

## **Submission – Objection to the Gullen Range Wind Farm Modification to Project Application**

**3842 Range Rd, (Lot 22) Grabben Gullen, NSW 2583**

### **Sensitive Receiver B29**

Our residence at the above address was purchased in 2002 with the specific intention of using it as our retirement home. The home is on a 5-acre block of land, which has been used by us solely as a residence and not for farming or any other commercial purposes. At the time of its purchase, it was in dire need of a thorough renovation, which we have painstakingly and successfully carried out over the years by improving all aspects of its appearance, functionality and comfort levels as we were to make this our home in early retirement. In the process, it is fair to say that we have invested an enormous amount of time, energy and expense. We looked at numerous properties and settled on B29 as it had an acoustic environment devoid of traffic, industrial noise and also with wonderful views.

We object to the modification application submitted by the Gullen Range Wind Farm to the Department of Planning to permit the unlawful turbine re-locations due to the reasons listed below.

### **Visual Impact**

There are 32 turbines within a 5 km radius of our residence (B29) of which 27 are visible from our small block. Eight of the 9 turbines within a 2 km radius have been relocated closer to our residence by 405.67 metres with the exception of BAN\_10, which is now approximately 9.57 metres further. An additional 5 turbines have been built within 2250 metres.

WTG BAN\_08 has been built at an elevation of over 1000 metres and closer to B29 by 145 metres. This is approximately 70 metres higher than our residence, B29. Based on the radically negative visual impact that it has made to the view from our residence, we request that the WTG BAN\_08 be removed.

## Visual Impact

WTG BAN\_09 has been built 167.11 metres closer to our residence (B29) and is now 1146.65 metres from the middle of our home. Due to the visual impact of this we request that WTG BAN\_08 be removed.

In accordance with the documentation *Sensitive Receiver Location Information*, we wish to point out that we are the worst affected from the list of non-associated residences.

Photomontages supplied in reference to B29 and tagged as viewpoint 1 for B28 have no relevance. One can only see the full impact of these industrial monsters once you stand outside the residence and look north and east. Now that the WTG BAN\_01 to BAN\_08 have been operational to the North and North West the impact is even greater.



BAN\_09 – Visual from our garden 10m from SE corner of residence

The visual impact of the wind turbines erected by the Gullen Range Wind Farm in the immediate surrounds of our property has now diminished our enjoyment of living in this home, especially as some of these turbines have been constructed closer to our property than had been originally authorised. We have lost the view we so much enjoyed to the North and East.

## Noise Impact

As noted on 4<sup>th</sup> April 2014 the following turbines were operating: BAN\_03, BAN\_04, BAN\_06, BAN\_07 and BAN\_11. At this time noise from the turbines was clearly heard.

As noted on 25<sup>th</sup> April 2014, the following turbines were operational – BAN\_01, BAN\_02, BAN\_03, AN\_04, BAN\_05, BAN\_06, BAN\_07, BAN\_08 and BAN\_11. There was a clear increase in the noise levels just outside the residence. The cluster, BAN\_01, BAN\_02, BAN\_03 & BAN\_04 appears to generate a much louder noise than noticed on the 4<sup>th</sup>.

To mitigate the noise generated by this cluster disturbing us, we request the removal of turbines BAN\_02 and BAN\_03, which have been relocated, or the re-engineering of this cluster and appropriate checks for compliance and ongoing monitoring of the noise.

The noise generated by BAN\_08, which has been relocated 145 metres closer to our residence is a further cause of disturbance.

Once again we request the removal of turbine BAN\_08 due to the additional noise disturbance caused by the relocation.

BAN\_11 was built 1618 metres away from our residence and is currently operational. The noise it generates during particular wind directions is unacceptable, disturbing and disruptive to our quiet lifestyle. BAN\_09 relocated 1146 metres or less will have a far greater impact, which is the reason we once again request the removal of WTG BAN\_09.

Noise from the limited number of turbines that are currently operational is proving to be an irritant and disturbance causing stress in what was once our refuge from industrial noise. Noise generated by turbines can be heard when the sound of wind rustling through trees could also be heard. Wind noise does not block out the noise of turbines as one has a high frequency and turbines generated low frequency noise. We do not know the full impact of noise from these turbines as not all of them are currently operational but it is expected that the impact to be much greater.

The aerodynamic noise from the blades referred to as “swish” can clearly be heard. In addition, a further noise is detected from operational turbines. We request that this be investigated to establish if this is caused by faulty design/engineering, infrasound or the van den Berg Effect.

## **Noise Impact (Cont.)**

**Re: REPORT No. 2007265SY 001 R02 - MARSHALL DAY ACOUSTICS - 5 June 2008  
- Noise assessment**

### **6.0 ASSESSMENT METHODOLOGY - Predictions and Receiver Assessment**

To quote paragraph 3 below:

“It should be noted that the wind velocity of 9ms-1 was chosen because this is the point at which the turbines considered within this assessment generate maximum noise level at the receiver and would therefore indicate any potential sensitivity to noise criteria in the initial assessment phase.”

After experiencing the noise generated by the limited number of the operational turbines, I can clearly state that the greatest noise sensitivity to a receiver is when the turbines were operating with no apparent wind at the residential property. From this I conclude that the assessment methodology is flawed and the predicted noise levels of relocated BAN\_09 are invalid.

The derived noise limits for B29 listed on page 26 and highlighted in figure 8 indicate a scattering of background noise. This in our opinion is probably due to local wildlife especially the number of frogs around during this time of the year. This should have been filtered out or a different month selected such as late April or May. We wish to highlight the high noise criteria listed to B29 in comparison to other residences in this study. In our opinion, background noise should be the same or similar.

Due to this, we request a new Noise Assessment be carried out on residence B29 by two different groups of acoustic engineers who specialise in the monitoring of noise from wind turbines.

### **Devaluation of Property Value**

The building of turbines by GRWF has caused the value of our house to be undermined and its saleability grossly diminished. A recent viewer that our property attracted was highly impressed with our home and location but the proximity of the wind turbines to the house deterred them from making an offer. This could be confirmed by the agent acting on our behalf. The agent could also confirm that the overall appeal in acquiring our property by prospective buyers has significantly waned since the erection of the turbines.

### **Shadow Flicker**

A new study on shadow flicker will have to be carried out to establish the impact of the relocation of the turbines.

In conclusion, the modification application submitted by the Gullen Range Farm and its proposals will further exacerbate the negative impact on our already impaired enjoyment of our home, and also drastically reduce its market value. Therefore, we object to the approval of this application and request that the following be carried out:

- 1) We believe that an independent public inquiry should be initiated as the developer is in breach of the Project Approval as per the findings of a Planning and Infrastructure investigation that uncovered the fact that many of the 73 proposed turbines were built in locations totally different to what was initially approved.
- 2) The Department of Planning & Infrastructure has not monitored or put a stop to the breach of its Project Approval nor has it directed the developer to cease construction of turbines in unlawful locations or to halt their operation. It is crucial that an inquiry is set up to investigate the developer and the Department as both should be held accountable.

I call for a new Noise Assessment to be carried out at our residence B29. The previous assessment carried out in August 2007 had a lot of data scatter which was probably caused by the croaking of frogs 10 metres from the logger and microphone. This would have raised the background noise levels artificially. The sounds generated by frogs are not evident for the majority of the year; neither will the croaking of these frogs mask the noise of the turbines. If the department of Planning & Infrastructure is to consider the Gullen Range Wind Farm Modification to Project Application, it is only fair that we have a new noise assessment carried out at residence B29 as a part of the process.