

From:
To: [Sen Madigan \(Private\); Committee, EC \(SEN\)](#)
Subject: sub18 WUSM Infrasound effects on the ear
Date: Friday, 19 October 2012 3:32:21 AM
Attachments: [Salt_Kaltenbach2011.pdf](#)
[Salt_Infrasound_review_2010.pdf](#)

Senator Madigan

I was pleased to hear that the Australian government is beginning to take seriously concerns that industrial wind turbines can influence the health of those living nearby.

We are a well-established research group at Washington University Medical School in St Louis, USA. I have been studying physiology the ear for over 35 years and the effects of very low frequency sounds on the ear for over 12 years. Until, 2010, we were completely unaware our measurements held any relevance to wind turbine noise.

The simple conclusion from our work and that of others in the neuroscience community is that **the inner ear is far more sensitive to low frequency sounds than has previously been recognized by the engineering and medical consultants to the wind turbine industry**. We are now studying the phenomenon in more detail and have no doubt that the ear is responding to the low frequency sounds and infrasound at the levels generated by wind turbines. I think it is very likely that many of the symptoms people report will be shown to result from prolonged low frequency stimulation of the ear. I attach, for your consideration, four of our publications related to the topic.

In view of this certain stimulation of the ear by very low frequency sounds and infrasound, I would implore you to insist on measurements of the low-frequency and infrasound components from wind turbines. The rationale for A-weighting sound measurements of wind turbines has now been shown to be invalid, as the effects on people are likely not mediated through hearing and perception. Even though the low-frequency sounds cannot be heard, the ear does respond to them and they can affect the exposed individual through other mechanisms.

We now know that the long-held assumption made by advisers to the wind industry, that low frequency sounds that cannot be heard cannot possibly affect people, is false. In view of this gross error, it is imperatand that future advisers pay more attention to the physiology of the ear.

Sincerely,
Alec Salt

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