RE: Renewable Energy (Electricity) Amendment (Excessive Noise from Wind Farms) Bill 2012

I live within 2km from the nearest turbines belonging to the Waubra Wind Farm I support this new amendment as it will help stop the excessive audible noise and as a result of overall noise reduction may help with the low-frequency noise.

You are probably aware of the recommendations of the World Health Organisation,

"environmental **noise as harmful pollution**, with adverse psychosocial and physiological effects on public health.

"Measurable effects of noise on sleep begin at LAeq levels of about 30 dB. ...the equivalent sound pressure level should not exceed 30 dB(A) if negative effects on sleep are to be avoided.

You may not be aware of the regulations used by USA town planners in various areas including Calmut County and Ellis County

Audible Sound Standard: The audible sound emitted by Wind Energy System operations shall not be greater than 5 dBA above the background noise level (L90) for the quietest period of the day measured during the pre-build noise study.

As we live in a quiet rural area where background noise is particularly quite at night, averaging around 20dB this new bill will help rural areas, where it would appear from the above standard the level of noise permitted from Waubra should be a maximum of 25dB.

The noise standard used at the present time allows wind turbines to run at background + 5dB or 4odB, which ever is the **greater.**

I am hopeful a new standard of background + 5dB or 3odB whichever is the **LESSER** will be applied. This would bring relief to all rural residents where background noise is low, and coastal areas where background noise will be higher due to the ocean sounds.

Noise from the Waubra Wind Farm stops me from sleeping through the night.

Over the summer months we have a dilemma! Do we open the window at night to cool the house and be kept from sleeping by the pulsating swoosh swoosh of the turbines, which is something like a Chinese water torture, or keep the windows shut and not sleep from the heat.

There are nights during the cooler months (even with the windows shut) when the audible swoosh, swoosh, of the turbine blades can be heard in the bedroom, this keeps me awake. Some nights you can feel the noise through the pillow. When the noise goes on for days and I have hardly slept, I am lethargic, cranky, unmotivated, can't make descisions and I am sleepy during the day. I can fall asleep on the lounge in the middle of the afternoon.

The noise has had an effect on me since 2009. During lambing (Aug and Sept 2009), I spent many hours working in a paddock 1 to 1.5 km's from a group of Wind turbines. After the first few days I started to get a headache and this got continually worse as the lambing went on. During my life I have had approx 12 headaches, since the operation of the Waubra Wind Farm I have had over 60. I was beginning to think I had a brain tumour but latter discovered that other farmers in the area were experiencing headaches when they were close to the turbines.

Towards the end of lambing I was not spending as much time this close to the turbines and my headaches gradually ceased.

In Nov/Dec 2009 I was doing some fencing at about 1.5km's from the turbines and the headaches returned. Once again the headaches ceased when this job was complete and I was away from the turbines.

On another occasion while feeding hay to the cattle out of my trailer, I was overcome with dizziness and almost fell from the trailer. As I hung onto the side of the trailer it felt as if I was in a small boat bobbing up and down in a series of small waves. I looked up at the turbines and I could clearly hear a loud chopping sound coming from them. I also noted I was in a direct line with two of the turbines (one behind the other), and their blades seemed to be spinning in sync. I got into the car and moved about 300m out of the alignment and the sensation abated, but the noise was still present.

My tinnitus has become so much worse, to the point now, that listening to people talk in a one on one conversation can find me having to continually ask them to repeat themselves. This didn't start happening till about 2-3 months from the full operation of the turbines. I have been referred to a hearing specialist as my hearing is deteriorating rapidly.

I deliberately avoid the top paddock which is closest to the turbines, and when I do have animals up there I make sure they are not lambing or calving, which would mean I would have to be checking them regularly thus putting myself in danger of headaches. This limits the land use of the most fertile and productive land on my property.

I live on the northern end of the wind facility and wonder if the cumulative effect from the noise is more noticeable here, as our cattle are now nervous and spook easily. The year Aug/Sept 2010 I brought the sheep down to the house paddock for lambing so I could be away from the noise as much as possible and avoid headaches. During their pregnancy the sheep where in our middle paddock where I had experienced the dizziness and chopping noises. During lambing I watched lambs being born dead or dying within minutes after birth. Some mothers were walking off abandoning their lambs straight after birth, this behaviour coincides when the turbines are at their noisiest. DPI were called and no mineral deficiency could be found to explain the deaths.

Lambing for Aug/Sept 2011, the turbines were running nosily and I had to be particularly vigilant given what I had experienced with loud turbine noise the year before. On days and nights when the noise was very loud I watch ewes drop their lambs and run off immediately, looking startled and frightened. I spent time catching the ewes and their lambs and moving them to the house pens ½ klm away,,where they were "mothered up". On days when the turbines were off or running slowly we had no lambing problems. I had an unusual death and called the DPI, the autopsy revealed a ruptured stomach ulcer not normally found in lambs and "caused by stress". What 8 week old lamb dies from stress unless it is related to the constant noise they have to suffer.

I still get headaches and sometimes am overcome with dizziness even with a much reduced time spent in the worst effected paddocks. I am still often very tired and lethargic and it seems as if, the more time that goes by, the more sensitive I get.

