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Senate Inquiry Submission

I support the proposed amendments to the Renewable Energy Act (Excessive Wind Farm Noise 2012).

Whilst there is much unknown about why people are becoming unwell in the environs of large industrial wind turbines, anything which increases the transparency of the wind industry with respect to actual noise emissions will assist with better understanding of the dose of sound energy being received by the residents. At present it is my understanding that the noise and wind mast data is not made available, and therefore it is impossible for the residents to know what they are exposed to, or whether the wind turbines are compliant with state government noise regulations.

The consequences of non payment of renewable energy certificates in the absence of evidence of compliance would seem to be appropriate, given the gravity of the known effect of excessive noise on human health.

Practitioner Observations

Throughout human history, well-intentioned, innovative, creative, insightful and determined individuals have been ridiculed, sometimes demonised and often criticised for discoveries that challenged institutionalised behaviour and the related contemporary beliefs and and/or theories. It was not necessarily that these people were wrong but rather that they revealed what Al Gore more recently popularised as being 'an inconvenient truth'. To this very day, this condemnation of such 'messengers' continues and as history demonstrates, we have not always learned well from these experiences of the past. Indeed, vested interest of times past and now use many means to deny, deflect, avoid, distract and resist those individuals and groups revealing such emergent discoveries of 'inconvenience'.

I believe that this process of obfuscation is now occurring in Australia regarding those affected by the so-called 'wind turbine syndrome' (WTS). Presently in Australia there is a quite vicious and dismissive attitude toward those people allegedly being affected by WTS. Rather than seeing such people as akin to the 'canary in the coal mine', they are dismissed as misguided, disingenuous, dishonest or mentally unstable. Of course, for those so affected, this vilification compounds an evolving trauma experience, and as a leading neurosurgeon recently said, what is worse than people disliking you is when they dismiss you.

As a practising psychologist, I have only recently become aware of this WTS first-hand, although for some years I have had some peripheral exposure, via the mainstream media. More recently however, I have met many individuals directly affected by WTS, and have had the privilege to be providing two individuals with psychological treatment and support.

Based on my recent experiences and interactions with such affected individuals, I am satisfied that this WTS condition is real. This conclusion of mine is based upon both hearing the stories of affected individuals and being aware of and having access to the limited yet growing scientific body of evidence highlighting this deleterious syndrome.

This syndrome is not, in my view, a psychosomatic illness or a nocebo effect. If this syndrome was primarily a psychosomatic condition, the genesis of the WTS would be rooted in inappropriate or irrational cognitive processing and my assessment of affected individuals elicits no evidence to support this. Moreover, psychosomatic conditions require a level of conscious awareness of adverse stimuli to activate somatic symptoms in the body. Conversely, I believe that the WTS affects people at a sub-conscious level, creating somatic symptoms without a conscious (or cognitive) awareness of why. Accordingly, this WTS is potentially a very insidious syndrome as the usual cognitive associations are not established till much later. At this later stage, psychosomatic responses may emerge, similar to people affected by post-traumatic stress disorder, but only retrospectively.

With regard to the nocebo effect (believing that one will be adversely affected in exposure to specific stimuli previously labelled as toxic or dangerous), the various theories of motivation ought to be acknowledged. Clearly, motivation among humans is a complex phenomenon. Nevertheless, for those affected by WTS that I have met and treated, there is no plausible motivation-based explanation for why they would want to be sick nor expect to be so, based on their prior life and medical histories. Furthermore, these are people who have possessed a very close affinity and love for their homes and locations, and so, have endured this syndrome for extended periods, and then in desperation, like environmental refugees, have had to leave their homes, with substantial regret.

I shall leave the scientific and/or neurological theories and explanations to the experts. Nevertheless, the existence of low frequency sound energy, produced by wind turbines, and inaudible to the human ear, may be the reason for this syndrome. While this low frequency noise or sound energy (aka infrasound) may be inaudible and thus not able to be consciously perceived by the human ear, it does appear that the ear's vestibular system is still capable of perceiving the presence of this infrasound, and so send signals to the central nervous system for processing, in this case without the conscious awareness of the affected individual. Despite this, it appears that this infrasound stimuli activates the automatic survival response, more commonly known as the fight/flight/freeze response. Consequently, somatic symptoms are experienced by affected individuals. These symptoms include hyper-arousal, anxiety, racing heart, nausea, muscle tension, panic, concentration and attention problems, memory difficulties, and more. At night, these symptoms can lead to insomnia and sleep disturbance, and consequent stress and emotional instability in the waking hours.

On the basis that this syndrome is not a psychosomatic illness (in the first instance) or nocebo effect, relief for affected people may only be achieved by removing them from the environment apparently responsible for catalysing their symptoms. Dialogue with affected people provides anecdotal evidence of the efficacy of this approach. Sadly however, chronic exposure to infrasound over an extended period, may more permanently alter the neurological state of affected people, and in such cases, we observe trauma-like symptoms among this cohort.

In my opinion, this is a serious health issue affecting a relatively small number of people in rural areas only, and so they lack the critical mass to adequately advocate for their rights. Vested interests, including government, business, environmental groups and communities want wind energy generation to be accepted and propagated across our country. Nonetheless, it is incumbent on governments at all levels to ensure the safety of fellow Australians. To this extent I appeal to the Senate of Australia to investigate this health issue, to allocate funds to undertake further research into the apparent WTS, and to consider a moratorium of further wind farm development until adequate and robust research is concluded and analysed. In the meantime, I would also ask that our elected representatives listen with open minds and hearts to those people currently substantially and chronically affected by a health problem that remains poorly understood.