

## **Introduction.**

I live in Evansford, Victoria, on the northern edge of the Waubra Wind Facility (WWF). The closest turbines are just over 3.25 kilometres from my home and workplace. There are thirty turbines, each between 110 and 120 metres high that straddle the hills and valley to the south/south west. I did not object to the development and construction of the Waubra Wind Facility. Like many people locally, I believed what the wind developers, politicians and government departments told us - that it is good for the environment, good for the economy, good for the community and that there would be minimal noise or adverse impacts.

Evansford is a tiny hamlet that has no school, shop, pub or post box. It is at least a 12 minute drive from any of the other tiny hamlets in our district. We have no major roads with heavy traffic. Indeed there is very little traffic at all. The night skies were pristine, with no light pollution. Our acoustic environment likewise had been pristine. The air quality is always remarked upon by visitors. Our home, built utilising sustainable principles, techniques and materials is situated in bushland. Our lifestyle is shaped by a set of principles and practices attentive to, minimising consumption of resources, caretaking the environment and the need to minimise our 'footprint'. We have chosen to live and work in this pristine and slightly out of the way place because we value a slower pace of life, serenity and all that means for our health, well being and quality of life.

I have lived in inner city Melbourne, with trams and traffic, intensifying at peak hours. I have also lived at Launching Place, another rural idyll, with very little sonic or visual pollution. When I moved from Launching Place to Flemington, initially I could not sleep. The trams rattling by, early morning, late at night woke me. After a few weeks I had adjusted, but after nearly two years living with the Waubra Wind Farm, I still wake in the night. The noise, the whooshing, the vibration wakes me, or prevents me from falling asleep. I had thought that I would adjust, but the particularity of noise, when the weather conditions and wind direction conjoin, makes it impossible to get a good, sound night's sleep.

## **Adverse Health Effects (AHE)**

Sometime in June/July 2009, ( I cannot provide a precise date, because at the time, I did not make a connection with wind farms. ) I woke in the night with what felt like a rapidly beating heart, shortness of breath, difficulty in breathing. I was so concerned that I woke my partner. He confirmed that my heart beat was rapid. After perhaps ten minutes or so it slowed. Over the following month this occurred on several other occasions, once in the garden and again when I was sleeping. This had

never occurred before. In August 2009, I visited my GP, and my Blood Pressure was so elevated, he immediately referred me to a Cardiologist. Since then I have undertaken various tests including: Halter Monitor ; Exercise Stress Test and Echocardiogram and Electrocardiogram. All of which have found that my heart etc is functioning normally.

When the turbines are operating and the weather conditions align, I can experience, any one or a number of:

- Elevated blood pressure; BP seems to be mostly high now. It lowers when I leave the area or when turbines are not operating.
- Rapid heart rate; heart rate varies and on occasion, for no apparent reason just accelerates, e.g I could just be sleeping, or working at my desk.
- Breathlessness, feeling short of breath.
- Head pressure and headaches: intense pressure on the front section of the temples and the base of the skull, like a vice. This can intensify into excruciating pain. There can be neck pain. These are different to stress headaches which seem to penetrate on the sides of the temples. Generally there has been an increase in all types of headaches.
- Vibration, tingling, prickly, twitching, sensations in either, sections of the body, or in the entire body. Most often this occurs at night.
- Aching legs: legs can feel very heavy, pains in the lower legs. I walk and exercise regularly, but on occasion it can feel like I am dragging my legs.

#### Ears

- ear pressure, ear aches, itchy ears: a feeling of pressure building up inside your ears, a most uncomfortable sensation. This can build into pain in the ears. I have never experienced any of these prior to the WWF.
- tinnitus
- difficulty in hearing what is being said in a conversation or when there are other conversations or noise in a room eg in cafe or restaurant or at a dinner party. It can be difficult to distinguish what is being said by someone who you are in conversation with. Also I observed that I am mishearing words more frequently.
- I also have observed that I am much more sensitive to noise - eg traffic noise

#### Sleep disruption and deprivation

- It is not every night that I am woken. Occasionally I have a very good night's sleep, if I am staying elsewhere or if the wind is in a particular direction or the turbines are not operating.

