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13<sup>th</sup> April, 2018

# WAUBRA FOUNDATION SUBMISSION TO THE CLIMATE CHANGE AUTHORITY REVIEW OF THE WIND FARM COMMISSIONER

# Terms of Reference of CCA Review

The review must consider the following questions (as per the Minister's letter to the Chair of the CCA on  $6^{th}$  March 2018<sup>1</sup>:

- To what extent is the role of the National Wind Farm Commissioner fulfilling the terms of reference (attached), including:
  - Working collaboratively with all levels of government, scientists, industry and the community to resolve complaints from communities about proposed and operational wind farms;
  - Referring complaints about wind farms to relevant state authorities and help ensure that they are properly addressed;
  - Leading efforts to promote best practices, information availability, and provide a central trusted source for dissemination of information?
- Should the role of the National Wind Farm Commissioner continue beyond the initial period of three years?
- Should the scope of the National Wind Farm Commissioner's role be expanded to other large scale renewable energy projects, such as solar and storage?
- What options are available to fund any ongoing role for the Wind Farm Commissioner?

The Terms of Reference for the Wind Farm Commissioner <sup>2</sup> included the following:

The negotiated settlement of the Renewable Energy Target in mid-2015 is expected to lead to increased construction of wind turbines in the next five years. The Senate Select Committee on Wind Turbines, held during 2015, identified many issues of concern relating to the standards, monitoring, and operation of wind farms.

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http://www.climatechangeauthority.gov.au/sites/prod.climatechangeauthority.gov.au/files/files/20 18%20Review%20NWFC/Terms%20of%20Reference.pdf

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The Government responded positively to the recommendations of the Committee's Interim Report, including the creation of the role of a National Wind Farm Commissioner.

The Commissioner will work collaboratively with all levels of government, scientists, industry and the community to resolve complaints from the communities about proposed and operational wind farms. The Commissioner will refer complaints about wind farms to relevant state authorities and help ensure that they are properly addressed.

The Commissioner will work with stakeholders to identify needs and priorities for monitoring wind farms.

The Commissioner will lead efforts to promote best practices, information availability, and provide a central trusted source for dissemination of information.

The Commissioner, supported by the Australian Government Department of the Environment, will report to the Minister for the Environment and provide an Annual Report to the Australian Parliament on delivering against these Terms of Reference.

The work of the Commissioner will not duplicate or override the important statutory responsibilities of other jurisdictions, such as those relating to the planning and approval of wind farms. The Commissioner is to draw on the work of the Independent Scientific Committee on Wind Turbines.

# Background to the Waubra Foundation's submission

The Waubra Foundation is a charity registered with the Australian Charities Not For Profit Commission (ACNC)<sup>3</sup> with the charitable purposes of "advancing health" and to "promote or oppose a change to law, government policy or practice". Our objectives are "to promote human health and well being through the prevention and control of diseases and other adverse health effects due to industrial sound and vibration, and to promote and protect human rights where those human rights are, or may be, adversely affected because of industrial sound and vibration".<sup>4</sup>

We were established in 2010, and since then have worked collaboratively with industry independent, ethical, acoustic and psychoacoustic researchers, in order to provide support to noise nuisanced members of predominantly rural communities who approach us for information and assistance. These noise sources have included open cut and underground coal and gold mines, coal seam gas extraction and transportation facilities, power generation facilities including gas and coal fired power stations, and noise from operating industrial wind power facilities, with multiple individual wind turbines, commonly known as wind "farms".

Our work in this area **across a range of industrial noise sources** has recently been recognised by the Administrative Appeals Tribunal, who amongst other things in their decision also recognised that the current regulatory framework for wind turbine noise based on dBA alone, that ignores low frequency noise, does not protect people, that there is field evidence of measured wind turbine noise levels exceeding limits known to induce noise annoyance, and that wind turbine noise can be a pathway to disease, including cardiovascular diseases, via noise annoyance.<sup>5</sup>

The regulatory context in which these often severely noise nuisanced residents who seek our help find themselves can be broadly summarized as follows:

<sup>&</sup>lt;sup>3</sup> https://www.acnc.gov.au/RN52B75Q?ID=B17A5108-A8C0-40F7-A4D2-4CC0495E757D&noleft=1

