence that the risk from wind farms noise increases over time or that 5 yearly periodic noise testing leads to better outcomes. Wind farm technology is getting quieter with new technology such as [serrated blades](#), in addition to turbines and parts being replaced over the lifespan of a wind farm.

The evidence suggested that over time there is an increase in acceptance of wind farms. Chapman and Crichton outline the [evidence](#) of acceptance over time.

For those living in proximity to windfarms, positive attitudes to windfarms have been shown to increase over time. (Warren, Lumsden, O'Dowd and Birnie 2005).

Field evidence indicates that generally, over time, residents develop more positive attitudes to windfarms in their community. However, in communities where anti-wind farm advocates are actively attempting to provoke anticipatory anxiety, there is a real risk that negative expectations will produce annoyance and symptoms. (Wilson and Dyke 2009).

...when participants were given only negative information about windfarm sound, without any counter-narrative, their symptom reporting increased over time, suggesting that their experiences were reinforcing their negative expectations, leading to further anxiety and heightened symptomatic responses (Crichton and Petrie 2015).

The largest longitudinal study into wind farm noise run by [Health Canada found](#) that perceptual variables can change annoyance from wind farms:

...these findings would support initiatives that facilitate direct or indirect personal benefit among participants living within a community in close proximity to wind power projects.

Collectively, these findings support efforts aimed at mitigating community annoyance that may be associated with new wind power projects and concomitant changes in community noise levels.

Perhaps instead of spending money on noise testing periodically resources could be invested on targeted measures to increase community acceptance such as benefit programs.

There is no evidence to support a universal periodic noise testing regime. There is no evidence that a 5 yearly noise testing regime would positively influence community support of wind farms and it may have the opposite effect. The EPA can manage noise compliance on a case-by-case basis. Individuals and Councils can trigger the EPA to conduct an evidence based risk based assessment of the complaint and has power to investigate. The testing that occurs may be modified to satisfy the EPA such as intermediate locations that are easier to access and measure. If there is a breach at the intermediate locations then more complex testing can occur that satisfies the New Zealand Noise Standard at receiver locations.

We support *Option 1 Direct regulation* with no periodic noise testing as the clearest mechanism to minimise spurious legal challenges or incentives for misinformation. Past [research](#) shows that psycho-social factors largely explain the perception of annoyance. There is no evidence to suggest that periodic noise regimes would change rates of complaints.

Lastly, the RIS outlines the EPA's activities, including "supporting industry to strengthen community confidence." We agree that this statement and feel that community education is an important to maintain regional community support for wind farms.

Summary

We recommend the adoption of the direct regulation of wind farm noise as proposed to accompany the changes from the Environment Protection Amendment Act 2018 which introduced General Environmental Duty (GED). *Option 1 Direct regulation* will be better for councils, by removing the costly regulatory burden, better protection for residents, with the EPA providing more clarity around process, and cause less confusion for wind farm operators, which is important as we go forward with Renewable Energy Zones.

We have noted that the noise assessments regime recommended in the RIS (regime 4) has some issues and does not meet the objective of improving certainty, confidence and compliance. There needs to be more work on how a noise regime would meet these objectives. We recommend not mandating periodical testing but leaving the compliance to the EPA.

Testing should not be done for testing sake. There is no evidence to support testing periodically every 5 years and the evidence shows it may instead undermine community confidence.

The evidence suggests that addressing psycho-social factors rather than frequency of noise testing leads to social support of wind farms. The evidence supports proactive community engagement, community education and community benefits.

Contact:

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