- Some nights I can be woken with a 'start' - heart racing, alert. It is very difficult to get back to sleep.
- Other times I have difficulty in falling asleep because my body, or sections of body is vibrating, twitching, I cannot get comfortable. There are degrees of these sensations; and regaining sleep depends on the intensity.
- I can also have slept what feels like the entire night but wake exhausted, as if I had not slept at all.
- Most days I feel exhausted and, as when you are tired, your brain does not function efficiently, your emotions are fragile, your body feels unco-ordinated and enjoyment in pursuits and activities diminished.

#### Decreased cognitive facility.

Concentration, memory, focus, language skills - to access words, and communication skills are on occasion seriously impaired. Words, communication and my ability to organise and be organised are the tools of my trade. As a freelance cultural worker I have mostly managed multiple projects simultaneously. There are days now that I would be lucky and very happy if I could achieve any one of those tasks.

It is very distressing to observe that the skills and talents which are the basis of your career, are no longer instantly accessible. The ability to generate income has been diminished because I cannot predictably work effectively: it just depends on something that is entirely out of my control: the conjunction of weather, wind and turbines operating.

#### Depressed immune system

For most of my life I have been very attentive to my health and well being to the point of being so healthy, I have had need to rarely visit a doctor. Now I seem to be more prone to viruses, flu, colds etc whenever I visit a town or city.

I have developed recurring sinusitis since the WWF, this no doubt being connected to my ear problems. I continue to pay considerable attention to my health and little has changed in my lifestyle, yet, my health has deteriorated considerably.

#### Sense of well-being

There are many factors that have impacted on my sense of well-being:

- We chose to live here because of the acoustic and visual amenity. The noise, vibration, flashing red lights infiltrates into your home and takes away the peace, tranquillity, required for your well being. Now there is an industrial installation in an area that does not have Industrial Zoning.
- The sense that home is no longer home, because it is no longer a place of refuge, a place of security, a place of privacy.
- Constantly feeling tired and exhausted.
- An increase in irritability.

These symptoms did not commence all at the same time, but have gradually accreted. I find now that when I leave the area it takes much longer for symptoms to diminish.

An additional factor.

Also, there is great deal of stress associated with attempting to alert authorities to a problem when they are not interested in knowing or acknowledging that there is a problem. Making complaints, writing letters, emails, phone calls, etc is a burden on top of one's usual work, family, social and community responsibilities. We have found that it has limited the time that we have available to commit to our relationships, social connections and leisure. One cannot underestimate the effect this is having on not just ourselves but other people in the community who have a social conscience and believe in the necessity of speaking out. There is no doubt that this would compound and/or aggravate any other health issues that people are experiencing.

Why I believe that these AHE are linked to the operation of the windfarm.

Initially I had not connected AHE with the operation of the Waubra Wind Farm, but now believe these adverse health effects are related to the operation of the turbines, because:

1. Neither my partner nor myself have experienced these adverse health effects prior to the operation of the WWF, with the exception of the normal run of the mill health complaints.
2. I began to experience some of these conditions around the commencement of the full operation of the WWF. Over time other adverse health effects have developed and others intensified.
3. Through conversations with our neighbours we discovered that they too had begun to experience similar adverse health effects at around the same time. An example: A lot of people locally are suffering from high blood pressure, whether they link it to the operation of the wind farm or not. And it started at around the same time. The number of people in a

small locality who are experiencing similar adverse health effects would indicate that there is something in their environment that is affecting them. The most noticeable change in the environment is the WWF.

4. Over time, we began to note that many of us have similar experiences on the same day. EG 7 people had a blinding headache on December 16 2009, why? Many of us would have either disrupted sleep or sound sleep on the same nights, why? EG a really bad night on January 28/29, 2011, many of our neighbours complained that they too could not sleep, why? We have kept health journals since October 2009 and more recently document our B/P daily. Recently we have noted that for many of us blood pressure spikes on the same days. EG 17 January 2011... why?
5. Of course we do not experience this every day and night. When we leave the area, or when the turbines are not operating, we find that the symptoms dissipate. Originally when we were away from our home we would sleep soundly and would not experience these adverse health effects. Although now, it takes longer for the AHE to diminish.
6. Initially, through research on the internet we discovered that these adverse health effects were being experienced by people living with wind farms, all over the world. We were astounded when we first learnt of what was occurring with people world-wide, because the ill health effects and the experiences with authorities were so similar, it is almost textbook. The similarities are too consistent and wide-spread to be coincidental.

