



WIND INDUSTRY REFORM VICTORIA INC.

Better Wind Turbine Regulation for a Sustainable Future

Challenges facing rural and regional councils

Wind Industry Reform Victoria (WIRV) is a voluntary non-profit group of rural people seeking improved wind turbine regulation, so that wind turbines and rural people can co-exist with greater harmony than exists now.

We try to be a voice of reason in a chronically heated debate. We do not deny climate change. We are not anti-turbine *per se*, though we do feel that the benefits in terms of base load electricity contribution and permanent employment are often greatly overstated.

On the other hand, the risks of, and fear of, problems due to poorly regulated wind turbines are increasing dramatically as turbine size increases significantly.

It would surprise many to know that several hundred turbines proposed for Victoria would have blade sweep areas similar to the MCG playing area – nearly five times that of the well-known Challicum turbines, east of Ararat, which seem to generate few complaints. It is widely held that turbine sound production increases as blade sweep area increases. The recently approved turbines at Bulgana, near Great Western, will be 196m (60 storeys) high.

With size change of this magnitude, there is an increasing need to meaningfully improve the system whereby turbine noise is policed independently, and to be seen to be doing so.

While under-resourced rural Councils continue to be the responsible authority for turbine noise policing in Victoria, and larger turbines continue to roll out, community frustration will only increase. Of necessity, rural communities across Australia are becoming better organised and are increasingly litigious, as this is now seen as a possible remedy where systemic checks and balances are lacking.

There is currently no effective Local Government turbine noise policing mechanism; so wind companies in effect police themselves. Litigation is a waste of time and money for all concerned – turbine neighbours, wind companies, host farmers and Government staff and representatives.

Where Local Government remains the responsible authority in Victoria, whether or not this is a realistic expectation, they will inevitably face increasing litigation from communities looking for a solution to excessive turbine noise nuisance.

We are in regular communication with hundreds of rural Victorians who live near existing or proposed turbines, and it would be remiss of us if we didn't relay to this Inquiry the very real risk of such a situation developing.

This situation would logically be remedied by reversing the decision to make Local Government the responsible Authority for wind turbine noise compliance, then quickly and meaningfully tasking the

Victorian Environment Protection Authority with the responsibility for turbine monitoring and compliance.

On 16 May 2016, a Report was released from the Independent Inquiry into the Victorian Environment Protection Authority.

We welcome Recommendation 10.5 from the Report from the above Inquiry which would require “a statutory environmental audit of noise”; however, this is their only recommendation in relation to wind turbines. We strongly believe that the EPA should have a significantly greater role than this if community “trust in the system” is to be improved. Improved trust would also benefit the wind industry in the long run.

The pro-turbine Australian Wind Alliance, submitting to the Senate Committee on Wind Turbines last year 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 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. Post-construction noise monitoring is generally done by acoustic consultants retained by the developer. Submission 111 to this inquiry from Glenelg Shire Council has suggested that post-construction 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.”

We agree strongly with the Australian Wind Alliance in the need to address both “monitoring and compliance” without having to rely on under-resourced Councils for this key role.

Recommendation 10.5 goes some way to addressing compliance; however, more pro-active monitoring is required, especially when turbine sound levels vary so much according to wind direction and strength, ground hardness (varying seasonally), day/night variation, mechanical failure, and so on. A good example is the case of a faulty turbine “screeching” for several months during 2013 at Cape Bridgewater, which the wind company publicly apologised for in retrospect. This prolonged situation greatly undermined community trust.

A pro-active EPA, with an ongoing monitoring role, would move relatively quickly to independently judge such a problem and stop it.

Communities who feel exposed to excessive noise regularly for whatever reason need to feel that their complaints will be acted upon quickly and truly independently. They don’t trust wind companies to fairly address their complaints, and wouldn’t be satisfied by the “yearly compliance audits” suggested in the EPA Inquiry Report.

This Report also suggests audits “for the first three years of operation”, which doesn’t address the likelihood of noise due to mechanical failure increasing as turbines age, especially when turbines are typically deployed for 25 years.