<sup>&</sup>lt;sup>4</sup> <u>https://waubrafoundation.org.au/about/objectives/</u>

<sup>&</sup>lt;sup>5</sup> <u>https://waubrafoundation.org.au/resources/aat-decision-reasons-waubra-foundation-vs-acnc-dec-</u> <u>4-2017/</u>

- There is limited acknowledgement, by some state health authorities, that noise pollution, including low frequency noise, and including wind turbine noise, is or could be a public health problem, because of the known, accepted, adverse effects of chronic noise exposure on sleep and stress. These adverse impacts are worse if people are at the extremes of age, have underlying physical or mental health conditions, or have specific risk factors including motion sickness, migraines and inner ear pathology. Some state health authorities (QLD <sup>6</sup> and Victoria <sup>7</sup>) have acknowledged the important issue of low frequency noise sensitivity and noise sensitization in individual reactions to noise, an issue of particular relevance to wind turbine noise. Noise sensitisation relates to the scientific observation that people do not "get used to" or "habituate" to noise with certain characteristics (impulsiveness / pulsing) rather they become increasingly sensitive, resulting in a lowering of their thresholds of perception with ongoing exposure.<sup>8</sup>
- There is widespread ignorance about the known and serious adverse health effects of noise and vibration amongst treating health practitioners, with some notable exceptions. This is in part understandable because of the workload demands on busy rural medical practitioners, and in the context of wind turbine noise specifically, a very active product defence campaign, reminiscent of that used by Big Tobacco, and James Hardie, despite admissions about wind turbine noise made by wind turbine manufacturers such as VESTAS.<sup>9</sup>
- There is widespread regulatory failure on the part of noise pollution control authorities, • who are state based and located in cities with few (if any) regional offices, and who have a track record of working very closely with noise polluters and their consultant acousticians, including to write "guidelines" and regulations but who in almost all instances abjectly fail their statutory duty of care and ethical obligations to protect the health and wellbeing of residents. If they were protecting residents they would ensure that genuinely industry independent full spectrum noise investigations occur, consistent with the latest scientific evidence, and would take prompt and effective subsequent action to address identified problems. Instead, noise "investigations" (if they occur at all) are almost always carried out under the control, and direction, of noise polluters. Residents (regardless of the noise source) consistently report that activity and noise levels during the monitoring period are not representative of what they usually have to endure, and that conditions revert back to "normal" when the acoustic monitoring equipment is removed. This situation has understandably led to longstanding and deep distrust of noise pollution regulatory authorities, and contempt for industry acoustic consultants who are regarded, rightly, as "guns for hire" rather than independent professionals abiding by their code of ethics.

Accordingly, in this regulatory and ethical vacuum, where for nearly eight years the Foundation has observed the legal and human rights of these vulnerable and sick Australians being regularly and systematically being ignored by government authorities as well as noise polluters, our activities have included responding directly to residents' specific requests for information, support and assistance, regardless of the noise source. We actively encourage noise nuisanced residents to collect their own scientifically objective, and where possible legally admissible evidence, of their acoustic exposures, either by employing their own acoustic consultants if they

<sup>&</sup>lt;sup>6</sup> https://www.health.qld.gov.au/ data/assets/pdf file/0027/428634/report.pdf

<sup>&</sup>lt;sup>7</sup> <u>https://waubrafoundation.org.au/wp-content/uploads/2013/05/Wind-farms-sound-and-health-</u> <u>Technical-information-WEB-29April2013.pdf</u>

<sup>&</sup>lt;sup>8</sup> <u>https://waubrafoundation.org.au/resources/laurie-thorne-cooper-startle-reflex-sensitisation/</u> <sup>9</sup> <u>https://waubrafoundation.org.au/resources/australian-environment-foundation-what-vestas-knew-and-when/</u> <u>CEO Mobile: 61 + 0474 050 462</u>

can afford to do so, or by purchasing their own acoustic recording and monitoring equipment and learning how to use it, where possible with industry accepted technical qualifications. <sup>10</sup>