#### Recently published statements re Wind Turbines and adverse health effects

The National Health and Medical Research Council state that there is no current peer reviewed scientific evidence to link wind turbines with adverse health effects. Unfortunately this Rapid Review is limited in the material reviewed eg some peer-reviewed research is not included whilst including a reference from crikey.com. This sort of sloppiness does not inspire confidence in the report. However the NHMRC Report statement also said that evidence into the health effects of wind farms was limited, and recommended that supervising authorities take a “precautionary approach” to building wind farms. Yet, government departments happily quote this disgraceful example of bad science, and fail to mention that a ‘precautionary approach’ is recommended.

The Victorian Department of Health has also undertaken a literature review. Both bodies have received submissions from people regarding adverse health effects, noted as far back by Dr Iser at Toora in 2004, neither organisation has seen fit to include the anecdotal reporting, nor to

investigate the claims and interview affected people. The NHMRC report and various 'experts' all make assumptions and express unsubstantiated opinion as fact about the people who are suffering.

Whilst desktop reviews are very popular these days, some old fashioned investigation of primary sources would be good science and aid in challenging assumptions. Academics and experts who support wind energy are supplying their expert opinions without one of them actually talking to affected people. Not one person locally who is suffering has been contacted, or interviewed to discover if there is a problem and what it might be. Refusing to investigate the problem does not mean that the problem does not exist, nor make it less of a problem, nor make the problem go away.

Both reports can be questioned in terms of the scope of the material included in their research. There is a significant weighting towards Wind Energy Industry publications, a tendency to sweeping statements with limited detail, and limited analysis. (There are many examples of shoddy research practice, breaking of their own terms of reference, but I believe that there are other submissions to this Senate Inquiry that will provide a thorough analysis.)

Here is just one example, in the NHMRC Report, Table 1 (pg 3) 'compares the noise produced by 10 turbine windfarm'... It does not state the height of the turbines, the size in MW, the length of the blades, the topography, the atmospheric conditions at the time of the testing, the wind speed or direction, the time of day, or what equipment was used in the testing. A good scientific document covers all these critical variables to enable an accurate analysis, and therefore comparison. 10 turbines – height 30 metres of 0.5MW will be substantially different to 10 turbines, 80 metres height of 1.5 MW, each in its own topography.

There are also reports that landowners with turbines do not appear to be affected because none of them are speaking out. Locally we have now heard, on the 'grapevine' of a number of landowners hosting turbines who are suffering from headaches, lack of a good night's sleep, and find the noise disturbing. Perhaps the reason they do not speak out is that there is a clause in their contract with the wind farm developer which does not allow them to talk negatively about the wind farm. A gag clause, why? There are also any number of personal or social reasons why a person might not speak up. (Especially in small communities.) Fear of litigation is a very strong inducement to say nothing.

The reports by the Department of Health and the NHMRC do not include primary research, have only an incomplete literature review and are therefore flawed. We have written letters, sent emails to our local councils, government departments, politicians. We have complained. We have been ignored. Why has basic research of talking to affected people, not been undertaken? Science is investigation and constantly evolving. We must investigate and use the appropriate tools - if you don't use a microscope you won't see germs, but the germs are there and they affect you. (An example of this is the way sound is monitored around wind farms - if you do not have the appropriate equipment or use appropriate methodologies you will not record accurately the complete range of sound. You won't find any problem - very convenient!) Why are governments and corporations fiercely holding onto this meagre research as if it was definitive?

An independent investigation based in good scientific practice – primary research, with a comprehensive review of current research material; and thorough analysis needs to be undertaken urgently.

If there wasn't a problem why would so many people waste so much of their time, risk their health, well being and relationships?

