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Department of Environment, Land and Water Planning

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Changes to the regulation of wind farm noise consultation

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (MEA Group) thanks the Department of Environment, Land and Water Planning (DELWP) for the opportunity to provide comments in response to the DELWP's Changes to the regulation of wind farm noise consultation (the Consultation).

Background on the MEA Group

MEA Group is a vertically integrated generator and retailer focused entirely on renewable generation. We opened our portfolio of generation assets with the Mt Millar Wind Farm in South Australia, followed by the Mt Mercer Wind Farm in Victoria. In early 2018 we acquired the Hume, Burrinjuck and Keepit hydroelectric power stations, further expanding our modes of generation. We have supplemented our asset portfolio by entering into a number of power purchase agreements with other renewable generators, and through this investment in new generation we have continued to support Australia's transition to renewable energy.

Environmental Protection Amendment Act 2018 (Vic) (EP Act)

The change to the EP Act presents a material shift in wind farm operator experienced of compliance matters. MEA Group is generally supportive of the upcoming reforms to wind farm noise regulation subject to the technical points raised below.

NZS6808:2010Acoustics - Wind farm noise (NZS:6808)

The MEA Group considers there would be significant benefit if NZS6808:2010Acoustics - Wind farm noise (NZS:6808) was applied and regulated by the Environment Protection Authority (EPA) as against municipal councils. This is because a consistent approach with the various noise related clauses and methodology across Victoria would more likely apply. That is, the MEA Group agrees that due to the technical complexity with wind farm noise the most effective manner to consider noise is by way of a broad state approach as proposed by the EPA. Overall, we consider the change would provide greater clarity and direction for all parties.

Please note such a change would need to ensure wind farm compliance is taken as a complete code and avoids fragmentation of assessing any noise effects and or compliance by the municipal councils. That is, the wind farm operator would not wish to deal with any compliance duplication and efficiencies should arise.

Wind Farm noise already has the benefit of being tested against NZS6808 and which has been endorsed, tested, and applied throughout Australia and New Zealand. The standard has been robustly tested in the Environment Court in New Zealand at numerous hearings and consistently upheld. Such an approach was applied in *Meridian Energy Limited* [2013] NZEnvC 59 whereby the Court in assessing an array of submissions on NZS6808 held at 244:

"We are satisfied that NZS6808:2010 provides the most workable noise assessment framework for this proposed wind farm. It was developed because of the input from a number of experts and representatives from different backgrounds, who considered in much more detail than we were able to, the literature, experience and scientific evidence available relating to wind farm noise"

Within the industry there is widespread acceptance of NZS6808 by acoustics experts and decision-makers as being appropriate and as setting an appropriate level of emissions that would be reasonable and acceptable. It articulates how noise effects may be assessed and provided there is the compliance the activity must be considered both reasonable and permitted.

The prediction methodologies suggested in NZS6808 are robust. Specifically, NZS6808 requires that persons operating turbines must ensure that the noise received by the receptor at a specified point and time must be within specified limits. In general terms NZS6808 is consistent with the international approach to the assessment and control of noise from wind turbines.

Compliance with NZS6808 would likely reduce hearing time, complexity, cost and community anxiety. The setting of limits is informed by many factors, including objective elements such as known health risks in high level noise, and subjective elements reflecting activities of the community in that place or at that time. NZS6808 will "standardise" noise, and content. Once confirmed, this will set a level as to what is appropriate and removes subjective assessments.

(a) 5-year noise testing requirements/re-measurements

Please note the MEA Group strongly believes the draft 5-year noise testing requirement in the draft regulations will be onerous, excessive, arbitrary, expensive, and unlikely to provide meaningful improvements in community confidence. The draft regulations make Victoria less attractive for new investment opportunities. The draft regulations also do not align with the risk-based and proportionate principles of the General Environmental Duty, therefore a more workable code of practice for industry would be preferable.

For context, based on the Wind Farm Commissioner's 2019 Annual Report, Meridian have not received any formal complaints in the last 5 years. There have only been five complaints in total across Victoria relating to the wind industry.

MEA Group propose that if the 5-year re-measurement is to show that there has been no change in noise level over time (rather than show compliance again), it would be more practical to measure a selection of turbines and undertake a simplistic sound power level measurement to compare against one taken after commissioning.

(b) Implementation of a Guideline (or code of practice)

The implementation of a Guideline (or code of practice) would provide wind farm operators guidance on how to compile a noise management plan that captured risk-based management practices. To assist businesses with interpreting their obligations, the EPA released an industry guidance note in October 2020, explaining that 'reasonably practicable' means putting in controls that are proportionate to the risk. We believe such an approach should be applied rather than a compliance framework and measurements that are not cost effective nor proportionate to any issues that may be raised.

(c) Background levels

There is no evidence provided that would suggest that the background levels do not change over a relevant period. Any changes to the background levels, after the original background survey, will add to the wind farm levels if the background levels are not re-measured.

(d) Post-compliance

The idea of the post compliance measurements is to demonstrate that the noise predictions were correct and to ensure that the wind turbine sound does not exceed the levels assumed in the modelling. Once this has been demonstrated, the most likely change is a change in the background noise level over time.

There are scenarios under the proposed framework that need not occur. MEA Group do not consider that a regular re-testing at properties would go any way to increasing community confidence with regard to wind farm noise.

(e) Annual Reporting

The draft annual reporting requirement to provide evidence, suggests that annual testing would be required to demonstrate the wind energy facility has not contravened the relevant noise standard. In our view, this is not a workable outcome and would only encourage unnecessary interpretation by third parties / litigants for the necessity for annual noise monitoring campaigns, and any spurious legal actions that operators would still need to respond to, costing time, resources, and money. In our opinion an annual statement should suffice without the need for annual testing as a part of the provision of evidence.

Our own experiences have been extremely limited based upon a more favourable, risk-based approach. That is, we have managed and reported on any complaints until the issue was resolved and reporting was no longer required. Alternatively, with no noise issues reported, the management plan was not put into action.

Another approach that would not require the draft regulations could be to take measurements in accordance with NZS6808 very close to the turbine (tip height distance) but over the period of hours rather than days. Changing to 1 minute measurements and plotting against nacelle wind speed would give a wider wind speed range in a short time. Either option would be used for comparison purposes rather than absolute compliance levels.

Under the NZS6808, noise limits are calculated based on 'background noise levels' plus 5 dbA. For any noise assessment to be undertaken post-construction MEA Group would need to either turn the turbines off (2 week measurement period with 4-6 weeks for the background noise level process to complete), or have an 'attended on/off test' which involves turning wind turbines on and off repeatedly over several weeks. Financially, either approach have large cost implications, disproportionate to the risk, if background noise levels are required to be re-established post construction.

This method is also the only approach applicable under the NZS:6808. MEA Group believes that to apply this approach alone is flawed, if industry accepted this standard for re-testing every five years.

In summary MEA Group believe that the incumbent reporting requirements are satisfactory, we have not seen any new evidence to suggest that the draft regulations for 5 year testing or strict application of the equivalent New Zealand Standards are fit for purpose. If you would like to discuss any aspect of this submission, please do not hesitate to contact me.

Yours sincerely



James Ell
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