We have also encouraged people to keep detailed diaries of their responses to those acoustic exposures via detailed environmental noise exposure diaries,<sup>11</sup> and by the use of concurrent personal physiological monitoring devices if symptoms such as **repeated rapid acceleration of heart rate** and **sleep disturbance** are reported by them. We encourage this particular data collection because these specific symptoms are increasingly being recognised as examples of activation of the startle reflex response (an involuntary sympathetic nervous system reaction to acoustic, pressure and vestibular stimuli). Repeated activation of the startle reflex in mammalian studies (with impulsive noise vs slow rising noise at the same dB level as the acoustic stimulus) has been demonstrated to lead to noise sensitization.<sup>12</sup>

A notable example of this startle reflex (aka fight flight response) reaction to amplitude modulated wind turbine noise now in the public domain is that of a NSW couple, previously noise sensitized to coal mining extractor fan and coal fired power station noise near their home, who subsequently reacted suddenly, and powerfully, to wind turbine noise at Taralga, in rural NSW with only transient exposure whilst attending a public toilet on their way home. In that instance amplitude modulated sound from the nearby wind turbines was detected precisely where this reaction occurred, and their symptom reports were not only witnessed, but the rapid activation of the sympathetic nervous system was confirmed with objective physiological data captured on the biological monitoring showing a sudden rapid acceleration of heart rate.<sup>13</sup>

It is not surprising to us that the wind industry via its acoustic consultants and other well known product defenders has attempted to discredit this Taralga physiological data, in part by discrediting the researchers who collected it alleging ethical breaches by those researchers, and by also asserting that it was unthinkable that wind turbine noise could be responsible for these symptoms, despite the fact that this pattern of symptom occurrence is regularly publicly reported by noise sensitized residents. This sort of objective physiological and acoustical scientific data is very damaging to those who deny there is (or could be) a direct causal link between reported symptoms and (amplitude modulated) wind turbine noise, despite admissions by UK based, wind industry consultant acoustician Dr Geoffrey Leventhall in his evidence to the 2015 Senate Inquiry that it is amplitude modulation that "upsets people" (evidence given on 23 June, 2015 in Canberra in response to a question from Senator John Madigan, chair of the inquiry about whether Leventhall supported full spectrum acoustic investigations inside homes). The extract from the Official Hansard is reproduced immediately below:

**CHAIR:** What sort of research do you think is now required as a priority? Do you support the detailed investigation of the full acoustic spectrum inside affected residents' homes, together with concurrent physiological testing of their brainwaves, heart rate, blood pressure and stress biomarkers?

**Dr Leventhall:** I think that the most important aspect of wind turbine noise—which I said in the paper I published nearly 10 years ago—is the amplitude modulation. Work is now developing on that, and I believe that that is where the main answer should be given, in amplitude modulation, because this is what upsets people. Personally, I do not believe that the infrasound and the low-frequency noise are an important problem, but because of the public and political pressure, it is inevitable that some work will be done on that. Work inside residences is obviously more important than work outside residences.

<sup>&</sup>lt;sup>10</sup> <u>http://www.acoustar.qld.edu.au/noise-measurement.html</u>

<sup>&</sup>lt;sup>11</sup> https://waubrafoundation.org.au/information/residents/journals/

<sup>&</sup>lt;sup>12</sup> https://waubrafoundation.org.au/resources/laurie-thorne-cooper-startle-reflex-sensitisation/

<sup>&</sup>lt;sup>13</sup> <u>https://waubrafoundation.org.au/resources/rapley-et-al-case-report-cross-sensitisation-infrasound-low-frequency-noise/</u>

This denial of any link between noise induced stress resulting in adverse health effects by industry associated acousticians and noise pollution regulatory officials is increasingly untenable from a clinical perspective with the increasing clinical recognition that acute severe stress resulting in adrenaline surge pathology such as Tako Tsubo cardiac events can indeed be induced by noise, <sup>14</sup> as well as epileptic seizures, <sup>15</sup> drowning and hanging, <sup>16</sup> and severe infections. <sup>17</sup> Importantly there is increasing clinical recognition that the originating stress resulting in Tako Tsubo events can be neurological or physiological, as well as emotional.<sup>18</sup>

In other words, in lay terms, acute severe stress, including from noise, is resulting in the release of large quantities of adrenaline. This excess of adrenaline can in turn induce Tako Tsubo heart events that are potentially fatal. Such events have been reported to the Foundation, including in young people, at both coal mines in the Hunter Valley Region, and at industrial wind power developments.<sup>19</sup> Other researchers including Engineer Bill Palmer from Ontario have also reported clusters of unexpected sudden cardiac deaths in residents exposed to wind turbine noise in rural Ontario, and queried whether the wind turbine noise exposure could have been a factor.<sup>20</sup> It is certainly possible that some of these deaths were due to Tako Tsubo events.

