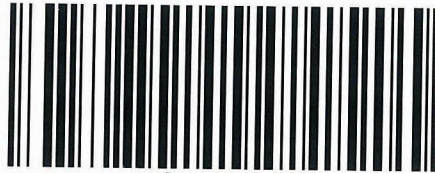


ROBERT AND LYN JARVIS  
"GEENOBBY"  
WELLINGTON NSW 2820  
Email: [geenobby@activ8.net.au](mailto:geenobby@activ8.net.au)  
0268452777



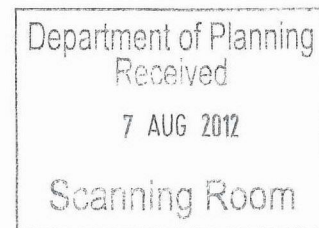
PCU036534

The Department of Planning  
and Infrastructure  
GPO Box 39  
Sydney NSW 2001

30<sup>th</sup> July 2012

Dear Sir,

RE: Bodangora Wind Farm MP10\_0157



Preamble;

We as the landowners of "Geenobby" Wellington, a neighbouring property of the Bodangora Wind Farm, object to the proposal to construct wind turbines in the Bodangora area.

We object that the proponent did not have adequate and through consultation from the beginning of the project development and the continuing lack of true, genuine community consultation.

The evidence that the proponent has put forward on health impacts has been underwhelming.

The proponent's noise reports have not addressed the infrasound issues from independent acousticians. And the proponent dismisses any contrary view to there own on infrasound.

The proponent has not complied with the Director General's Requirements in relation to the visual impact of our home.

The Environmental Assessment has not been read by representatives of the proponent and therefore they lack the knowledge and understanding of the Bodangora project area to fully inform residents of the development.

We are concerned that our safety is likely to be jeopardised from the construction vehicles in relation our property entrance.

We are very concerned that there have not been definitive studies done on the environment and the native flora and fauna and heritage items.

We also have concerns that the Wellington Council has not given due consideration necessary, to investigations into the proponent's ability to provide the Wellington Council with any contractual funding scheme, to provide funds for the upgrade of the roads system for the construction phase and the ongoing road maintenance for the life of the wind farm.

We are concerned by the potential undue financial pressure put on the Council which in turn will be carried through to ratepayers.

We are concerned for the division in the rural community, as the proponent has failed to engage all landowners; they have concentrated their efforts on establishing a business relationship with the stakeholders who are the minority, and not developing strong relations with all neighbouring and nearby residents to the wind farm.

We are concerned about the proximity of the nearest turbine of less than 2klms to our private airstrip, which we use for agricultural aerial activities including fertiliser and chemical applications to continue to develop our pastures for our Stud Hereford cattle and beef production. The proponents have not assessed the many private airstrips used for the same purpose on other properties neighbouring the project area. Detailed studies on these private airstrips from the BWTAG are contained in their submission.

We are extremely concerned that the bushfire risks and hazards have not been assessed in the EA, including any protocols for Turbine fires from the rural fire service.

There has been no studies done by the proponent, on the impact that the infrasound may potentially affect the inmates and staff at the Wellington Correctional Centre which is located within 9 klms of the Bodangora Wind Farm project. Our concern is for Robert who is employed at the WCC as an overseer.

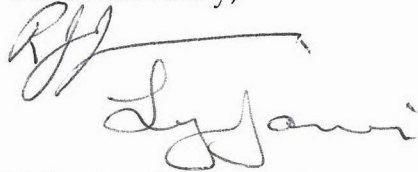
We are extremely concerned at the devaluation of our property.  
We are concerned that our super funds are being used to subsidise the wind industry.

We are very concerned that the Environmental Assessment has failed to address the director general requirements and the NSW draft guidelines and

support the Bodangora Wind Turbine Awareness submission which highlights many DGR'S that have not met the requirements. We are concerned that the Environmental Assessment contains many errors that may compromise the integrity of the assessment. (*Refer to BWTAG submission*)

We thankyou for the opportunity to make comment on the Bodangora Wind Farm proposal and we reserve our right to add further comment and reports in the future.

Yours Sincerely,

A handwritten signature in cursive script, appearing to read 'Robert and Lyn Jarvis', written in dark ink.

Robert and Lyn Jarvis

30/7/12 .

## ATTACHMENTS

1. CONSULTATION
2. VISUAL IMPACT – “GEENOBBY” HOMESTEAD
3. CULULATIVE IMPACTS
4. BARTON LETTERS Re: Objection to another development in the Bodangora /Spicers Creek area.
5. NOISE ATTACHMENT TO SUBMISSION -PARLIMENTARY DEBATE-  
Excessive Noise from Wind Farms
6. REVIEW OF NOISE ASSESSMENTS – STONY GAP
7. HEALTH CONCERNS-Wind Farm refused by Goyder Development  
Assessment Panel on health grounds
8. HEALTH CONCERNS-Evidence of Adverse Health Impacts of Industrial Wind  
Turbines
9. BUYING YOUR PROPERTY –Landowners Guide highlights wind farms
10. Devaluation-
11. WIND TURBINES - THE UNTOLD STORY  
Sen. DR Chris Back.



## Consultation:

We object to the level of consultation that we received from the proponent during the period 2008 to 2012, and feel that the degree of consultation that we believe was appropriate for the scale of the project and proximity to our home, was somewhat different to the proponents desire to share information with us.

We have felt from the proponent that to ask questions that are an opposing view to theirs, then you were branded an "anti-wind lobby group" (*Jonathan Upson, Wellington public meeting 22<sup>nd</sup> July 2012 & ABC CW 23<sup>rd</sup> July 2012.*)

We felt isolated and 'left out' of the process of consultation right from the start of the project development and in doing this it created a division within the community that has grown deeper as the project progressed.

It is our belief that sometime around 2008 the Bodangora area was scoped for the potential of a wind farm in the area, from that time when property owners signed agreements with Infigen Energy to have wind turbines on their land, the project commenced.

Planning and data collection was done during that time including sound data with sound monitor 'boxes' being placed on some properties. One was placed at our home, "Geenobby". The reasoning for the sound monitoring was not fully explained in any detail, and on reflection we recall the placing of the sound monitoring to be deceitful.

It is our recollection that there was no talk that the sound monitoring was for a wind farm proposal in the Bodangora area. The devise was placed under trees in our garden and the technician briefly explained he was monitoring sound in the area, but did not go further to explain it was for wind data collection for the proposed wind farm.

No information was given to us from that point and the next contact we had with Infigen Energy was a standard letter in 2011 inviting us to the Open Days on the 2<sup>nd</sup> & 3<sup>rd</sup> September 2011.

From that open day we came to the conclusion that the sound monitoring was for the wind farm.

Although we were not kept updated with the early development stage the wind tower masts were placed on stakeholder's properties in 2010, we read about this in a media outlet. We believe the early stages of the project have been very secretive and we feel that our right to information was deliberately suppressed until the project was in the advanced stage as presented at the open days.

The Infigen Energy Open Days on the 2<sup>nd</sup> and 3<sup>rd</sup> of September 2011, were held at the Comobella Hall, some 25kms from the township of Wellington. At the time we thought this was a strange choice of venue, as it would have restricted the broader Wellington community to attending.

The proponent claims that from that Open Day there was very strong support from the community of the project.



A strong claim that is repeated within the Environmental Assessment, on examination of this claim, in the EA, that claim was assessed from 17 survey forms filled out by visitors to the open days.

Not what you would call a true community endorsement of the project and most likely 6 of those surveys filled out were completed by hosts that already had a vested interest in the project and should not be seen as impartial.

The hosts featured in the power point presentation by Mr Jonathan Upson where he showed photographs taken at the open day venue. The power point presentation was at the public meeting on 22<sup>nd</sup> July 2012 at the Wellington Civic Centre, which was hosted by the Bodangora Wind Turbine Awareness Group with all wind energy companies invited to attend and only Ifigen turned up, although no official acceptance of the invitation was given to the organisers.

The public meeting was hosted by the Bodangora Wind Turbine Awareness Group after repeated requests to Frank Boland, project manager of the Bodangora Project and the Mayor of Wellington Ann Jones.

The BWTAG made the decision, that in the interest of the community's awareness and the expressions of interest to members of the BWTAG, a public meeting was held and was an information forum which was held in a central location to enable all residents the opportunity to attend.

At this public meeting approximately 250 people were in attendance, most people were there to find out some information because they were unaware of the project, this in itself is an indicator that the proponent has not engaged the Wellington community.

It seems that the proponent holds little regard for the broader community, and focuses on the key stakeholders who have agreed to host wind turbines.

From the initial open days and our concerns that followed by the apparent close proximity to our property we started corresponding with Frank Boland. We found that some information was vague and lacked details and face to face meetings were offered, but were never followed through with. We have never refused to meet with Mr. Boland.

Some of our questions via emails were answered, not necessarily to our satisfaction but others were ignored.

Often meetings were invited at short notice and we have never been invited to group meetings, which were noted in the consultation chapter attachment F of the environmental Assessment.

As neighbours of the Bodangora wind farm, we didn't feel that our consultation was equal to the stakeholder's consultation and that most of the project was formally in place before the broader community was engaged in the process.

The proponent, called for expressions of interest in the Bodangora Wind Farm community consultation committee, after the NSW Draft Guidelines made the recommendation to 'form a community consultation committee'.

The first meeting was held on 20<sup>th</sup> June 2012. At that meeting a show of hands was recorded in the minutes that only one member applied to be on the

committee, that member was Lyn Jarvis. All other members were chosen or asked by the proponent to be on the committee. Not really a balanced formation of the committee when the proponent can hand pick their choice of members. Robert Jarvis applied through the application process and was rejected.