'Experts' have suggested that the adverse health effects people are experiencing are because they: are psychosomatic; hypochondriacs; feel disempowered, jealous, anxious or fearful about new technologies; are opposed to windfarms and are angry, annoyed and stressed which makes them sick; feel they are sick due to the fear and negative publicity; are NIMBY's; are wanting compensation.

The 'experts' who provide these 'analyses' have never met, nor undertaken psychological or sociological studies on either individuals or this group of people. It is extraordinary that they are able to make a diagnosis of people's mental and physical health without actually meeting and conversing with them. Their opinion is based on nothing more than an untested hypotheses. I suggest that these 'experts' need to take a more scientific and rigorous approach and not mire the debate with unsubstantiated opinion. Especially when these opinions provide a conveniently negative depiction of a group of people.

Let us unpack some of these 'experts' assumptions.

#### Jealousy

It is unfortunate that we live in a society that places so much emphasis on money, and so is able to suggest that a group of people's ill health is dictated by their sense of lack of money. There are more

things to life than money. Some people actually value lifestyle over of money. They want time to enjoy life, their family, their friendships, their passions. I know that to be true for people I know locally. They are not jealous because other people are earning more money from turbines. It's an insult to suggest such a petty motivation.

#### Compensation.

A motivation, similar to jealousy. Some say that we are doing this because we are seeking compensation. I can think of more reliable and cost effective ways to earn money than engage in a long drawn out litigation. I think lawyers would be the only winners in this sort of legal action.

#### Nocebo

'Nocebo effect' a worsening of physical and mental health based on fear or belief in adverse health effects. Most of the people locally who are experiencing ill health which they attribute to the operation of the wind farm, were: a) supportive of the windfarm; b) noticed the ill health effects before making the link; c) are not prone to irrational fears. Of course it could be an explanation but no-one has done a psychological assessment on the people who are adversely affected and so whilst it is a convenient explanation it is merely an untested hypotheses.

#### Anxiety over new technologies

Everyone I know who is experiencing ill health locally, welcomed the wind farm initially. Surely if they would have been anxious about the wind farm they would have been anxious and ill prior to and throughout its construction?

#### Disempowered?

It has also been suggested that a sense of disempowerment is making us feel ill. There is no doubt that a person, or people who feel disempowered, and thus very stressed, may have ill health. I would suggest that a group of people who stand up and speak out in a somewhat hostile, antagonistic and disbelieving environment are not 'disempowered' . They are actually 'empowered', because they are speaking out, want answers and change. They do not demonstrate classic 'victim' traits.

#### NIMBY

To accuse people of the 'selfishness' of being a NIMBY assumes that those people believe it's OK to put it in some-one else's backyard. I believe locally people would say " not in anybody's backyard."



### Another explanation - could they be telling the truth?

Whilst all those explanations are possible, they have not been investigated, and there is one that is not even acknowledged as a possibility - that people are actually sick because of the operation of the wind farm. Everyone stops short of accusing affected people of lying, (although the implication is there) but where is the explanation that allows for the possibility that people have become ill and therefore are exercising their civic duty and democratic right to speak of what is occurring - that they have become sick because of living and working in close proximity to wind farms.

### Some other stereotyping

There are other people who believe that because we are stating a problem with this great big example of green energy that we are doing so because we are 'flat-earthers, climate change deniers, nuclear and coal proponents and opposed to renewable energy". Again there is a lack of inquiry, a determination to cast this issue into a "you are either for us or against us", with no shades of grey possibilities. This is a complex situation where a group of people who support renewable energy have recognised a serious problem that needs to be addressed. It is not about supporting or not supporting renewable energy, it is about adverse health effects on individuals and communities living in close proximity to windfarms.

It is unfortunate that there cannot be discussion because of one group of peoples refusal to acknowledge that there could be, or indeed is a problem.

Dialogue and discussion are not aided by these simplistic and reductionist views. Indeed, dialogue does not occur. It seems that it is easier to negate another group of people's experience, belittle them, than to have an enquiring mind.

### Consequences of promoting negative stereotypes.

Wind industry and some politicians who employ full time staff with specialist skills eg publicists, have utilised their position, to promote this negative image of a group of people. Some state politicians have shamefully used their parliamentary privilege to vilify people. Ordinary people do not have the same level of resources or access to the means to rebut these images and state their position. There is a fundamental failure in democracy at this point.