With respect to the subject of ethics, we note in particular that the Australian Acoustical Society has as its first item in the code of conduct that "*the welfare, health and safety of the community shall at all times take precedence over sectional, professional and private interests*".

It is the Foundation's view that our role would be limited to facilitating independent research into the as yet unanswered scientific questions, rather than encouraging residents to obtain their own independent acoustic monitoring data if all acousticians as a profession, including particularly those working for noise pollution regulatory authorities, were indeed operating **at all** *times* in accordance with their code of ethics.

With respect to wind turbine noise specifically, Australian Research Council funded wind turbine noise researcher, Emeritus Professor Colin Hansen has made some pointed comments with respect to the issue of the lack of ethics within his profession, with respect to wind turbine noise.<sup>21 22</sup> We are clearly not alone in our concerns about the conduct of acousticians in Australia.

What are at issue are repeated breaches of an increasing number of Australians' fundamental human and legal rights with respect to protection from health damaging noise pollution. The fundamental right to attain the best possible physical and mental health (enshrined in six out of seven of the UN instruments to which Australia is a signatory) is impossible to achieve, even for

- <sup>16</sup> <u>http://www.jccjournal.org/article/S0883-9441(15)00465-7/pdf</u>
- <sup>17</sup> <u>https://www.sciencedirect.com/science/article/pii/S2210833514001245</u>
- <sup>18</sup> <u>https://www.radcliffecardiology.com/articles/life-threatening-takotsubo-cardiomyopathy</u>

<sup>&</sup>lt;sup>14</sup> <u>https://academic.oup.com/eurheartj/article/37/37/2844/2469940</u>

<sup>&</sup>lt;sup>15</sup> https://www.radcliffecardiology.com/articles/life-threatening-takotsubo-cardiomyopathy

<sup>&</sup>lt;sup>19</sup> <u>https://waubrafoundation.org.au/resources/acoustical-society-america-conference-2015-waubra-foundation-presentation-notes/</u>

<sup>&</sup>lt;sup>20</sup> <u>http://www.imedpub.com/articles/why-wind-turbine-sounds-are-annoying-and-why-it-matters.pdf</u>

<sup>&</sup>lt;sup>21</sup> <u>https://waubrafoundation.org.au/resources/hansen-c-whats-our-ethical-responsibility/</u>

<sup>&</sup>lt;sup>22</sup> <u>https://waubrafoundation.org.au/resources/hansen-c-collateral-damage-engineering-ethics-and-wind-farms/</u>

people in excellent physical health with no underlying risk factors, if they are chronically subjected to uncontrolled, unregulated, excessive noise with noise characteristics resulting in sleep disturbance, stress and progressive noise sensitization.

This health damage is precisely what is currently occurring in Australia, in the context of wind turbine noise as well as other industrial noise sources – and there is a significant volume of evidence now in the public domain from both noise impacted people and independent researchers. It was in part for this very reason that the position of National Wind Farm Commissioner was created – due to the evidence obtained during the third Federal Senate Inquiry chaired by Senator John Madigan, dealing with the issue of wind turbine noise and its regulation. Similar evidence was provided in our AAT case, previously mentioned, where the judges accepted that wind turbine noise could be a pathway to disease, including cardiovascular disease.

Please note in the context of this submission that noise is defined as "unwanted sound" and can be inaudible, and that Australian Acoustician Steven Cooper's latest research has demonstrated that noise sensitized people react with 100% accuracy to amplitude modulated inaudible wind turbine recorded sound to which they are blinded, in a recent prospective, case control study, reported at the American Society of Acoustics Conference in New Orleans in December 2017, three days after the AAT decision was delivered. This laboratory research, at last, provides clear evidence of a direct causal link between inaudible sound and the precise symptoms and sensations reported by residents living near a range of industrial developments, including wind turbines, when these previously "normal" people are exposed to amplitude modulated sound.

