

Under the **FAST-TRACK APPROVALS ACT 2024**

In the matter of an application for resource consents, concessions, wildlife approvals, an archaeological authority, and approvals relating to complex freshwater fisheries activities in relation to the Southland Wind Farm project

By **CONTACT ENERGY LIMITED**

Applicant

**STATEMENT OF EVIDENCE OF MIKLIN HALSTEAD (NOISE EFFECTS) ON
BEHALF OF CONTACT ENERGY LIMITED**

14 January 2026

BUDDLE FINDLAY

Barristers and Solicitors
Wellington

Solicitor Acting: **Dave Randal / Thad Ryan**

Email: [REDACTED] / [REDACTED]

Tel 64 4 462 0450 Fax 64 4 499 4141 PO Box 2694 DX SP20201 Wellington 6011

INTRODUCTION

1. My full name is **Michael Miklin Halstead**.
2. My evidence is given on behalf of Contact Energy Limited (**Contact**) in respect of Contact's proposed Southland Wind Farm project (**Project**) in response to comments made under section 53 of the Fast-track Approvals Act 2024 (**Act**) by:
 - (a) Southland District Council (**SDC**);
 - (b) West Catlins Preservation Society (**WCPS**).
3. I prepared Technical Assessment #11: Noise Effects, dated 18 August 2025, in Part H of the application for the Project. My qualifications and experience are set out in paragraphs 8 – 12 of my technical assessment.

Code of conduct

4. I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. In particular, unless I state otherwise, the issues addressed in my evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

SOUTHLAND DISTRICT COUNCIL

5. SDC's comments attach a memorandum on noise related matters prepared by Dr Jeremy Trevathan of Acoustic Engineering Services. As recorded in that memo, Dr Trevathan also provided feedback on the previous Covid Fast-track consenting process for the Project.
6. Dr Trevathan's comments are generally supportive of the methodology I applied in assessing noise effects; Dr Trevathan also confirms his view that "the predicted noise emissions are generally reasonable".
7. In light of comments that have been made by local residents, I note in particular the following comment made by Dr Trevathan:

"Several submitters raised concerns around elevated noise levels being present in areas where farm workers will be operating outside in the daytime. I agree with MDA's response that this is not a protected activity with regard to noise amenity in rural areas, and note that the

predicted noise levels at nearby farmland not on the project site are expected to be well below thresholds resulting in any degradation of concentration or where loss of ability to communicate could occur."

8. Dr Trevathan has raised a number of discrete matters that he considers should be addressed. I respond to those matters below.

Transport of turbines and other material to the Project Site

9. Dr Trevathan correctly notes that oversize/overweight deliveries will require special vehicles and methods, involving slow deliberate movements with some preparation and reinstatement of signage and other road furniture. The slow speeds effectively increase the average noise level of each vehicle movement, as the noise source is present for longer periods of time.
10. In preparing my noise assessment, I reviewed the specific tracking paths required for turbine blade deliveries. The nearest vehicle movement to a dwelling occurs at the junction of Blackwater Street (SH1) and Shannon Street in Bluff, where traversing the roundabout brings the vehicle within 10 metres of the dwelling at the corner. I have based my statement of the worst noise effects on this situation. I acknowledge that it is possible this could occur every night for several months, although it may also be possible to convoy movements such that the number of days this occurs is reduced. At other dwellings the delivery vehicles do not approach the dwellings this closely, and so the noise levels are lower by 5 – 10 decibels than those calculated for this particular dwelling.
11. I have discussed the likely logistics of these deliveries with the project team, and understand that:
 - (a) major changes to the road features such as movement of power lines have already been made to accommodate deliveries of the Kaiwera Downs turbine components. If any further overhead lines require lifting, they will be done permanently rather than lifted for each over-size load;
 - (b) minor changes such as removal and reinstatement of streets signs are relatively fast and unintrusive activities which do not significantly increase the noise impact of a night's activities; and
 - (c) cranes and basket lifts are not expected to be needed.

12. On this basis I repeat my conclusion that minor noise effects will arise due to these deliveries, although they are not unanticipated, and not significantly dissimilar to the noise effects of existing activities such as forestry trucks or street cleaning. I do however agree that there is value in the applicant providing further clarification of the delivery schedule and any necessary mitigation measures, as part of the Construction Traffic Management Plan. I note that the proposed addition of condition TR2 (e)(iv) specifically requires consideration of such mitigations, and I consider that this addition addresses Dr Trevathan's concern.

Operational and Maintenance Facility

13. Dr Trevathan notes that in his experience, Operational and Maintenance (**O&M**) activities are often conducted with roller doors open, increasing the noise emissions relative to those I have assumed in my assessment. Although my experience with such facilities differs, I have carried out additional calculations to assess such activities from open doors.
14. Typical activities could include drilling, grinding, operating lathes, the use of impact wrenches, and hammering on metal. I have carried out measurements of similar activities at wind farm sites in the open air, and in partially enclosed sheds, as part of wind farm erection activities. I have measured noise level of 88 dB L_{Aeq} at 3 metres from this activity, reducing to 50 dB L_{Aeq} at a distance of 160 metres over soft ground.
15. The distances between the O&M site and dwellings at the Southland Wind Farm are around 1800 metres. The resulting noise level from such an activity at that distance is calculated to be 20 dB L_{Aeq} , discounting any additional topographic attenuation that may occur. This noise level is easily compliant with the operational noise limit, and unlikely to be audible, particularly during daytime hours.