It is our firm belief that the formation of the community consultation committee was formed to satisfy the NSW Draft Guidelines and after two meetings with attempts at both meetings to discuss community enhancement projects, no enhancement programs have been initiated by proponent to date.

We support the Bodangora Wind Turbine Awareness Groups' submission to the Bodangora Wind Farm and draw your attention to the consultation chapter within that submission.



## Visual Impact:

*We object to the proponent's assessment within this EA, of our home, and the predicted visual assessment which is not an accurate portrayal of the potential visual impact of our home, the view the proponent uses for evaluation, is a false representation of "Geenobby" and is a view from the Mudjee road. Our home is not located at this viewpoint.*

## "Geenobby" Viewpoint Analysis:

The photo below is the actual photo which is taken from the front of "Geenobby" homestead, looking towards the proposed Bodangora wind farm project to the north westerly direction of the project.

The ridge lines in the photo are the ridgelines where turbines will be sited.

The proponent suggests in the EA that we will see 80% of the turbines, yet also claim that we will only have a nil to low visual impact.

We request that a reassessment be undertaken of our homestead and that we are able to have the new assessment taken with views from a more appropriate aspect from our home and that we are consulted with all aspects of the new appraisal.

The assessment within this EA is mis-leading and does not present an actual view from our home. The proponent favours "worst case scenario", but in this our case the position of the viewpoint, taken from the Mudjee road would be more likely "best case scenario".

The fact is that we do not live at the viewpoint the proponent has assessed and any potential visual impact assessment within this EA that assesses the "Geenobby" homestead in our opinion has not been an accurate assessment of our home's visual impact.

We have included in this submission for your consideration a photo taken from the front of our home looking towards the Gillinghall Road (where truck is entering from the Mudjee Road).





(photo taken Lyn Jarvis 30<sup>th</sup> June 2012.)



Proponents BWF 22

The view above is the viewpoint BWF 22; our home entrance is right side of photo and homestead 500 meters east of this view, with a further elevation of 26 meters

Any potential impacts to our residence contained within this EA assessed from this view are incorrect.

Masterplan Visual Assessment 8-11 states

Figure 8.8 provides an indication of a *moderate* visual impact nearby to neighbouring Dwelling 16 ( Geenobby), along Mudgee Road.

Then the expected visual impact to “Dwelling 16” as indicated in Table 8.2 is rated as “nil-low”.

Two assessments of same dwelling and different visual assessment impacts.



The visual layout of turbines in relation to the horizon and skyline profile is an important factor for consideration when assessing the effect at a viewpoint. The extent, pattern and proportions of structures in the view in relation to the scale and form of the landscape and the skyline are all important. The methodology behind the assessment does not correspond to our views from our residence.

. Any potential impacts could not be mitigated as stated in Viewpoint Analysis "Potential Visual Impact" page 45. By." A combination of topography and vegetation in the foreground is likely to obstruct views of the turbines". This impact is not possible from the home where elevation is greater than viewpoint. Trees simply do not grow that high to mitigate the visual impact.

BWF 22 – Mudgee Road....."Entrance to "Geenobby" North view

No reference to "Geenobby" Homestead and it is 500meters from this viewpoint.



Viewpoint BWF -22 (from Bodangora wind farm EA)



Image cropped from BWF -22 (from Bodangora wind farm EA)

The Summary of Visual Impact (12.0) Table 17 - Summary of nearby residences (Houses 14 to 26) Clearly shows "Geenobby", "based on topography" will see 80% of turbines, with nil-low potential visual impact, makes the

#### Proponents Comment from Environmental Assessment

"Views of the proposed wind turbines are significantly obstructed by native vegetation. Some filtered views of the proposed wind turbines may be visible to the north, however for the most part the wind turbines will not be noticeable."

We reject the analysis of this viewpoint based on; The homestead is at an elevation of 426 meters. Viewpoint elevation is at 400 meters. Elevation of the homestead has not been considered, and therefore the viewpoint at the front entrance may be relevant to the proponent's comments but has no relevance to the ACTUAL impact from homestead.

Turbines situated to the north and North West of our homestead will be clearly seen. This view has not been assessed in the analysis.

We refer the Department of Planning & Infrastructure to the Bodangora Wind Turbine Awareness Group submission to the Bodangora Wind Farm Environmental Assessment. The Visual Assessment chapter has a detailed submission that we support.



#### Cumulative Impacts:

Cumulative Impacts of the proposed wind farms listed below are unknown and have not been assessed. These are located within the Wellington and neighbouring Mid-Western Regional Council areas, between Wellington and Mudgee.

The Uungula, Bodangora and 12 Mile Wind Farms are located within a 20klms radius of each proposed wind farm. Our property will be situated within 7klms from the Uungula wind farm and 10klms from the Twelve Mile wind farm proposals, yet there are no studies of the cumulative impact from these developments with the Bodangora wind farm.

There has been no detailed studies of the cumulative impact of the overhead transmission lines and associated infrastructure of the Bodangora Wind Farm in the Environmental Assessment and in particular to the visual impact from the infrastructure on our property.

We have listed below the **KNOWN** wind farms (\* = Mid-Western Council Community News dated December 16<sup>th</sup> 2011) in the area. This total between 658 and 776 wind turbines ranging from 2.5, 3.2 and 4.5 megawatts.

*Windamere Wind Farm	30-40 Turbines
*Ilford Wind Farm	8-10 Turbines
*Crudine Ridge Wind Farm	70-106 Turbines
*Uungula Wind Farm	(330) now - indications are 250 Turbines
*12 Mile Wind Farm	10-15 Turbines
Bodangora Wind Farm	40 Turbines
Hargraves to Triamble monitoring)	330 Turbines (in early stages of wind



## Turbine Hosts previous objections to a development in the Bodangora Area.

This information has come to light, about the Barton's from extensive research when doing this submission. It clearly shows their previous feelings towards their family's welfare and is relevant today as they are hosting turbines that could potential impact others.

The following are two letters that written by Mr Simon Barton and Mr John Barton of "Glen Oak", Glen Oak Pastoral Company, Wellington to the Wellington Council ( correspondence 103 45 & 103 44), in opposition to a proposed 800 head feedlot, which was to be located in the area nearby, to the proposed Bodangora Wind Farm are and neighbouring their properties.

- Lot 92 Parish of Mitchell- "Springdale" Spicer's Creek.

Both Mr. J and Mr. S Barton are in an agreement with the proponent to host wind turbines on their property "Glen Oak" Wellington.

In their objections to the Wellington Council both site the inappropriate siting of the feedlot to their homes and that the "wooded ridges" that were to be used as mitigation methods for the passive feedlot development, the Barton's did not agree (after expert advise) that trees will not protect their homes from impacts.

Tree plantings are one mitigation method that the proponent have stated in the EA as a measure to filtered any visual impact.

Mr Simon Barton also sites in his feedlot objection, wind data for the area, dust and noise pollution, states, "separation distance of 8klms from residential areas and up to 5klms from individual residences."

He states "no attempt by applicant to notify us of the proposed development and discuss the relative sensitivities of different neighbours. Mr Barton goes on to also state that he and his wife suffer from hay fever, that the dust or odour pollution will increase their problems, and also the development will be detrimental to their health and well being.

Mr Simon Barton goes on to say that the development will have catastrophic effect on these family members.

Mr. Simon Barton believed, in his objection to the rural based feedlot proposal, that his concerns for his families health and well being are gong to be detrimental, if such a development was to be sited so close to his residence.

The fact that Mr Barton has agreed to an industrial wind turbine development in close proximity to his home and to our home is in direct contradiction to his objects to the feedlot development.

It is worthy to note that the feedlot development did not go ahead and Wellington Council voted against the development and Mr Barton's objections would have played a major role in that process.

The power of the financial inducement seems to have put the earlier concerns of Mr Barton to rest and his fears for his family's health and well being also seemed to have disappeared.

He now is playing a major role in the destruction of the health and well being of our family and all the complaints he had concerning noise and dust pollution are magnified with the proposed development he has agreed to host on his property Glen Oak.

In the second letter Mr John Barton also in his objection to the Wellington Council of the same feedlot development sites the impact of the two closest residences of his sons homes and that they will now live in an "inferior environment" to the one they currently live in, and states that the development will be very detrimental to the lives of his family.

He goes on to site lack of communication. Mr John Barton identifies errors in the feedlot EIR, and the affect on his neighbour's properties. He obviously has not read the Bodangora Wind Farm EA and all its inaccuracies and errors.

Mr John Barton then goes on to question the traffic movements and made an extensive calculation on the traffic movements on the Gillinghall road. Interestingly the Ivey ATP Environmental Assessment Report had those traffic movements for the feedlot at 90 per annum. A far cry from the 250 -300 traffic movements per day on the Gillinghall Road from the Bodangora Wind Farm project.

Mr John Barton goes on to say, he only draws this to the attention of the Wellington Council as he would not want any of his shire rates used to repair the damage caused by the 90 traffic movements per annum.

I wonder if Mr John Barton has studied the Environmental Assessment for the Bodangora wind farm, if he had taken the time he would also have picked up all the errors contained in that document and also noted the huge amount of traffic movements contained in the roads and traffic assessment of 250 – 300 per day. These two host landowners have in their letters to the proposed passive rural feedlot application, which was to be near approximate 2klms their homes, and were very clear on all their points of concern for their family's health and roads etc for that development.

These two men have had a change of heart in relation to their families health and well being, the only difference is that their discission to host wind turbines will impact my family's health and wellbeing, but are they objecting, no they are not. So what we have is the height of hypo racy at the cost of others families, they must not have a conscious.

In fact, their correspondence to Wellington Council, is an indication of their feelings towards a development near their homes, but now they have no concerns at all with this massive wind turbine development.