I have been advised by Mr Cooper that the National Wind Farm Commissioner has been made aware of this groundbreaking research. Mr Cooper's work in this area is being increasingly recognised by his international peers, and he is an invited speaker to the Euronoise conference in Crete in June 2018.

Finally, with respect to the obligations of Australian Federal Public Servants to protect the human rights of Australian citizens I note the following requirements, laid out in the APS Values and Code of Conduct in Practice.<sup>23</sup> (bold emphasis mine)

Employees of the Australian Public Service (APS) occupy a position of trust. They are entrusted by the Government and the community to undertake important work on their behalf. With this trust comes a high level of responsibility which should be matched by the highest standards of ethical behaviour from each APS employee.

Together the APS Values, the APS Employment Principles and the APS Code of Conduct set out the standard of behaviour expected of agency heads and APS employees. They provide the public with confidence in the way public servants behave, including in their exercise of authority when meeting government objectives.

The Public Service Act 1999 (PS Act) requires APS employees and agency heads at all times to behave in a way that upholds the APS Values. Agency heads and Senior Executive Service employees must also promote the Values. All employees must inform themselves of their obligations under the PS Act.

<sup>&</sup>lt;sup>23</sup> <u>http://www.apsc.gov.au/publications-and-media/current-publications/aps-values-and-code-of-</u> conduct-in-practice CEO Mobile: 61 + 0474 050 463

# The conduct of public servants, both inside and outside the workplace, can have implications for the confidence the community has in the administration of an agency or the APS as a whole.

This guide is structured around the three professional relationships that are a central part of work in the public service: relationships with the Government and the Parliament; with the public; and with public service colleagues.

Further scrutiny of the APS requirements and values reveals that public servants must be ethical, accountable and respectful.<sup>24</sup> Extracts from each of those sections are reproduced below.

#### **Ethical**

2.2.7 The Ethical Value provides for an APS that demonstrates leadership, is trustworthy, and acts with integrity in all it does.

2.2.8 The Directions about this Value require APS employees to comply with all relevant laws, appropriate professional standards and the APS Code of Conduct. Employees must act in accordance with government policy and decisions. An employee's actions must also comply with the law. [7]

2.2.9 The law can sometimes be complex. The work of public servants may be subject to many different statutes, regulations, other legislative instruments and other rules. Employees should ensure they know and understand the laws that are relevant to their duties.

2.2.10 When working with the public, employees must follow through on commitments made and must be able to demonstrate that they have acted with honesty and integrity. Employees are expected to act in the right way, as well as the technically and legally correct way.

2.2.11 The Directions about this Value also require employees to provide leadership in policy development, implementation and program management. This requirement is relevant to consultation with the community on these matters.

#### Accountable

2.2.17 The APS is open and accountable to the Australian community under the law and within the framework of ministerial responsibility.

2.2.18 The Directions about this Value require APS employees to be open to scrutiny and transparent in decisionmaking. They should be able to demonstrate that actions and decisions have been made with appropriate consideration. Employees should be able to explain actions and decisions to the people affected by them. Employees are accountable for their actions and decisions through statutory and administrative reporting systems. 2.2.19 One of the ways in which employees contribute to the proper functioning of government is by making decisions that comply with policy and law. This applies both in the management of programs and in deciding individual cases. Decisions that may affect the rights and entitlements of people may be subject to the requirements of administrative law.

#### Respectful

2.2.12 The Respectful Value provides for an APS that respects all people, including their rights and their heritage. 2.2.13 The Directions about this Value require APS employees to treat all people with dignity, recognising that all people have value. They should deal with all people honestly and with integrity. Employees should recognise the importance of human rights and understand Australia's human rights obligations, and comply with all relevant anti-discrimination laws. They should recognise and foster diversity and be open to ideas in policy development, implementation, program management and regulation.