Locally we have held several public meetings, to inform people about what it is like to live with a wind farm. Councillors, state and federal politicians and other interested people were invited to attend. Our local councillors and one or two politicians have attended, others asked to be updated, some have the courtesy to RSVP. The majority do not even bother to respond, especially our local members, who regularly disparage us in the media. They certainly have not taken this opportunity to investigate the veracity of their opinions.

This name-calling, dressed up as 'expert opinion' does not promote logical and informed debate in a community nor is it indicative that appropriate scientific investigation has occurred or will occur. It does however foster a culture of put-down and abuse within the local and broader community.

### **Community Health**

Any community is made from groups, and there are always differences of opinion. However the Waubra Wind Farm, has caused deep divisions and tensions in the community: death threats, verbal abuse, harassment, assault, damage to private property, neighbours from 5 generations no longer talking to each other, members of families refusing to talk to each other. Funds from government and corporations for community building cannot remedy these divisions.

People are moving out of the area. Some because they can no longer live in their homes. Some because the rural ambience they have enjoyed has been destroyed. There are properties that have been purchased by Acciona. There are many houses vacant. There are many houses and blocks of land on the market. There are other properties that have been on the market for over a year but one owner has been told that many people looking for a rural retreat don't want a view of an industrial scale wind farm. Numbers at the local school are decreasing. The local pub has closed. The local community is dwindling. Without neighbours, people living near windfarms will become more socially isolated, the community fragmented. Is this what we want? Is this creating sustainability?

### **Observations**

#### *Planning and Monitoring*

If the health and well being of people, both individuals and the community, is to be considered, then regulations, standards, and processes of planning and monitoring need a complete and rigorous overhaul.

It is extraordinary that in the Planning Permit process, Wind Developers must undertake studies to investigate the impact on flora and fauna; and yet there is such determination not to undertake a study to consider what the impact may be on the health and well-being of human-beings and communities.

Much consideration has been given to visual amenity in terms of wind farms, but little consideration to acoustic amenity, even in a time when Noise pollution is on the rise and known to cause Adverse Health Effects. We know that not everyone experiences noise in the same way, that some people are just more sensitive to noise than others. Surely though, when you have made a decision to live in a remote area for its particular amenity - that of silence, that amenity should not be taken away by your neighbours. We now live with noise, which not only has impaired our quality of life but has significantly impacted negatively on our health. If we were living in the city we would have first occupancy rights - and it would be up to the 'agent of change', the wind farm to not disturb our pristine acoustic environment. We rural people want the same rights our city cousins have.

We note that many houses in Evansford do not even appear in Acciona's Waubra Wind Farm OPERATIONAL (STAGE 2) ENVIRONMENTAL MANAGEMENT PLAN ( Version 1.1 February 2008). Our residence is not on the map. Also there are no houses marked on Brown's Road and houses missing on Severino's Road. Hastie's Lane is not even marked. One particular house which has been there for more than 50 years, is not marked on their map. This calls into question Acciona's competence in planning and the validity of the Plans they have made based on incomplete data. How can they possibly have done adequate sound testing in the local community when so many residences are absent from their planning maps?

Sound travels, especially at night, especially in the country when the night time ambient noise is so low. That is common knowledge. Even during the day we can hear the shape of a conversation, if not the words from our neighbours hundreds of meters away. We hear the radio from across the valley. At night we are woken on too many occasions by the noise and vibration of the wind turbines. We also know of people who hear the wind farm over 6 kilometres away. Yet no sound testing was done in the village of Evansford prior to, and since, the building of the Waubra Wind Farm. Acciona discount our complaints saying our residence is too far away to be considered relevant. Acciona Energy may claim that they are operating within the Standards, and if that is so, then the Standards are inadequate, outdated and need to reviewed. And there cannot be any doubt

that a Standard developed in 1998 for a rapidly developing technology, will no longer be adequate in 2011.

The health standard of people living in the country is already less than the health of people living in the city. Our concern is that the health, well being and quality of life of rural citizens is being compromised. A total overhaul of Wind Farm regulation, planning and monitoring at every level must occur to protect local living people.