Their lack of concern for the neighbours on this wind farm project is in direct contrast to their objection to the feedlot proposal.

Both Mr Simon and Mr John Barton have expressed their concern for their family's health with a development sited close to their homes. We are now forced to live with the impact from these turbines from the decisions of neighbouring landowners like the Barton's without any input into the development of the project



# GLEN OAK PASTORAL COMPANY

GLEN OAK, WELLINGTON N.S.W. 2820

22nd March 1996

Syd Craythorn,  
Manager, Planning Services,  
Wellington Council  
Nanima Crescent  
WELLINGTON N.S.W. 2820

Re: Development Application Number 67/94 - J.Bailey  
800 Head Feedlot  
Lot 92 Parish of Mitchell - Springdale, Spicers Creek.

CORRES No. 10344		FILE No. 291/96.					
DATE RECD		25 MAR 1996					
REFER TO	RECM	NOTN	ACT	REPLY	DISC	DAY	INFO
CCI							
GM							
CSP							
RC							
TSD							
ESD				X			

Dear Sir,

Let me make it quite clear to Council, Councillors and staff that I am not objecting to the establishment of a feedlot on 'Springdale', but I am objecting to the site of the proposed feedlot.

It is obvious to me that the Applicant and Ivey ATP have given more consideration to Enviromental matters than they have to the impact on the two closest residences to the proposed site. My two sons, their wives, young families and future young families will have to live in an enviroment which will be very inferior to the one they live in today if this site is allowed to be used by the applicant for his feedlot. I would appreciate it if Councillors and staff asked themselves " Would they be in favour of this site if they lived in either of these two houses?" Of course this will not affect them but it will have a very detrimental effect on the lives of my family.

When one considers the Vickery feedlot at Tamworth, Rob Vickery decided that to get the financial benefits from his feedlot he would do the decent thing and put up with the objectionable side effects by locating it close to his house and as far away from neighbours as he could. This most certainly is not the case with this application with all the nasty side effects being forced onto his neighbours. Of the 3000 acres on 'Springdale' it is not possible for this feedlot site to be located any closer to my sons houses.

In an article "Guidelines to Prospective Feedlot Applicants", from the N.S.W. Department of Agriculture dated 17/11/92 and in the file held by Syd Craythorn on this matter it states under a heading "Impact on Neighbouring Properties" and I quote - "You should discuss your proposal with neighbours at the earliest opportunity to determine any legitimate concerns and to ensure any unfounded concerns are allayed."

That is over three years ago and to date there has not been any communication to us from the applicant. The first we knew of this proposal was when we received from Council on the 3/12/95 the first Ivey E.I.R dated 19/5/95 and the condensed minutes of

the Focus Meeting held at 'Springdale' on the 2/10/95. Why have we been kept in the dark during those three years?

I have closely studied the two E.I.R's presented to Council by Ivey ATP and need to comment on some of the mistakes which in my opinion should be considered by Council.

1. In the first Ivey E.I.R. there was no mention of the 'Glen Oak' residence we call "Morrisson's". This had to be pointed out to Peter Tremain by me.

2. Wind speed, direction and strength as supplied in the second E.I.R. is completely irrelevant.

3. The adjoining property on the western side is owned by Glen Oak Property Pty. Ltd.

4. Adjacent properties : I have had great difficulty calculating how the figures supplied are correct, so I consulted Neil Doherty who informs me that they should be :-

Wandrona 1.2km N

Morrisons 1.7km W.S.W.

Springdale 3.4km N.E.

Landsgrove 3.6km W.N.W.

Bungiebomar 4.1km N.E.

Fernleigh 4.2km N.N.E

Ahwahnee 4.0km S.S.E.

5. Odour - covered in Simon's letter.

6. Downslope Air Drainage :- is to the East and North which will affect the Wandrona residence.

I keep asking myself the question " Why does the applicant knowingly let these mistakes come forward in the E.I.R ? "

I am not qualified to be certain that the figures in the solid and liquid waste disposal are correct but I am led to believe that there is some concern about them from the State Environment Authorities. Of concern to me is that in this latest report, it is possible that at any one time there could be 475 tons of **odour producing manure** on the site. It is also of concern as to how, in a wet winter, will the liquid effluent be dispersed ?

#### TRAFFIC.

If the application is for 800 then let the correct figures be shown.

Incoming Cattle.  $800 * 4 = 3200$  at 54hd/truck = 59 movements

Outgoing Cattle. 3200 at 41hd/truck is 78 movements.

Grain. From advice we have received from a Feedlot manager, the average feed per head per day for a 90 day feed is 12 kg per head per day of which approximately 70% is grain and 30% is roughage.

Therefore : Grain required is 70% of 12 kg = 8.4 kg per head per day.

Roughage is 30 % of 12 kg = 3.6 kg per head per day.

Grain Required is  $800 * 90 * 4 * 8.4 = 2419$  tonnes.

Less 100 ha ( Springdale ) at 3.75 tons per ha. = 375 tonnes

which is 2044 tonnes and at 25 tonnes per load is 81 movements.

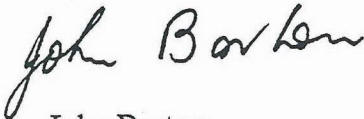


Roughage is  $800 * 90 * 4 * 3.6 = 1036$  tonnes and at 40 bales per tonne = 41440 bales. I would not estimate how many of these would be produced on 'Springdale' but I estimate that the shortfall would be significant.

I only bring these traffic movements to your attention because if this application is approved, we will be very upset if any of our Shire rates were used to repair damage to roads caused by a feedlot site which will be very detrimental to us.

Please inform us of any Sub committee meetings or full Council meetings when this matter will be discussed as we would like to be present to answer any questions and to speak to our case.

Yours faithfully,



John Barton

Director, Glen Oak Property Pty. Ltd.

# GLEN OAK PASTORAL COMPANY

GLEN OAK, WELLINGTON N.S.W. 2820

22nd March 1996

Syd Craythorn,  
Manager, Planning Services,  
Wellington Council  
Nanima Crescent  
WELLINGTON N.S.W 2820

Re: Development Application Number 67/94 - J.Bailey  
800 Head Feedlot  
Lot 92 Parish of Mitchell - Springdale, Spicers Creek.

CORRES No. 103 45		FILE No. 291 / 96	
DATE RECD		25 MAR 1996	
REFER TO	RECM	NOTH	ACTA
CCI			
GM			
CSD			
RC			
TSD			
ESD			X

Dear Sir,

On behalf of my wife, Carlene, and myself, I would like to submit some objections we have to the proposed feedlot site, and bring to your attention what we believe to be discrepancies in the Enviroment Impact Report prepared for J.W.Bailey by Ivey ATP.

Our major concern is with the feedlot site and the closeness in proximity to our house on Glen Oak, that my wife and I currently live in.

Referring to the Odour section ( No.10) of the E.I.R, we believe the issue has been covered very inadequately, especially in stating that " the two closest dwellings are sheltered from the feedlot by wooded ridges on the northern and western sides of the site." We don't believe (after expert advice) that trees will prevent the odour travelling the short distance to our house.

Section 10, Point 4, states " the second closest dwelling is west of the feedlot. Winds from a due easterly direction are relatively uncommon."

Firstly it was stated earlier in Section 6.1 that our house is located 1.7km WSW of the proposed feedlot. This direction is correct.

Secondly it was stated that winds from an easterly direction are uncommon. Most people living in the Spicers Creek / Bodangora area will know that winds from an easterly quarter are prevalent.

The applicant has chosen in his second E.I.R. statement to use wind data from the Wellington Post Office which we believe is totally irrelavent. After living here all our lives we know that it can be an easterly ( due, NE or SE ) gale on Glen Oak whilst at the same time be relatively calm in the Wellington township.

In a major project of Glen Oak that I prepared whilst at Orange Agricultural College in 1987, I collected climatic information for our area from the Wellington Soil Conservation Research Centre.



The wind data collected here ( which is closer to us than the Post Office ), states that the Nth / Easterly wind is the highest in average number of days per month for wind direction recorded at the Research Centre. The second highest was from the SE direction, followed by NW, E, SW, S, N, W and Calms.

Thus we believe from this evidence and our experience and local knowledge that the statement " winds from an easterly direction are relatively uncommon " to be totally incorrect and whats more that the winds from a N.E direction are the most common and this is the wind that will affect us the most in odour , dust and noise pollution. We also believe that winds on Glen Oak ( especially from an easterly quarter ) are considerably stronger than there are at the Reseach Centre.

It is common with the wind in the easterly quarter, to hear traffic on the Mudgee road, so we don't believe the statement that the " wooded ridges " will abate the noise, odour or dust problems.

Contained in the 1995 Feedlot Manual ( which can be obtained from the Dubbo N.S.W. Agriculture Office ), are certain points that we would like to raise.

Under a heading of ' Residential areas and buffer zone objectives ' it states:

" A seperation distance of up to 8km from residential areas and up to 5km from individual residences may be needed, depending on proposed feedlot size, topography, ground cover and air movement.

Accordingly then, when you chose a feedlot site, consider :

- \* how close it is to existing or proposed residential development.

- \* the prevailing winds ; put the feedlot downwind of any houses."

It also states that " local conditions such as wind corridors may nessitate / allow greater / lesser distances. Remember that manure stockpiles and irrigation with effluent waters have the potential to cause odours, so effluent and manure use areas should conform to the recommended seperation distances."

It can be seen from the E.I.R. that the effluent disposal areas, the manure stockpile and the burial site will affect us greatly with odour with the prevailing easterly wind.

Also stated in the 1995 Feedlot Manual under the heading of ' Protecting the Community Amenity - Odours '

" It is well known that different people have different sensitivities to odours and react differently to different types of odours. An understanding of the relative sensitivities of different neighbours would be useful.