2.2.14 An awareness of, and sensitivity to, the diversity of the Australian community is important to achieve quality advice and service provision. It ensures different perspectives are brought to bear on decision-making. Good policy and program delivery is responsive to the needs and interests of different community groups.

2.2.15 Consultation with the community and business sectors is critical to policy development and program design. Different perspectives promote innovation and can produce new ideas. Good policy requires a thorough understanding of the issue to be addressed and the impact any policy proposals would have on stakeholders. Governments are rarely able to impose policy solutions in isolation, and the success of resultant programs is dependent to a large extent on the ability of government to mobilise wide community support.

It is therefore through the broader lens of the current regulatory context for noise pollution in Australia, with the background of specific concerns about the failure of ethical behaviour of acousticians resulting in breaches of legal common law rights to live in one's home without being

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noise nuisanced, and breaches of fundamental human rights to attain the best possible physical and mental health, in addition to the specific code of conduct for Australian Public Servants and relevant values, as well as the narrower terms of reference of this particular review, and the terms of reference for the Wind Farm Commissioner's work that we look at the track record of the National Wind Farm Commissioner (NWFC) and his office.

## **Direct Involvement with the NWFC**

As CEO of the Foundation, I have had very limited direct involvement with the NWFC. At the suggestion of the member for Wannon, Dan Tehan, I met with the NWFC in December 2015 in a café in Melbourne. Whilst the Commissioner gave the appearance of listening to what I had to say, he was also at times busy acknowledging people he knew. The NWFC promised at that meeting to arrange a meeting for me with members of the Independent Scientific Panel, but no such meeting was ever subsequently arranged.

I was concerned at the time of the meeting that neither the Commissioner, nor those who appointed him, were genuinely interested in establishing what the precise acoustic exposures of noise impacted residents were, which should be the starting point for any valid investigation of a noise complaint at an existing wind farm. There was no budget for industry independent noise monitoring, and my direct knowledge of the historical behaviour of state based regulatory authorities on the issue of wind turbine noise in New South Wales, Victoria and South Australia gave me no confidence that referrals by the NWFC (if they ever occurred) would be properly conducted. I am not aware of any noise investigations having been conducted at the instigation of the Wind Farm Commissioner – either by regulatory authorities or by consultant acousticians and would be interested to know if they have occurred, what the outcomes were, and what the publicly available information about any such investigations might be.

I was also concerned that there could have been an agenda to "shut down complaints and complainants" by a variety of means including the use of a type of non disclosure agreement under the guise of "privacy" by the Office of the Commissioner itself, as has happened. This behaviour is not consistent with the transparency requirement in the APS code of conduct. In addition I had multiple reports from various residents at proposed wind farms of the Commissioner encouraging the use of non disclosure agreements by the wind industry including particularly the so called "good neighbour agreements" in advance of wind turbine developments being approved or built. An example of such an agreement is the Trustpower Neighbour Deed written by Trustpower Australia Holdings Ltd for residents at the Palmer Wind Farm.<sup>25</sup> Such agreements legally bind those who sign them, and in particular may prevent the subsequently noise impacted resident from complaining to a regulatory authority about a subsequent noise nuisance problem. Such agreements are sometimes referred to by wind industry supporters as "community benefit sharing" but in effect are "shut up" agreements which allow fundamental abuses of human rights to subsequently occur especially if vulnerable people are effectively bullied into signing them. This situation is of concern particularly when those people have been falsely reassured that "there are no health problems from wind turbine noise" and do not have the personal capacity to do their due diligence. These non disclosure agreements are also commonly part of property buy out agreements when the wind industry are forced to purchase the properties of noise affected residents - multiple former residents at Toora (confirmed by a Slater & Gordon employee in a letter to the Australian) and Waubra Wind Farms in Victoria (eg Trish and Victor Godfrey) being historic examples in the public domain.

 <sup>&</sup>lt;sup>25</sup> <u>https://waubrafoundation.org.au/resources/neighbour-deed-palmer-wind-farm-south-australia/</u>

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I have since listened with increasing concern to numerous private reports from rural residents and others including industry independent acousticians and health professionals who have interacted with the NWFC since that original meeting. Examples of situations where I was not specifically requested by those sharing them with me to keep those details confidential are listed below.