### **Smoke and Mirrors.**

When some of the claims of the wind industry and various government departments are put under the hard light of analysis, the lack of rigor and transparency, is revealed. I have become quite sceptical of the claims made by Wind Industry and various levels and departments of government. What I have observed is that whilst the claims appear to be definitive there is a shortage of actual detail, and the use of the word 'can' is a feature. It's not that what they say is not true, it's just that it usually does not provide the entire picture. Sins of omission, perhaps!

We need to ask more questions and demand more rigorous analysis so that we actually have knowledge and details that will allow us to understand, judge and make decisions. We do not want more promotional pap and self congratulation.

### Analysis of a few statements

Perhaps some will consider this examination of the use of language nit-picking, but language is a powerful tool. It can be used to inform or obfuscate. It can be used to empower or disempower.

Here are several examples:

Example 1. The most recent is 'Twelve Month Noise Monitoring Report' in Waubra Wind Farm Newsletter. Edition 13. December 2010.

*Acciona is in compliance with all regulations and requirements of the planning permits related to the Waubra Wind Farm.*

We know that in an 'Update on the post-compliance noise monitoring for the Waubra Wind Farm', presented to Pyrenees Shire Council Meeting November 16, 2010, it was noted that several of the properties that Marshall Day Acoustics had noise tested indicated non-compliance. It was also noted that a fully independent peer-review would be undertaken on the Marshall Day Report.

A Letter from the DPCD on December 16, 2010 stated that this independent peer review had found issue with compliance with noise standards at a number of dwellings. They had asked Pyrenees Wind Energy Developers, a company owned by Acciona, operating the Waubra Wind Farm, to respond to the findings.

Of course in the article they talk about operating in Noise Reduction mode, which we knew because numbers of turbines had not been operating for weeks, even when there is wind. Perhaps PWED, Acciona, felt that even if they were found not to be in compliance regarding noise, then at least operating in noise reduction mode, made them compliant...

At the Pyrenees Shire meeting it was also noted that many complaints have not been addressed. Yet in The Operational(stage 2) Environment Management Plan , Sections 4.4 and 3.4.3 of the Complaint Procedure states: ACCIONA Energy will respond to all complaints by investigating the causes and potential factors that may have contributed to the area of concern. ACCIONA Energy will investigate the complaint and determine an appropriate response within five working days of receiving the complaint.

We have registered at least 30 complaints. No investigation has occurred. So what about not addressing complaints? Or doesn't it matter if you are not complying with your Operational Environmental Management Plan... which would have been part of your Permit, surely?

Considering all of this, at what stage between the 16 November and 16 December 2010, did Acciona consider they were operating in compliance so that they could confidently publish such a statement?

Example 1a. They also state in the same article "During the noise compliance monitoring period, two properties adjacent to some of the turbines included in the noise reduction plan were made available for sale. To help achieve optimal energy generation of green energy at Waubra, Acciona decided to purchase those properties on commercial terms."

One of the houses had been on the market since April 2009. The owner spoke at a public meeting on 31 January 2010 stating that: *They needed to sell their home for personal reasons. That they can see turbines from just about every window in their house. The closest one is about 800 metres. The few people that had come out to see it, love the house but they just don't like the turbines being so close. The Real Estate Agent had said that he would write a letter stating that people had said to him that they love the house but they just did not want to live that close to a windfarm. He then withdrew the offer to write that letter. The owner had contacted the Shire, Justin Madden expressing their*

*concerns.* (This is a synopsis based on video documentation, not a quote. The video is available on request.)

The owner began discussions with Acciona , who at first were not interested in her concerns at all. Noise Monitoring occurred in April 2010. After phone calls, emails, meetings, letters, finally in July 2010, Acciona agreed to purchase the house. And of course the owner signed a Confidentiality Agreement.

Of course it is just one line in a newsletter - but the story within that line, not hinted at or revealed, is one of distress, anxiety, manipulation and intimidation. The sentence constructs a happy chance that the houses came onto the market and does not reveal the long, emotionally taxing, time and resource intense, effort, required on the part of the owner, for the house to be purchased.