You should know the wind direction that would cause odours to be blown to each neighbour. A simple wind vane at the feedlot would then show which neighbours might be affected." This obviously hasn't been done if the applicant can state that " winds from an easterly direction are uncommon "

As well there has been no attempt by the applicant to notify us of the proposed development or to discuss the ' relative sensitivities of different neighbours', with us (which are both guidelines contained in the 1995 Feedlot Manual.)

If there had been I could have made the applicant aware that both my wife and I suffer quite badly from hayfever, and that any increase in dust or odour pollution would be very detrimental to our health.

Other points raised in the 1995 Feedlot Manual for odour control include :

*" maintaining low stocking densities ( that is allowing at least 15 square metres per head)"*

The proposed feedlot has a high density rate of 5 square metres per head.

*" odour dispersion, by selecting a site that is far enough away from neighbours and that takes advantage of topography, wind direction frequency and atmospheric stability dates (Sweeten, 1988 ).*

And the section concludes that :

*" The main issue is to eliminate odour nuisance to neighbours, not necessarily to eliminate odour generation at the feedlot (QDPI ).*

In concluding we believe that the proposed feedlot site and designated effluent waste areas could not be located in a worse area as for odour, dust and noise pollution that could affect us. We also believe that this development would greatly affect our general health and well being.

If the applicant had done his research properly he would have realised the catastrophic effect the proposed feedlot site would have on us.

It would be appreciated if we could attend any meetings held on this matter by Council committees or sub committees so we could voice our concerns.

Yours faithfully,



Simon Barton

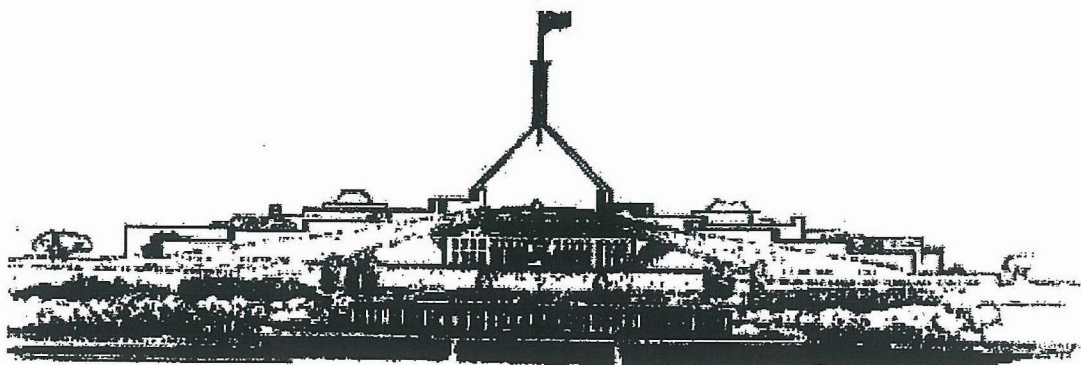
Director, Glen Oak Property Pty. Ltd.





COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY DEBATES



**THE SENATE**

**PROOF**

**BILLS**

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

**Second Reading**

**SPEECH**

**Thursday, 28 June 2012**

BY AUTHORITY OF THE SENATE

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## SPEECH

**Date** Thursday, 28 June 2012  
**Page** 151  
**Questioner**  
**Speaker** Madigan, Sen John

**Source** Senate  
**Proof** Yes  
**Responder**  
**Question No.**

**Senator MADIGAN** (Victoria) (02:31): I move:

That this bill be now read a second time.

I table an explanatory memorandum relating to the bill and seek leave to have the second reading speech incorporated in *Hansard*.

Leave granted.

*The speech read as follows—*

I am very pleased to introduce this Bill in both my name, and that of Senator Nick Xenophon, who cannot be here today. This Bill is being introduced in the hope of resolving a problem, a serious problem that has spread across this country for a number of years.

This Bill seeks to give powers to the Clean Energy Regulator to ensure that accredited powers stations, that are wind farms, do not create excessive noise. Among other things, the Bill adds a definition of 'creates excessive noise' and 'wind farm' into the *Renewable Energy (Electricity) Act 2000*.

Everyone in this place is fully aware that on 23 June 2011, just over 12 months ago, the Senate Community Affairs References Committee tabled its report into the social and economic effects of rural wind farms. In its report, the Committee made 7 recommendations. Those recommendations were, to put it bluntly, extremely limited but at least they made some mention of the concern about the effects of wind turbines on human health and recommended studies be undertaken to resolve the matter. To date nothing has been done. If it had been done, this legislation may not have been necessary.

For several years before I took my place as a Senator last July, I had been receiving repeated reports of people in distress due to the ever growing number of wind turbines that were spreading across the farmland of Victoria. People suffering illnesses they had never had before, stress, high blood pressure, serious sleep disorders and deprivation. I was also becoming aware that we had a new form of refugee in our midst, the 'wind farm refugee'.

These people, these wind farm refugees, have been forced to leave properties they and their families had lived on for generations. Driven off by a situation over

which they had no control. These were people whose daily lives involved hard work, difficult conditions and adversity. These were rural people and farmers; the type of Australians who have faced drought, fires, floods and all the other disasters known to the generations of country people who have come before them.

These people, these iconic Australians were suddenly being forced to flee the properties that held not only their memories and their lives but hold the bones of their ancestors. What could do that, except the direst of circumstances?

These people are not political activists; they are not radicals or zealots. They do not chain themselves to buildings or machinery; they do not attack others and they do not seek the end of renewable energy. They are the typical average Australian who hates making a fuss, who doesn't readily get involved in political issues but is always there for family and community. These people want to live their lives, bring up their families and generally remain in the background.

In every case I have come across these people, those in distress because they have been driven off their land and those in even greater distress because they have nowhere else to go and can get no respite from their sufferings. In every case they have all stated their support for renewable energies, including wind farms. Like almost all Australians they believe that to use clean, safe, efficient and cost effective alternative technologies is something we should strive for but in doing so we should not pursue the clean aspects at the cost of safety or health.

We all know the stories of illnesses caused by asbestos, lead, mercury and other physical substances. We have all seen and heard, even experienced issues such as repetitive strain injuries, post traumatic stress disorders and numerous other conditions we could all name. In virtually every one of those cases those who originally suffered these problems were ridiculed, called 'nutters' or 'whingers', or simply had their conditions fobbed off as "it's all in your mind".

Now these people across Australia, not just in one or two places but in dozens of places, are suffering identical symptom and we are again told, 'nutters', 'whingers' and again we hear that "it's all in their



minds". That is to be expected from the Wind Industry itself, which obviously would not want to accept that its industry could be the cause of a major health issue. It is also the type of thing I and others have come to expect from the Clean Energy Council, which is simply an advocate group for the Wind Industry. It is the argument being espoused by numerous blogs sites that dedicate themselves to the end of coal and the expansion of wind power.

But while it is to be expected from these groups, what is extremely disappointing is that it also comes from members of various State governments and the Federal governments, whether ALP or Coalition.

Where are the health studies that have been called for? We need genuine independent health studies incorporating experts from all related fields, including acousticians, neuro-specialists, stress experts, experts in sleep disorders; in fact experts in any of the areas that repeated disorders have been reported. These studies need to be conducted by eminent Australian specialists under Australian conditions using an approved methodology.

These are human beings who are suffering, Australian citizens and our constituents. They are not asking for anything that any other human being does not deserve as a basic human right. They want to live in safe and healthy conditions and it is the duty of their elected representatives to ensure that is what they get.

This Bill will hopefully go some of the way to alleviating the sufferings of some of these people and allow some to return to their homes. It may not solve all the issues but it is a start and should be put in place as soon as possible.

If the Wind Industry is as confident that there are no health issues as they keep telling me, then I would have thought they would be falling over themselves to have these studies done. They could then get on with building their industry and gathering their Renewable Energy certificates. Unfortunately I see plenty of advertising coming out about how wonderful wind farms are, how safe, how clean etc...; I see articles and letters in the paper, often by the same people, heaping praise on the wind industry and scorn on any that claim to be suffering.

Neither I nor Senator Xenophon can bring about these studies; that is up to the Government. But what we can do is to have legislation put in place to ensure that power stations deriving some or all of their power from wind must comply with acceptable standards and must openly disclose the data that is necessary to ensure these health issues do not occur.

I will speak more about these issues at a later date, as I am sure will Senator Xenophon. I am encouraged by the support this issue has received from several members and senators and am confident that something can be done soon to alleviate the problems of those already suffering and to ensure we do not see any expansion in the number of wind farm refugees.

**Senator MADIGAN:** I seek leave to continue my remarks later.

Leave granted; debate adjourned.

*We do not know when this will be continued but in essence it will cause the Energy Regulator to withdraw from issuing REC's (Renewable Energy Certificates) to Wind Project Operators if the Project fails to meet the noise standards (most do not meet even the very weak standards that are currently in place).*

*Without REC's operators cannot collect their subsidies.*





July 31, 2012  
Australia, Noise

## Reviews of Noise Impact Assessments — Stony Gap

Acoustic Group and GHD

### CONCLUSIONS (The Acoustic Group)

Marshall Day Acoustics has relied solely upon the EPA Guidelines and has ignored the acoustic characteristics that residents will actually receive as a result of the Stony Gap Wind Farm. They have not addressed the actual acoustic impact of the wind farm on the community.

The Marshall Day acoustic assessment provides a set of predicted noise levels in terms of the A-weighted values set out in the Guidelines and concludes that there are no tonal or modulation characteristics requiring modification to the predicted noise levels.

The assessment does not specifically address the influence or effect of winds and temperature inversions which have the potential to result in higher noise levels than have been predicted.