- 1. I was contacted by a number of severely chronically wind turbine noise affected Waubra residents who met with the NWFC in a pre arranged meeting, but who were not allowed by the NWFC to have independent observers at that meeting. The NWFC drove up from Melbourne with the wind farm senior representative. This alone was cause for concern with respect to the perception of the lack of independence of the NWFC. Other concerns were expressed about the attitude of the NWFC during the course of that meeting. After the meeting, the residents were understandably cynical about how useful the NWFC would be in helping them resolve longstanding and ongoing noise complaints with the operator, Acciona, and the failure of the duty of care of the noise pollution regulatory authority being the Victorian Department of Planning. I was subsequently told that some residents were so disgusted with what they saw during that meeting that they did not see any point in lodging a formal complaint with the NWFC, and that other residents who did lodge complaints with the NWFC had their complaints closed by him with no action with respect to the noise nuisance they had complained of. This behaviour by the NWFC would appear to be in potential breach of multiple areas of the APS code of conduct and stated values and certainly led to a breach of trust by those residents.
- 2. I note that in a newspaper article in the Ballarat Courier published on 17<sup>th</sup> January, 2018<sup>26</sup> that the NWFC was quoted as saying that of the 55 complaints lodged by residents at existing wind farms that 53 complaints had been closed. Given that many of those complaints were reported to include noise complaints, and that no independent noise investigations appear to have been conducted to thoroughly investigate those complaints, I question the factual basis on which those complaints relating to noise and vibration have been closed.
- 3. In that same newspaper article the NWFC was quoted as saying the following:

"Andrew Dyer, whose tenure as commissioner runs out in November 2018, said the vast majority of complaints came from wind farm proposals rather than operating sites. He said the bulk of complaints continued to be concerns around noise, with illness-related queries declining as more turbines appear.

If residents are increasingly being encouraged to sign good neighbour agreements, that prevent them from complaining to anyone including the NWFC about the subsequent noise impacts, then that could also explain the alleged "illness-related queries declining". Another explanation could be that noise affected people do not trust the NWFC, and regard him and his office as a waste of time and effort, because they are aware of others who have put extensive effort into lodging complaints only to have the NWFC dismiss them by simply closing their case and saying insufficient evidence has been provided to substantiate their claims. I am aware of numerous severely noise affected people from NSW, Victoria and South Australia who individually decided against lodging complaints for that reason.

The Ballarat Courier article goes on to state the following:

"Like any change, whether it's mobile towers, smart meters or wind turbines, there's going to be a period of time for communities to get used to them," Mr Dyer said. "People have real or perceived fear of any new technology, but if there was a systemic issue (with wind-related illness) there would have been trends by now."

With respect to Mr Dyer's claim that residents are "getting used to" the wind turbines, there is no scientific evidence that people who become noise sensitized to wind turbine noise can then "get used to" or habituate to the noise. On the contrary, the scientific and acoustic evidence suggests that once noise-sensitized, people will only improve once they are removed from the noise source, and their exposure is reduced. This statement by the NWFC is not only factually incorrect, it is also inconsistent with the APS values of honesty and using the best available (scientific) evidence, rather than propaganda manufactured by wind industry product defence teams.

With respect to Mr Dyer's claim again in the same newspaper article that "if there was a systemic issue (with wind-related illness) there would have been trends by now" I refer the CCA review team to the paper by PhD candidate Eric Zou,<sup>27</sup> analyzing suicide rates using a very large data set from multiple independent credible sources including the Centre for Disease Control (CDC), that showed a statistically significant increase in suicide rates corresponding with sleep disturbance and wind direction, suggesting that wind turbine noise related adverse effects on sleep could indeed be a serious systemic problem, with fatal outcomes. Sleep disturbance has been widely reported by wind turbine noise affected residents, and has been confirmed on numerous occasions as an issue by experienced Sleep Physicians such as Dr Wayne Spring, and in the UK, Dr Chris Hanning in addition to local treating doctors such as Dr David Iser from Toora in Victoria in 2004, well before the Waubra Foundation was established six years later. Recent Swedish laboratory research has demonstrated that strongly amplitude modulated wind turbine noise can induce sleep disturbance even in fit young healthy study participants. Chronic sleep disturbance regardless of the cause is widely and increasingly acknowledged to be a major contributor to serious longterm adverse health effects for both physical and mental health - a fact acknowledged in the recent AAT Court decision previously mentioned. The failure of the NWFC to publicly acknowledge that sleep disturbance in the context of wind turbine noise exposure is a serious and growing issue in the community that must be dealt with, and prevented, in order to protect the fundamental human and legal rights of rural residents, is indicative of whose financial interests this particular NWFC is working so hard to protect.