WIRV strongly suggests that Recommendation 10.5 be augmented to also task the EPA, not Local Government, with:

- Prompt response to complaints, followed by noise measurement and enforcement where appropriate, by a small roving team of specialist EPA personnel (this could be efficiently deployed, as problematic wind projects are largely concentrated in greater SW Victoria, where most existing and proposed turbines are, with the main exception being one project in South Gippsland)

- Noise prediction auditing during the Planning process by truly independent (EPA-approved) acousticians before turbine locations are approved, in order to reduce the risk of inherent chronic excessive noise (as opposed to noise due to mechanical failure)
- Independent turbine noise auditing annually for the life of a wind project, including random noise monitoring checks, as opposed to purely desk audits (full report and results to be “on the public record” per the Report’s suggestion, in order to maximise public trust)

We feel that the involvement of truly independent acoustic consultants as well as a small group of specialist EPA personnel will allow healthy knowledge and skills exchange, thus optimising the understanding of the highly complex and variable wind turbine sound mix.

The EPA is generally well-regarded, has a related skill base, is of sufficient critical mass, and should be tasked accordingly.

We are convinced that such measures would improve the wind industry for all, not just for turbine neighbours, but also for wind companies, turbine hosts and rural Councils over the long run.

In their submission to the Senate Committee on Wind Turbines in May 2015, Moorabool Shire Council stated, “The lack of clarity of the responsible authority also adds to difficulties in determining who is responsible for setting baseline noise data, checking compliance with permit conditions and taking enforcement action where required.

“Further, local Councils do not have the resources nor the technical expertise to undertake the roles mentioned above.

“MSC has been approached by residents who advise that they have been affected by audible and sub audible noise from the Leonard’s Hill facility near Hepburn.

“Further, the claimed impacts have also had the effect of fracturing relationships between families and communities. This has been experienced in Waubra in the Pyrenees Shire and even at locations in the west of the Moorabool Shire where towers are proposed, and in Greendale where an application was withdrawn.

“The negative impact on property values and the inability to sell properties because of their proximity to proposed towers has also been evident. The right to farm is also impacted in some instances.”

To put the above into perspective, if we regard the blade sweep area of the apparently benign Challicum turbines mentioned above as 1 unit, then turbines at the following wind facilities have blade sweep areas as follows:

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| • Challicum blade sweep area | 1 unit |
| • Leonard’s Hill, Waubra and Cape Bridgewater | 1.6x |
| • Macarthur | 2.9x |
| • Lal Lal (west Moorabool Shire referred to above - latest amendment proposal) | 4.8x |

Several other wind projects across greater south-western Victoria have proposals for wind turbines the size of Lal Lal’s or even larger.

The game is changing dramatically. When Challicum became operational, there were few complaints. Taking blade sweeps to the size of Leonard’s Hill, Waubra and Cape Bridgewater saw

neighbour complaint levels rise dramatically. The next generation of turbines built at places like Macarthur saw neighbour nuisance increase further.

The hundreds of new mega-turbines proposed across greater SW Victoria will see neighbour nuisance reach a new order of magnitude, potentially affecting many thousands of rural people, including in several towns.

The Lal Lal project alone has 2000 people living within 5kms of turbines, many of them only around 1km away.

Moorabool Shire referred above to “negative impact on property values”. WIRV would like to raise the risk of very significant rate base reduction across greater SW Victoria, should the above new mega-turbines be built as close to homes as they are proposed to be, and without proper compliance enforcement by the EPA.

There are other significant problems for rural Councils and their ratepayers, which our organisation is not expert to comment on in detail; however, Moorabool Shire in its Senate Enquiry submission listed some of these, including the following:

- “Significant impact on local roads” due to wind facility construction
- VicRoads experience “with an estimated \$100m of unfunded damage” for the same reason
- Widespread quarry exhaustion for turbine foundation and farm access road construction

Similar concerns were presented by Moyne Shire to this Senate Enquiry.

We would also raise the real possibility of even greater quarry depletion resulting from local construction of concrete turbine towers. Permits now allow either concrete or steel towers.

However, WIRV sees the primary concern as being the absence of a competent independent turbine noise policeman.

Rural harmony will be greatly improved, noise nuisance will be significantly moderated, and Council budgets will be much healthier, if the EPA is tasked with and adequately resourced for turbine noise compliance at both the Planning and operational stages.

John McMahon would be happy to discuss these ideas via [REDACTED]