Professor Hansen has raised the issue that the acoustic assessment has under predicted the noise that residents will receive and taking into account the above matters, there is the distinct possibility that at times noise generated by the proposed wind farm will be greater than that set out in the acoustic assessment.

In relation to background levels, the attached measurement results confirm (as expected) that ambient background levels inside rural properties in the subject region are significantly lower than 30 dB(A) and that external noise levels are lower than the nominated Environment Protection (Noise) Policy 2007 night time Indicative Level of 40 dB(A) for rural areas. As such, the noise generated by the wind farm is likely to be significantly greater than background +5dB(A) and therefore to have an impact significantly greater than for an "annoyance."

The issue of low frequency noise and infrasound has been raised and discussed above. Documentation from the world's leading supplier of turbines has identified that computer models are inadequate for low-frequency noise propagation. As high frequencies are rapidly attenuated over distance (when compared to low frequencies) audible characteristics of the turbines may be reduced to a low frequency hum and can also include frequencies below the normal range of human hearing.

The Guidelines identify that infrasound is not generated on a well maintained wind farm yet the measurement results obtained for the purposes of this report prove otherwise. The measurement data appended to this review identifies that there are both low frequency and infrasound components generated by the turbines that are currently located in the region.

A proper assessment of community impact (either pursuant to the Development Plan or generally) cannot ignore low frequency noise and "infrasound." To the extent that it does, when these have been issues of specific complaint with other wind farms, the Marshall Day report falls short of its responsibility to the community.

The Guidelines identify that for host stakeholders, sleep disturbance is an adverse health effect. It is not unreasonable for Council and the community to assume that if sleep disturbance gives rise to an adverse health effect for persons who are obtaining a financial gain from hosting turbines, then sleep disturbance that impacts upon the general community (i.e. non-host stakeholders) must also give rise to an adverse health effect.



This peer-review has identified two eminent acousticians who, in 2002/2004, identified that there are issues with low frequency and infrasound and that the ear still continues to work and receive signals even when people are asleep. The mechanism causing sleep disturbance (for example, whether individuals are able to detect the infrasound components) is an issue outside my expertise.

But it is clear that use of the A-weighted value for assessment or compliance purposes does not address all of the noise impact issues associated with wind farms.

The Council's Development Plan requires certain objectives to be met for the subject wind farm. These objectives have been outlined above. The current application has not satisfactorily addressed these objectives, and has not actually assessed the noise or the impact of the subject development.

Inadequacies of the EPA Guidelines in meeting their own core objects have been raised. Council may consider raising these difficulties which the Guidelines are causing the Council with the EPA to address the concerns of the community.

As a result of the various matters raised and outlined above, there can be no confidence that the community will not be adversely impacted by the proposed Stony Gap Wind Farm. It is recommended that Council should request further particulars from the Applicant to address the individual matters raised above with particular reference to the Development Plan and with a view to identifying the actual noise impact that will be generated by the proposed wind farm.

Download original document: "Stony Gap – Attachments 5-6" <sup>[1]</sup>

Attachment 5: The Acoustic Group – Peer Review of Noise Impact Assessment  
Attachment 6: GHD – Independent Acoustic Review

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URLs in this post:

[1] Download original document: "Stony Gap – Attachments 5-6": <http://docs.wind-watch.org/Stony-Gap-Attachments-5-6.pdf>

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Supporting argument for the health concerns of the Bodangora Wind Farm

This has not happened elsewhere in Australia. At last, a local planning authority is listening to the concerns of local residents.

The panel heard testimony from people at Waterloo (the next range over from the Stony Gap wind development) who live out to 8km away from wind turbines whose lives have been significantly detrimentally affected, The same company (TRU Energy) owns Waterloo and they have done nothing to investigate the current problems at Waterloo, and deny their existence, because there is "no peer reviewed published evidence".

**Subject:** Stony Gap Wind farm refused by Goyder Council Development Assessment Panel on health grounds

**Today (1<sup>st</sup> August 2012) at Burra the Regional Council of Goyder Development Assessment Panel refused consent of the 41 turbine Stony Gap wind farm on the basis of community health concerns.**

The panel voted 3 : 2 in favour of refusing consent.

Elected members Jane Kellock and Peter Dunn asked probing questions of the Wind farm proponents and were not convinced by the responses to their concerns about the impact on 4 households between 1.25 and 2 km from proposed towers.

Councillor Dunn proposed the motion to refuse consent and this was seconded by Councillor Kellock. One other Dap member voted in support of CR Dunn's motion.

The Solicitor for TRUenergy said no one could guarantee there would be no health impacts. Not his exact words.

He also said there were only 4 non stakeholder houses within 5 km . This is not true as the township of Burra is around 4.5 km from the closest proposed turbine.

TRUenergy said after the meeting that they will appeal the decision through the ERD Court For more information on the wording of the motion and other details contact John Brak, the DAP Public Officer at Goyder Council

1 Market Square, Burra, SA 5417

Tel : (08) 8892 0100

Fax : (08) 8892 2467 Tel :

Email : [council@goyder.sa.gov.au](mailto:council@goyder.sa.gov.au)

Web : [www.goyder.sa.gov.au](http://www.goyder.sa.gov.au)



## **Evidence of the Adverse Health Impacts of Industrial Wind Turbines**

This is a supporting document for the report “**Wind Turbines – The Untold Story**” to provide more information in support of the comment: “There is a growing body of evidence that adverse health impacts are real and that they are occurring at greater distances from turbines than previously recorded.”

Following is an outline of some of the science and references:

1. Ms Krogh’s summary of peer reviewed articles with their abstracts and citations regarding adverse health effects and industrial wind turbines, March 2012.

Ms Krogh is a former adviser to Health Canada, and a senior Pharmacist, and edited the compendium used by doctors and nurses in Canada for prescribing drugs. Her summary shows clearly that there is now mounting evidence of a serious problem, which has led health professionals and noise consultants around the world to author seventeen peer reviewed articles on the adverse health effects caused by wind turbines. Health Canada made an announcement last week that they are commissioning a multidisciplinary study into the reported adverse health problems in Canada.

2. Leventhall, G., Pelmear, P., and Benton, S. 2003, *A Review of Published Research on Low Frequency Noise and its Effects*, Department for Environment, Food and Rural Affairs, London, UK; 2003.

The DEFRA Literature Review was based on peer reviewed and published literature available in 2003, and page 49 lists the symptoms of "wind turbine syndrome" which were known in 2003 by Leventhall and his colleagues to occur in some people exposed to low frequency noise. Professor Leventhall confirmed his knowledge of these symptoms at the NHMRC workshop in June 2011 during his presentation, and specifically confirmed that he had known about them “for some years.” Professor Leventhall was also aware in 2003 of the link between low frequency noise exposure and cortisol / physiological stress. Professor Leventhall did not share that crucial information with the authors of the NHMRC 2010 Rapid Review, despite him being one of two peer reviewers.

3. Shepherd, D. McBride, D. Welch, D et.al, 2011, *Evaluating the impact of wind turbine noise on health related quality of life*, Noise and Health, vol 13; 54, 333 – 339.
4. Hanning, C. and Evans, A. 2012, *Wind Turbine Noise – Seems to affect health adversely and an independent review of evidence is needed*, British Medical Journal, 344: e1527.

5. Carl V. Phillips, 2011, *Properly Interpreting the Epidemiologic Evidence about the Health Effects of Industrial Wind Turbines on Nearby Residents*, Bulletin of Science, Technology, and Society, vol. 31, no. 4 (August 2011), pp. 303-315.

Abstract:

**“There is overwhelming evidence that wind turbines cause serious health problems in nearby residents, usually stress-disorder type diseases, at a nontrivial rate. The bulk of the evidence takes the form of thousands of adverse event reports. There is also a small amount of systematically-gathered data.** The adverse event reports provide compelling evidence of the seriousness of the problems and of causation in this case because of their volume, the ease of observing exposure and outcome incidence, and case-crossover data. Proponents of turbines have sought to deny these problems by making a collection of contradictory claims including that the evidence does not “count”, the outcomes are not “real” diseases, the outcomes are the victims’ own fault, and that acoustical models cannot explain why there are health problems so the problems must not exist. These claims appeared to have swayed many non-expert observers, though they are easily debunked. Moreover, though the failure of models to explain the observed problems does not deny the problems, it does mean that we do not know what, other than kilometers of distance, could sufficiently mitigate the effects. There has been no policy analysis that justifies imposing these effects on local residents. **The attempts to deny the evidence cannot be seen as honest scientific disagreement, and represent either gross incompetence or intentional bias.”**

See also Dr Philips submission number 897 to the 2011 Senate Inquiry into the Social and Economic Effect of Rural Wind Farms.

6. Dr Nina Pierpont, Executive summary and peer reviews, Wind Turbine Syndrome, 2009.

Dr Amanda Harry (UK), Dr David Iser (Australia) and Dr Nina Pierpont (USA) were the first doctors to systematically collect and report clinical data, followed by the Society for Wind Vigilance in Ontario.

7. Styles, P. Stimpson, I. et al, 2005, *Microseismic and Infrasound monitoring of Low Frequency Noise and Vibrations from Windfarms* – Recommendations on the siting of windfarms in the vicinity of Eskdalemuir, Scotland, Keele University.

Regarding the UK seismic monitoring site situated at Eskdalemuir near Langholm in the Scottish Borders. It can detect nuclear testing at great distances. This research was done as they had to establish the vibration level from wind farms and whether this would effect the monitoring at Eskdalemuir. It concludes that there is a clear seismic vibration issue out to distances of greater than 18km coming from relatively small turbines that have a generating capacity of 660kW. Further the research found that vibration is proportional to power generating capacity. Therefore a single 2.5 to 3.0MW turbine will produce a significant seismic vibration. A number of turbines combined will have a very significant impact out to



a great distance, and the long term effects of chronic exposure to this vibration are unknown. Some sites where residents are reporting this vibration overnight have become ill very quickly (Waterloo, Glenthompson, Cape Bridgewater and Capital). Note that this urgently required scientific research with large turbines is yet to be instigated.