Use of helicopters

16. Dr Trevathan notes that further clarity around anticipated flight paths would assist with the consideration of noise effects. I have based my assessment on the understanding that such activities would occur at least 1.5 km from dwellings. I understand that exact flight paths are not available at this stage, but would welcome such information when it is available to allow me to advise on whether any resulting noise effects should inform changes to these paths, or trigger any need for mitigation.

Comments on conditions

17. Dr Trevathan's comments on conditions generally lend support, and where he suggests further consideration, they are mostly on points of timing and procedure. I would support any changes that are universally considered to assist the efficient and complete processing of management plans and review of information, and consider that my expertise does not extend to such matters in a way that I could comment further.
18. Dr Trevathan suggests that the Construction Traffic Management Plan would benefit from further consideration of night-time deliveries, and I agree that the addition of condition TR2 (e)(iv) is an appropriate means of considering and addressing any necessary mitigations of noise effects related to these activities.

WEST CATLINS PRESERVATION SOCIETY

19. The WCPS submission raises a number of matters relating to noise. I respond to those in turn.

Location of Noise Measurements at 1542 Wyndham-Mokoreta Road

20. WCPS considers that this measurement does not adequately reflect the noise environment of the adjacent dwelling at 1403 Wyndham-Mokoreta Road, as the latter is set back further from the road. Although it is likely the case that vehicle noise will be quieter at a dwelling further from the road, the measurement of the L_{90} parameter, as required by NZS6808:2010 is generally not influenced by occasional traffic, but rather controlled by noise from wind in local vegetation. I therefore consider my representation to be reasonable.
21. I note that regardless of the measured background noise level, my assessment that the noise effects of the wind farm are reasonable is primarily based on the very low noise levels from turbines – 34 dB L_{Aeq} . This level is lower than even the more stringent noise limits which would apply at extremely quiet sites (which I do not consider this site to be). I do however agree with the submitter that the noise will at times be audible. As the submitter acknowledges, audibility is not necessarily an adverse effect.

Noise Measurements more generally

22. WCPS queries why sound is only relevant at dwellings. This is fundamental to the way that noise is assessed in the rural environment. The rural land is generally considered to be a working environment, and it is considered inappropriate to restrict activities that are productive. It is acknowledged however that within the rural environment there are areas of residential sanctuary, where noise protections similar to those offered in a residential zone should be provided – within the "notional boundary" of a dwelling. It is in this area that the District Plan and the New Zealand Standard apply.
23. WCPS asserts that the noise standards are antiquated and need to be updated for larger wind turbines. This is not the case – the latest standard was written in the context of turbines of similar size to present turbines. It should be noted that turbines do not make more noise as they get larger, and in fact generally have been shown to be quieter per unit of energy produced, and with less audible character as their technology has matured. Nevertheless, the noise standard, and the good practice documents which continue to evolve in support of the standard's application, contain appropriate methods for assessing the noise from modern wind turbines.
24. WCPS notes that modelling (presumably referring to measurements) were taken in August and September which is a busy time for the farms, relating to animal and vehicle movements, and suggests this therefore does not represent an adequate noise data set.
25. My assessment includes consideration of the noise during night-time periods only, and it is on the basis of these measurements that I have drawn my conclusions about turbine noise impacts. Generally night-time measurements avoid influence by stock and farm vehicle activity – and the L_{A90} parameter is also not influenced by occasional bleating or similar noises at night. I consider that while there may be valid seasonal variations in daytime activity relating to farming intensity, this does not invalidate the measurements I have taken for the reasons described above.
26. WCPS ask what "affect on amenity and noise does the outstanding natural landscapes assessment have"? I do not have expertise on the outstanding natural landscapes assessment, and am not aware of any matters of noise impact that would be considered outside of the notional boundaries of dwellings at this site.

27. WCPS asks whether the Catlins Conservation Park has different zoning in the Southland District Plan, and if so, whether this triggers any reverse sensitivity provisions. I do not understand how this would be the case.
28. WCPS notes that the measurement locations are not the closest dwellings (to the turbines). It is true that there are properties slightly closer to the turbines than those where measurements were taken, but in general it is only necessary to measure at representative locations, rather than at all locations, or at the closest locations. I note that in this case, there are no dwellings within the 35 dBA noise contour, and as such there is no statutory requirement to carry out any noise measurements. However, Contact and Marshall Day Acoustics both consider these measurements to be valuable to be able to inform the degree of noise effects on dwellings, and have carried out representative measurements to be able to provide this.
29. WCPS query whether there are scientific studies to support my assertion that stock and wildlife quickly adapt to the presence of new noise sources. I provided this observation simply as an observation; it does not have direct relevance to my assessment. I would also be interested in such a study.
30. WCPS consider that there has been no assessment of the noise effects on local families, and imply that the presence of a wind farm may adversely affect a farm's ability to retain staff. I presume this concern relates to matters other than noise effects on dwellings, as I have covered that matter in my assessment. The effects of wind farm noise on the working environment are not within the scope of my assessment, although I note that there are many farming activities which are significantly noisier than wind turbines, such as farm vehicles, stock, tractors, and handheld machinery. If there are other effects of the wind turbines such as social or visual impacts, these are outside my area of expertise.

Michael Miklin Halstead

14 January 2026