Example 2. The statement below from the *Waubra Wind Farm Newsletter. Edition 13. December 2010:*

*Even with maintenance shutdown periods and windless days the turbines can still generate energy more than 97% of the time.*

All it takes is one or two turbines to be operating for some energy to be generated. They do not say how much energy is actually generated for 97% of the time. It could be as little as .01% .

Example 3. From the Waubra Wind Farm website (Accessed 9 August 2010.):

"The Waubra Wind Farm comprises 128 wind turbines, associated access tracks, substations and a Maintenance Facility. Each turbine can generate 1.5 megawatts (MW), providing a total installed capacity of 192MW. The green energy generated by the Wind Farm each year can deliver approximately 650,000 tonnes of CO2 savings. At peak, the Wind Farm will generate enough green energy to power more than 140,000 homes or enough electricity for the City of Ballarat and surrounding areas."

- What is considered to be 'peak'?
- How often does the Waubra Wind farm operate at peak? And for what duration? How often will the Waubra Windfarm be able to power 140,000 homes?
- How is the energy required for 140,000 homes calculated?
- How frequently does a windfarm operate at installed capacity?
- Is the 650,000 tonnes of CO2 savings worked out based on installed capacity, peak performance or on actual data? And how is this worked out?

- How do they work out these equations? What are the formulas for these calculations? What data are they using to generate these numbers? Who provides them with this data?
- A windfarm rarely operates at Capacity. For 2010, Waubra operated at 35% of its installed capacity. Most of the windfarms around the world operate at between 15% and 40% of installed capacity. Where does the Wind Industry inform people about this?
- So what is the difference between the theoretical and the actual? And shouldn't it be a company's responsibility to use actual, rather than predicted or theoretical figures, when they promote their product?

Example 4: In Acciona's Media Release *Allendale Wind Farm Appeal* (August 3 2010) it states: *The company's Waubra Wind Farm in western Victoria is the Southern Hemisphere's largest wind farm, producing over 192MW of green energy.*

So what do we believe - installed capacity is 192 MW and yet they claim it will produce over that?

#### A Term: Independent consultants

Marshall Day Acoustics, Brett Lane and Associates - their bread, butter and jam is the Wind Industry. These 'independent' consultants are constantly being employed by the wind industry, producing plans and reports and updates. How can you possibly say that these companies are 'independent' when so much work is undertaken for Wind Energy Developers - Origin, Acciona, etc. You certainly cannot claim independence when so much of your income is generated via your consultancies on one side of the fence in an Industry.

#### Jobs

Such a Big Catch Cry! Jobs in rural areas - our eyes light up! Reality check, jobs for contractors are short term, they are only there during the construction period. Then we end up with a maintenance team that requires specialised training. How many 'locals' have the skills to fill these positions? Our experience is that a very few 'local' people are employed and most are 'imported'. A few ongoing jobs are created. However there are people moving out of the area. Many farmers are experiencing health problems working on their farms, and cannot be as productive. Have people moving out of the area due to the WWF and AHE been factored into 'job creation'?, How many have gone, what is the impact to the community of those losses, are they filled by the 'new jobs'?

As to pumping money into the 'local' economy - there is a general store in Waubra - who is doing ok - but a lot of people don't go there anymore because previously WWF supporters have verbally

abused or ridiculed them. People moving out of the area also impacts on the local economy. Is the community better off as a result of this wind farm?

Conclusion:

As people who are living with an Industrial Wind Development, we have been vocal, because we do not want other people to suffer what we are suffering. We have a particular experience and insight that should be heeded in considering any standards, guidelines and processes for the planning and monitoring of these developments, wherever they are. We are people with a first experience of living with a working wind farm.

Recommendations:

- A minimum turbine setback of 5 kilometres from property boundaries.
- An independent and comprehensive investigation into the adverse health effects experienced by people living in proximity to wind farms based in good scientific practice – primary research, with a comprehensive review of current research material; and thorough analysis needs to be undertaken urgently.
- A total overhaul of Wind Farm regulation, planning and monitoring at every level must occur to protect local living people.
- That there is greater transparency and accountability in the processes of all stakeholders.
- A moratorium on any further wind farm development until planning, regulations and health issues have been investigated and revised.