8. Oral testimony of Professor Anderson, NHMRC, to the Senate Inquiry 31<sup>st</sup> of March, 2011. **"...we are very aware that the high-quality scientific literature in this area is very thin. That is why we were at pains to point out that we believe that a precautionary approach should be taken to this, because, as you would understand, the absence of evidence does not mean that there might not be evidence in the future".**
9. Recommendations from the 2011 Senate Inquiry into the *Social and Economic Impact of Rural Wind Farms*. That the NHMRC held a public forum to review recent evidence does suggest that the public statement, the rapid review and the peer review have not held up under the spotlight of the 2011 Senate Inquiry and Senate Estimates.
10. The Falmouth Board of Health requested on June 11, 2012 that the Massachusetts Department of Health (USA) immediately initiate a health assessment of the impacts of the operation of wind turbines in Falmouth, Massachusetts. It reads: **"This appeal is compelled by two years of consistent and persistent complaints of health impacts during turbine operation. We realise that this is an atypical health assessment study. The suspected agent of harm is not a food borne, waterborne, or airborne contaminant. Yet the Wind Turbine Health Impact Study recently completed by the state suggests certain elements of wind turbine operation propagate to health impacts potentially as harmful as those caused by organic agents."**

A growing number of Australian doctors are speaking out publicly about their concerns, and urging research. These doctors include:

- Dr David Iser, (GP who reported problems in 2004, Toora, VIC)
- Dr Sarah Laurie (Medical Director of the Waubra Foundation)
- Dr Wayne Spring, (Specialist Sleep Physician, Ballarat, VIC)
- Dr Mitric-Andjic, (Daylesford, VIC)
- Dr Alan Watts (retired rural GP from Carcoar, NSW)
- Dr Max Whisson (retired medical researcher and Pathologist, WA).

Other concerned health practitioners and acousticians locally and internationally who have experience in the area or spoken out publicly include:

**Acousticians/Engineers:**

- Dr Malcolm Swinbanks, (UK)
- Professor Rick James, (USA)
- Rob Rand (USA)
- Stephen Ambrose (USA)
- Wade Bray (USA)
- Dick Horonjeff (USA)
- Steven Cooper (Australia)
- Dr Bob Thorne (Australia/NZ)
- Professor Phillip Dickinson (NZ)
- Professor Colin Hansen (Australia)
- Professor Henrik Moller (Denmark)
- Professor Mariana Alves Pereira (Portugal)

**Physiologists**

- Professor Alec Salt (USA)
- Dr Timothy Hullar (USA)

**Psychologists**

- Dr Daniel Shepherd (NZ)
- Professor Arline Bronzaft (USA)
- Dr Helen Parker (USA)

**Epidemiologists**

- Assoc Professor Jeffrey Aramini (Canada)
- Professor Carl Phillips (USA)
- Professor Alun Evans (Ireland)

**Medical Practitioners**

- Dr Chris Hanning (UK Sleep Physician)
- Dr Michael Nissenbaum (US Radiologist)
- Dr Mauri Johansson (Occupation Physician, Denmark)
- Dr Henning Theorell (Sweden)
- Dr Noel Kerin (Occupational Physician, Ontario)
- Professor Robert McMurtry (Ontario)
- Dr Nina Pierpont (USA)



- Dr Amanda Harry (UK)
- Dr Herb Coussos (USA)
- Dr Nuno Castelo Branco (Portugal)

#### **Nurses**

- Professor Norma Schmidt (Ontario)
- Jane Wilson (Ontario)
- Jane Davis (UK)

Low frequency noise and infrasound as indicated in the above references, is being measured inside the homes of sick people in the USA, and in Australia, and is occurring at the times they are experiencing the specific symptoms. The data recorded clearly indicates that the symptoms and the sound energy frequencies are NOT measurable when the turbines are switched off. I am aware of completed but as yet unpublished work by Dr Bob Thorne which supports previous peer reviewed empirical data collection, from Canada, the UK and the USA, all of which involves empirical data rather than reviews which deny there is any evidence. All of this causes me to publicly question the assertions made by proponents that there are no adverse health effects from industrial wind turbines.

We cannot afford to take risks with human health. It is now 56 years since the last asbestos mine was closed in Western Australia but we are still seeing people exposed to that deadly fibre dying from mesothelioma. We don't know if industrial wind turbines are as damaging as asbestos but it is worth remembering that the community thought that asbestos was safe - they built their houses out of it. A similar case exists with carcinogens affecting firefighters by absorption through their protective clothing.

I believe we should adopt a precautionary approach. Health and independently conducted sound impact studies are vital but in the meantime we need to make sure our buffers are sufficient that the infrasound and low frequency noise impacts are not causing adverse health effects.

**Dr Chris Back**

**Deputy Opposition Whip in the Senate**

**Senator for Western Australia**

27 July 2012

If you would like copies of the supporting documents, please contact us via the website:  
[www.chrisback.com.au](http://www.chrisback.com.au)





# BUYING YOUR PROPERTY

## Moving out of the city

Before you decide to buy a rural property, take a few moments to answer the following questions. You should also get legal advice before buying any property.

- Do you know the history of the property? Request a property search from the Livestock Health and Pest Authority (LHPA) to ensure there are no outstanding LHPA rates, levies, known chemical residues or animal health issues on the property. What stock did the previous owner have? Did they sow pastures and use fertilisers? Are there any rubbish dumps on the property that you will need to remediate? Are there pest animals (e.g. rabbits, foxes) on the property?
- Is the activity that you plan for the property suited to the landscape and capability of the land?
- Is there enough water to carry out the activity that you have in mind and is it of suitable quality?
- Are all required services provided to the property? If not, can they be provided economically? Or is it an area that will always have limited services? Services include phone, gas, water, sewer and electricity.
- Do you know what the regulations and conditions are for building dams or that you may need approval for sinking bores? Do you know that digging near a watercourse may require a permit?
- Are you aware that in most instances you require approval to remove native vegetation? How might this affect your activities?
- Does the zoning of the land allow your proposed use, or will you need to apply for a change of land use or any other permit?
- Are there good quality pastures? Are they dominated by native or introduced species?
- What weeds are on the property? Are any of them declared as noxious weeds? Is there a Noxious Weed Notice (Section 18) on the property?
- Is there soil erosion on the property that will be time consuming and expensive to fix?
- Is the soil fertile and the pH appropriate for growing pasture, crops and any other produce that you want to grow?



Central West CMA



BRC



- Are the fences in good repair and suitable for confining stock and the grazing management of the property?
- Are there any derelict mine shafts on the property? If so, are they fenced to ensure your safety?
- Are there existing mining leases or exploration licences on the property?
- **Are there any commercial wind farms planned for the area?**
- Is there forestry land near the property that may be harvested in the future?
- If there is no existing dwelling and you want one, does the land have a building entitlement?
- Are there existing or proposed adjacent land uses that will affect your enjoyment of the property? For example, are there legitimate rural uses nearby such as agriculture, quarries, mines and forestry that produce dust, odours or noise?

- Is there a Property Vegetation Plan (PVP) agreement, management plan or condition of consent over part of the property that requires you to undertake specified management actions, or limits the land uses on part of the property?
- Are any threatened species of flora and fauna known to live on the property?
- Will the amount of time and money required to control weeds, erosion and pest animals be excessive?
- Ask Council if there are:
  - any development applications current for the nearby area
  - other developments that have been approved but not commenced
  - any restrictions on developing certain desired land uses.
- Have you examined the Section 149 planning certificate from Council closely and discussed any potential constraints with Council and your conveyancer or solicitor?
- Is the land prone to flood or bushfire? Will you need to undertake any management activities to minimise these impacts?
- Are there any rights-of-carriageway or other easements on the property that need to be maintained and/or which may allow neighbours access?
- Are there any covenants, management plans or agreements on the property that protect certain areas?
- Is there enough shade and water for stock?

After considering all these questions, will the property provide the rural lifestyle that you are looking for?



Central West CMA



**[REDACTED]**  
**[REDACTED]**

## Wind farms DO hit house prices: Government agency finally admits that thousands can be wiped off value of homes

By [Gerri Peev](#)

**PUBLISHED:** 21:31 GMT, 22 July 2012 | **UPDATED:** 08:52 GMT, 24 July 2012

Wind farms can wipe tens of thousands of pounds off the value of homes, a government agency has admitted for the first time.

The Valuation Office Agency has been forced to re-band homes into lower council tax categories, confirming what most residents who live near the giant turbines already know: they are detrimental to property prices.

The move will make it harder for the wind farm industry to dismiss public concerns over the impact of their turbines.

At least five homeowners have seen their properties officially downgraded by the VOA because of their proximity to windfarms.

But only cases that go to appeal are made public by the agency, suggesting many more applications have been received for council tax discounts.

One case, a couple saw the value of their home near the Fullabrook wind farm site near Braunton, Devon, fall from £400,000 to £300,000 when they

1/08/2012



asked estate agents to value it.

The home is 650 yards from three of the turbines and the couple feared that the noise and visual dominance of the turbines would not only de-value their home, but make it impossible to sell.

The VOA agreed to put the home from council tax F to band E, saving the couple £400 a year in council tax.

The Valuation Office Agency has been forced to re-band homes near wind farms into lower categories



Many residents in towns such as Llanllwni, in West Wales, have campaigned against wind farms being built near their homes

Families living in the seaside Suffolk village of Kessingland have also applied to be put into a lower council tax band as many of their homes are near 400ft turbines.