The past two years I have left the farm for an extended time. It takes approx 1 week for me to adjust and I can sleep through the night with uninterrupted sleep. When I return home to the noise of the turbines, the sleepless nights return.

More health problems have presented this year. I have had problems with my thyroid and have had tests. My Doctor plans on monitoring this every three months. I am due to see my Doctor again for newly developed gastrointestinal problems, including constant nausea. I have made complaints to Work Safe, Council, EPA and Acciona. Rodney Glenn Brew page 2 of 4

I am still waiting for a resolution.

I find the practices of Acciona to be very deceitful and unethical. This is a Spanish owned company who say they have installed Wind Farms Worldwide. They should be aware of rules and regulations elsewhere.

Noise complaints are not taken seriously. In the USA operational guidelines include extra monitoring to be carried out when residents complain about noise.

"if there have been any **complaints** about WIND ENERGY SYSTEM **sound or low frequency noise** emissions by any resident of an occupied dwelling that property will be included in the post-build study for evaluation against the rules.

Audible noise monitoring has never been done at our house. Low-frequency noise is not monitored here in Australia even though it is part of operational guidelines in the USA, and shut down procedures are in place

10) Operations — Low Frequency Noise: A Wind Energy System that emits sound (or causes structural or human body vibration) with strong low-frequency content where the time-average C-weighted sound level exceeds the A-weighted sound level by at least 20 dB when measured inside a structure and adversely affects the subjective habitability or use of any existing dwelling unit, hospital, school, library, nursing home, or other sensitive noise receptor shall be deemed unsafe and must be shut down immediately. Exceedances of any of the limits of the Table in Section 79-19 (a)(5) will also be considered as proof that the Wind Energy System is unsafe and must be shut down immediately.

The following is a striking example of Acciona miss-leading the public, when they purchased a home in Waubra after complaints had been made regarding the noise and health of the owners .

ABC news states: Acciona have bought the Godfrey's house. *Acciona's Managing director, Brett Thomas, says the Godfrey's did not say the turbines were having an effect on their Health"*.

This couldn't be further from the truth. Several papers including The Australian reported a different story " *Ms Godfrey said she has experienced almost constant nausea and headaches since the wind farm became operational, she is convinced the turbines are responsible*". *Ms Godfrey is convinced her health is suffering she says* " *it feels like I have a head-cold, its like motions sickness that never goes away, by mid-afternoon all I want to do is sleep.*"

The 2010 noise report found Acciona in Breach of their permit conditions and as far as I am aware we are still waiting for a resolution, 2 years later.

There is no escape from the NOISE of the Wind Farm and all the problems it causes.. If I were to move from this area I could still find myself and my family will be caught up with another wind farm springing up beside me.

The <u>World Health Organisation</u> defines health as 'a state of complete physical, mental and social well-being and not just the absence of disease "

WHO health glossary:new terms', Health Promotion International, vol 21 no 4

Rodney Glenn Brew

Noise, health and newspaper references

"Noise stimulates the brain's reticular activating system. Neural impulses spread from the reticular system to the higher cortex and throughout the central nervous system. **Noise** can, therefore, **influence perceptual, motor, and cognitive behaviour**, and also trigger **glandular**, cardiovascular, **and gastrointestinal** changes by means of the autonomic nervous system" (Suter, 1991)

Noise pollution: non-auditory effects on health Stephen A Stansfeld and Mark P Matheson

Department of Psychiatry, Medical Sciences Building, Queen Mary, University of London, London, UK

Noise and sleep disturbance:

There may also be after-effects during the day following disturbed sleep; perceived sleep quality, mood and performance.

Noise and cardiovascular disease

Noise exposure causes a number of predictable short-term physiological responses mediated through the autonomic nervous system. Exposure to noise causes physiological activation including increase in heart rate and blood pressure, peripheral vasoconstriction and thus increased peripheral vascular resistance.

Noise exposure and psychological symptoms

Symptoms reported among workers regularly exposed to high noise levels in settings such as schools and factories include **nausea**, **headaches**, argumentativeness and changes in mood and anxiety. Community surveys have found that high percentages of people reported 'headaches', '**restless nights**', and 'being tense and edgy' in high-noise areas

Recognising the uncertain and global nature of environmental health threats, WHO has developed an approach for applying precautionary measures that is rational and practical and consistent with public health values and its mission to promote and protect public health.

With rapid technological advances and equally rapid development of potential health hazards, it has become urgent to rigorously apply the precautionary principle (which is the basis for European environmental legislation) or similar measures in assessing risks and to adopt a more preventive and pro-active approach to hazards.

Infra sound Toxicological Summary (USA), November 2001 stated:

"When male volunteers were exposed to simulated **industrial infra sound** feelings of fatigue, apathy and depression, pressure in the ears, loss of concentration, drowsiness and vibration of internal organs were reported. In addition effects were found in the central nervous system, the cardiovascular system and the respiratory system."

http://www.wind-watch.org/news/2011/01/17/waubra-resident-tells-court-of-wind-farm-hell/

http://www.abc.net.au/news/video/2010/02/19/2825235.htm

Calmet county regulations: I have a download copy available if required