4. Multiple residents have informed me that the NWFC had told them that the Foundation was scaremongering, and that there was no evidence of any adverse health effects from wind turbine noise. In addition, a South Australian then shadow Minister and now Minister in the new South Australian government led by Premier Steven Marshall told me that the NWFC had told him that there was no evidence of adverse health effects from wind turbine noise. This statement is factually incorrect. Honesty is one of the requirements of the APS. I have no reason to doubt these consistent accounts from multiple sources.

With respect to the terms of reference for the review as listed by the Minister, I make the following comments (in red).

• To what extent is the role of the National Wind Farm Commissioner fulfilling the terms of reference (attached), including:

 <sup>&</sup>lt;sup>27</sup> the paper by Eric Zou, and a critique of it by Dr Nina Pierpont are available here: <u>http://en.friends-against-wind.org/health/pierpont-re-zou-wind-turbine-syndrome</u>
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- Working collaboratively with all levels of government, scientists, industry and the community to resolve complaints from communities about proposed and operational wind farms; with respect to complaints about noise and vibration, in the absence of objective and competent evidence based, industry independent, investigation of the acoustic exposures, conducted in a manner consistent with the AAS code of ethics, and incorporating the very latest scientific evidence, I do not understand how the NWFC can resolve such noise complaints, nor do I understand how this can be considered consistent with the various provisions of the APS code of conduct.
- Referring complaints about wind farms to relevant state authorities and help ensure that they are properly addressed; I am unaware of any investigations by state based authorities, and in any case, given their track records I have no confidence in their ability to conduct such measurements free from interference and undue influence from the wind industry and political pressure. The result is always the sacrifice of the legal and human rights of noise impacted residents, many of whom do not have the financial resources to pursue legal remedies, a fact well known to the industry and the regulators. This result is contrary to the APS code of conduct.
- Leading efforts to promote best practices, information availability, and provide a central trusted source for dissemination of information? I have direct knowledge that the NWFC has provided misleading information to politicians and noise affected and concerned rural residents, as reported to me by those individuals. The failure of the NWFC to take notice of important scientific developments and instead to publicly pedal wind industry propaganda that people "get used to" the noise as per the media report in the Ballarat Courier provides direct evidence of his abject failure in this particular area. He is not trusted, with good reason.
- Should the role of the National Wind Farm Commissioner continue beyond the initial period of three years? It has long been my view that what is required to protect public health is a Federal National Noise Pollution regulatory regime, incorporating all industrial noise sources, to provide oversight to ensure that the existing state regulatory regimes actually work with strong Federal oversight, free of political and industry influence, to protect people's health in accordance with the AAS code of ethics, and minimize the effect on the current Federal Health budget. It would need to be staffed by adequately remunerated Acousticians of impeccable ethical standing and technical knowledge and ability who were trusted by the community, into whose homes they would be entering to conduct acoustic investigation if state regulatory authorities were unable or unwilling to act on residents noise complaints. It could be funded by hefty fines of noise polluters for repeated breaches of noise pollution regulations and/or noise nuisance episodes – such a system would act to positively reinforce to noise polluters that health damaging excessive noise pollution doesn't pay. At the moment, wind turbine noise pollution pays handsomely, in the form of lucrative renewable energy subsidies. There are currently no adverse financial consequences for harming people's health or forcing them out of their homes, and there is ongoing public and private denial of any wind turbine noise related health problems by the current NWFC.
- Should the scope of the National Wind Farm Commissioner's role be expanded to other large scale renewable energy projects, such as solar and storage? Outside the Foundation's area of interest and expertise
- What options are available to fund any ongoing role for the Wind Farm Commissioner? See the above suggestion re funding

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