When one resident, Sue Price, put her home up for sale last year for £460,000, she found a buyer. But they pulled out when local papers reported that the wind farms were about to be erected and estate agents told her to drop her price, she told the Sunday Times.

'We went down to £360,000 and still could not sell so now we have taken it off the market,' she said.

Waveney Council which covers the area has admitted that the constant swooshing noise does constitute a 'statutory nuisance', and is working on a technical solution with the wind farm operators, Triodos Renewables.

Recent council-tax rebandings by the Valuation Office are the first admission by an arms-length government body that house prices can be dented by wind farms.

This is despite other studies pointing to their detrimental effects, including the Royal Institute of Chartered Surveyors who pointed out in a 2007 report that homes within one mile of wind farms would lose value.

One in five prospective buyers rate peace and quiet as their number one priority when looking at a house, according to an Alliance and Leicester



survey.

Val Weedon, the honorary president of the UK Noise Association, said wind farms would have an impact on people's quality of life and therefore house prices.

She said: 'These re-valuations will set a precedent which the wind farm industry does not want. Wind farm noise is like road and airport noise, it has an impact on property prices.'

'Noise is also associated with headaches and nausea as it is a form of stress, so it can also have a detrimental effect on your health.'

It was revealed last week that every home in Britain will pay £88 to build a vast network of pylons in a £22billion project to link wind farms to the national grid.

Bills will start to rise next year under the controversial plans revealed by industry regulator Ofgem.

An average of £11 will be added annually for eight years, making £88 in total on top of any other increases.

The industry was recently dealt a blow by Chancellor George Osborne, who demanded huge cuts in government aid for wind farms.

The Chancellor told the Treasury to draw up plans for a reduction of 25 per cent in subsidies for onshore wind farms.

A VOA spokesman said: 'The Valuation Office Agency (VOA) is responsible for keeping council tax bands up to date in England and Wales. We do not record the number of occasions where a band challenge is made by a taxpayer due to the proximity of a wind turbine/farm.

'If a taxpayer believes that the value of their home has been reduced by a substantial physical change to their locality, then they may be entitled to make a proposal to alter their band.

'The proposal will be considered by the VOA, which may or may not result in a band change. If the taxpayer disagrees with the decision of the VOA, there is a right of appeal to an independent Valuation Tribunal.'

Read more: <http://www.dailymail.co.uk/news/article-2177429/Wind-farms-DO-hit-house-prices-Government-agency-finally-admits-thousands-wiped-value-homes.html#ixzz21aUfnlqp>



[http://www.thesundaytimes.co.uk/sto/news/uk\\_news/Environment/article1086138.ece](http://www.thesundaytimes.co.uk/sto/news/uk_news/Environment/article1086138.ece)

## Council tax cut for homes near wind farms

*Jonathan Leake, Environment Editor* Published: 22 July 2012

1/08/2012



***The windfarm at Kessingland in Suffolk has dented local property values***  
(Rob Howarth)

Wind farms can cause property blight to nearby homes, according to what could become landmark rulings by a government agency.

The Valuation Office Agency (VOA), which decides council tax valuations, has accepted that having wind turbines built near homes can sharply decrease their value and has, as a result, moved some into a lower tax band.

The decisions are a serious threat for the wind farm industry. Until now, such negative views have been rejected by the industry and planners as simply subjective opinion.

In one of the latest cases, a couple living near the 22-turbine Fullabrook wind farm near Braunton, Devon saw the price of their home fall from about £400,000 to £300,000. Three of the turbines are within 650 yards of their home.

That figure is based on a valuation by local estate agents and the couple have not yet tried to sell. However, they fear that in reality the constant noise and visual intrusion mean they could get even less — or that their home might be unsaleable. When they put those points to the VOA, it agreed, moving their home from band F to band E, saving them about £400 a year.

It follows a 2008 ruling in which Jane Davis, of Deeping St Nicholas, near Spalding, Lincolnshire, was given a discount on her council tax because the value of her £170,000 farmhouse home had been reduced by an eight-turbine wind farm 1,000 yards away.

Davis's initial request for a council tax reduction was rejected but she appealed to a VOA tribunal and won after describing how the noise left her family unable to sleep, forcing them to move into rented accommodation.

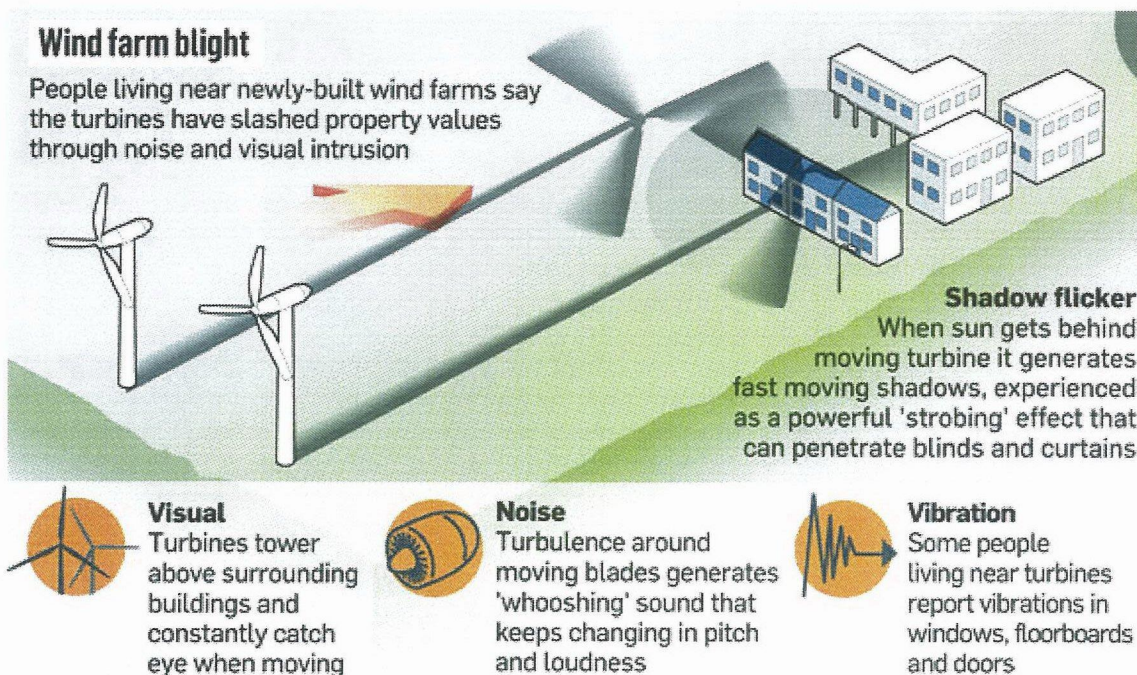
Davis went on to sue the wind farm owners, including French-owned energy giant EDF, in the High Court. The case ended late last year in a settlement that included a confidentiality agreement so tight that none involved will comment. It is understood, however, that the wind farm owners bought Davis's house.



Proximity to wind farms has played a part in at least three other decisions by VOA appeals tribunals to move homes into a lower council tax band — although in each case there were other factors.

The VOA has received similar applications from homeowners elsewhere — although last week it could not say how many because only cases that go to appeal are made public.

Rob Norris, of Renewable UK, the wind industry trade association, said: “No study has ever been produced showing evidence to back up the claim that wind farms have a detrimental effect on house prices,”



However, the Royal Institution of Chartered Surveyors published a report in 2007 showing that homes within one mile of wind farms could lose value.

Some say the blame lies with the government's planning guidelines, known as ETSU-R-97 which were drawn up in 1996 when turbines were smaller, and less was known about their impact. Despite the complaints, the Department of Energy and Climate Change revalidated the rules last year with few changes.

One area that has experienced the blight that can be caused by wind farms is the seaside village of Kessingland, near Lowestoft in Suffolk. Two 400ft turbines, financed by Triodos Renewables, tower over dozens of homes less than 550 yards away and residents complain they can hear a constant swooshing noise, especially in high winds.

A spokesman for Waveney council, which covers Kessingland, said the noise was sufficient to constitute a “statutory nuisance” but it preferred to work with Triodos on a technical solution. Matthew Clayton, of Triodos, said he was working with Waveney.

Many Kessingland residents have applied for council tax rebanding. The VOA was unable to say whether any had succeeded but the decline in value claimed by villagers appears to be reflected in prices.

Sue Price put her Kessingland home up for sale at £460,000 and had found a buyer when, last year, local papers described the machines that were then about to be erected.

“The buyers simply pulled out and the estate agent told us to cut our prices because the wind farm had blighted our property,” she said. “We went down to £360,000 and still could not sell so now we have taken it off the market.”

John Constable, director of REF, a charity publishing data on the energy sector, said: "Current policies are making renewables deeply unpopular by creating a few rich and happy winners and a larger number of very angry losers."

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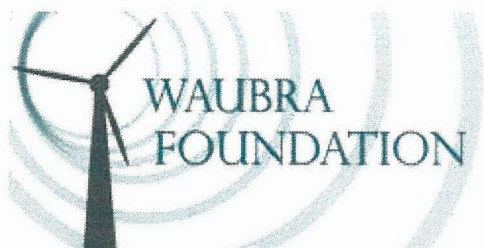
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# WIND TURBINES: THE UNTOLD STORY

Harnessing wind for energy purposes is not new. Wind turbines have been in use for decades overseas and in Australia. This has largely been led by Scandinavia, the USA and Holland. The oldest continually operating wind farm in Australia, Crookwell, has been in operation for 14 years.

What is new in Australia is the burgeoning expansion of wind 'farms' in recent years in order to meet targets (Renewable Energy Targets—RET's) for power generation from renewable sources. This coincides with generous grants from the commonwealth government through the agency of Renewable Energy certificates (REC's) which are the economic drivers of most wind 'farm' projects.

Approvals for and location of wind 'farms' rest with State/Territory and local governments. In most cases, local governments are not adequately resourced for this task. It is not the role of the federal government to interfere in this planning process, residing as it does, under the Constitution, with the States.

Without access to grant funding by the Commonwealth under the REC scheme however, most if not all would **not** be viable.

Debate rages on the cost-benefit of wind generated power when absorbed into an electricity grid in both peak and non-peak demand periods. It is not the purpose of this paper to pursue the alternative arguments of this question.

The following graph shows that coal provides the cheapest form of electricity generation in Australia. This is followed by gas, wind, hot rocks, while photovoltaics come in as a much more expensive form. Wind generated power is approximately double that generated from coal.

## HEALTH IMPACTS OF WIND TURBINES

This has been the subject of bitter argument and disagreement, denial and deception for many years in all countries. The stakes are very high on both sides of the argument. It is an unequal contest between a billion-dollar industry and small rural communities.

There is a growing body of evidence that adverse health impacts are real and that they are occurring at greater distances from turbines than previously recorded.

Where distances of two kms were regarded as a safe distance between turbines and residences, recent evidence would appear to push this out to 10 km from the nearest turbine.

The wind farm development guidelines for Western Australia are covered by Planning Bulletin Number 67 which was written in 2004, before the first health impacts were reported. Planning Bulletin 67 states, "As a guide, the distance between the nearest turbine and a noise-sensitive building not associated with the wind farm, is likely to be 1km." The bulletin also endorses the outdated South Australian *Environmental Protection Authority – Wind Farm Environmental Noise Guidelines*. These guidelines are now the subject of a recently upheld court appeal which has resulted in the wind farm concerned having to switch off the offensive turbines.

There was a view that turbine 'hosts' (earning an income) suffered no ill effects from wind turbines but that neighbours (missing out on income) did.

This has now been debunked.

I have spoken to a turbine host who, together with his wife, is suffering health effects attributable to wind turbines and is willing to say so publicly. He was interviewed in a national TV program in early June to express his concerns.

This man is a retired Australian naval engineer who worked in the field of electro-magnetic wave technology so has some familiarity in the science of wave motion through the atmosphere.



The income from the wind turbines on his farm provides a much needed supplement to his navy pension for himself and his wife. His motives are genuine. He presents this evidence at his economic peril.

In recent years, there has developed an increasing body of evidence pointing to adverse health effects of people residing within the 'noise shadow' of wind turbines. As turbine size and generating capacity has increased exponentially (from 67 metres high with a rotor diameter of 44 metres and 600 KW generating capacity to 175 metres high with a rotor diameter of 112 metres and 3.0 MW capacity) so has the impact on those residing in the vicinity of the turbines.

The accepted minimum distances between residences and turbines are seriously challenged by claims or evidence by affected parties.

This whole scene is exacerbated by the numbers of wind turbine projects being promoted, the size and number of units in each project and the proximity to built up areas in the urban-rural interface and in rural areas in most states.

### **Health effects of wind turbines in humans**

The symptoms developed can be divided into two groups based on whether they result from acute exposure (instant/days/weeks) or longer term chronic exposure (months to years).

**Acute exposure:** related to Infrasound and Low Frequency Noise (ILFN) exposure leading to vestibular disturbance via the outer hair cells of the inner ear.

Exposure may result in instant symptoms (for example tinnitus, ear pressure, vertigo, feelings of motion sickness, nausea, dizziness, sensations of head pressure, headaches, migraines, visual blurring, tachycardia, and irritability).

People specifically at risk of developing these symptoms include people with pre-existing migraine disorders, motion sensitivity, or damage to inner ear structures (such as hearing loss from industrial noise exposure).

**Chronic exposure:** severe balance disturbance, specific cognitive deficits including problems with mental arithmetic, difficulties with word finding, and planning activities specific and measurable short term memory deficits.

Over the longer term, people also notice that there is acceleration in the severity of their pre existing chronic health problems (eg diabetes, autoimmune disorders, angina, hypertension and others).

Other symptoms (acute and chronic) include chest pain, tachycardia, a perception of body vibrations, severe headaches, intense anxiety, night time waking in a panicked state and sleep disturbance/deprivation.

The characteristic feature is that they all IMPROVE when people are away from the wind turbines and other sources of ILFN, but get worse when they go back to being exposed to the operating turbines.

Some people report clinical signs when they either approach or are inside buildings. Others report severe symptoms in the open, such as in the paddock.

The symptom complex resembles syndromes caused by vestibular dysfunction. The proposed mechanism is disturbance to balance and position sense by noise and vibration. Balance related neural signals affect a variety of brain functions, including spatial awareness, memory and problem solving, fear, anxiety, autonomic functions (heart rate) and aversive learning.

There is plenty of evidence of people having to move away from their residence in affected areas, obviously with severe disruption to employment, schooling and social networks.

Clinical symptoms in Australia were first reported by Dr David Iser in 2004.

### **Impact on animals**

In animals the signs reported on farms in Australia are those of stress. Ewes and cows become very agitated and will leave their offspring in fits of panic if they are in the vicinity of operating turbines. These behaviours are demonstrated during lambing or calving



respectively when the parturient animal is sufficiently disturbed to interrupt the birth process.

I have been presented with the autopsy results on 12 week old lambs with perforated ulcers of their stomachs and intestines. These are typical of lesions found at autopsy in zoological animals which were caught in the wild and confined in zoos. They are described as being stress-related.

Cardiac pathology has been recorded in laboratory animals subjected experimentally to infrasound similar to that emitted by wind turbines. Blood biochemistry shows elevated cortisol levels seen in stress induced situations.

### **LOGICAL USE OF RENEWABLE ENERGY IN COMBINATION WITH GAS-FIRED POWER GENERATION**

In the Greenough near Geraldton, a wind farm feeds electricity into a nearby gas fired powerhouse for electricity generation.

This may well be a sound investment and the operators are planning to add photovoltaic cells to supply solar energy to the generating mix in the near future. It can be argued that this achieves the best of all worlds: solar generated power in the daytime, wind generated power at night when the wind is strongest and natural gas available to generate electricity when neither is available and to guarantee reliable supply of sufficient power to the grid.

### **CONTRACTS WITH TURBINE 'HOSTS' AND WITH NEIGHBOURS OF WIND TURBINE HOSTS.**

Hosts are those on whose properties the wind turbines are located. Wind turbine manufacturers or project entrepreneurs do not typically work directly with communities or potential 'hosts' where a wind 'farm' is targeted.

This is achieved through local promoters, known in the community and often themselves a potential 'host'.

Typically, hosts are required to sign up to a legally binding **CONFIDENTIALITY AGREEMENT** with the promoters. In return they are paid an annual lease fee in consideration of each turbine on their property.

Confidentiality Agreements are interesting. They may bind the 'host' for periods of up to 50 years or longer. Clauses include:

- Waived right to speak publicly on any aspect of the project, the turbines, or their impact without the written permission of the promoter;
- Inability to sell or lease the property or alter equity in the asset without approval;
- Inability to build within certain exclusion zones without approval; or
- Restrictions on other land use on the property without approval.

A second type of agreement in use is the **COMPENSATION AGREEMENT**, signed by property owners on neighbouring properties. These are also struck for periods of time up to 75 years. In consideration of a fee payable by the promoters, these compensation agreements bind the neighbour to:

- Waived right to speak publicly on any aspect of the project, the turbines, or their impact without the written permission of the promoter;
- Inability to sell or lease the property or alter equity in the asset without approval;
- Inability to build within certain exclusion zones (distances from nearest turbines) without approval; or
- Restrictions on other land use on the property without approval.

Agreements may contain 'buy-out' clauses which address the possibility of changes to land valuations, reflected by annual rate notices by the local government. To this end, the promoter may agree to compensate the neighbour for reduced land valuation, subject to a negotiation and appeals process.

Contractual agreements are typically written with the promoters and not with the multinational manufacturers or entrepreneurs. These parties appear to distance themselves

from any legal responsibility or obligation in the event of adverse outcomes at some time in the future.

***It is interesting to consider why proponents would want to contractually bind neighbours if they have no concerns about the adverse health effects or any other impacts on the local environment. What do they know that they don't want the wider community to know?***

There are compelling reasons why affected hosts will not speak publicly:

- Firstly, they are in default under their Confidentiality Agreements; and
- Secondly, they expose themselves to the threat of litigation from their neighbours if the neighbour has been adversely affected by the activities occurring on the host's property. This may be in the form of 'inconvenience' including health effects often forcing the neighbour to leave residence on their property to move elsewhere or reduced land values resulting from the wind farms.

To understand the scale of these projects, the Collgar Wind Farm near Merredin in Western Australia's wheat belt 300 km east of Perth is illustrative.

It has 111 wind turbines, each of 2.0 MWh capacity, located over an area of 18000 hectares. It has the capacity to generate 206 MWs of electricity or 792,000 MW hr per annum subject to wind performance.

It is generally accepted that the best performance under ideal conditions is generating capacity in the order of 38% to 42%.

#### **CONCLUSION**

Many wind turbine projects are having divisive impacts in rural communities. Family members are at logger-heads, club memberships are under threat and the social fabric within rural communities is being torn apart.

*Rural communities currently in dispute over proposed wind farms include Williams, Kojonup, Dandaragan, Lake Clifton and Eneabba.*

I know of one such rural community in Western Australia recently in which call-outs to a bushfire failed to attract the usual response from some neighbour-brigade members due to the anger from a proposed wind farm in that community.

**Senator Dr Chris Back**

**Liberal Senator for Western Australia**

**7<sup>th</sup> of July 2012**

**Senator Dr Chris Back**

Deputy Opposition Whip in the Senate

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