

Glan Aber
Kialla Rd
Crookwell 2583

10/09/08

Major Infrastructure Assessments
Department of Planning
PO Box 39 Sydney
NSW 2001

RE SUBMISSION Major Project: (MP 07 0118) Gullen Range Wind Farm

I wish to object to this project for the following reasons.

Preamble

The EA produced by Epuron Pty Ltd does not give a Real Property description of the land involved in this development. As no Lot numbers and Deposited Plan and/or title references are cited this application is rendered incapable of assessment.

I contend that, therefore, this EA is rejected and another EA including this information is submitted to the Department of Planning and presented for public exhibition to allow interested parties to more adequately assess the proposal.

I write this submission as someone who has lived in the Crookwell area for over 40 years and for 35 years owned and worked a beef cattle property in Kialla. I am an ornithologist, internationally recognised wildlife artist, author and have also won major prizes for traditional landscape painting.

Apart from the above omission of Real Property description, assessment of the EA is particularly difficult as it contains a vast amount of information, some of which is unsound, false or vague. The methodology used to arrive at "conclusions" is sometimes not explained and sections of the document are repetitive and / or largely irrelevant to the project under discussion.

Epuron claims that the project, if built," will provide enough renewable electricity for the average consumption of 73,500 homes and would reduce greenhouse gas emissions by 588,000 tonnes of CO2 (equiv) over a typical year" (Epuron's Gullen Range Wind farm COMMUNITY UPDATE No. 3 JULY 2008).

These figures are plucked out of the air – they cannot be supported or proven as Epuron has not specified turbine power capacity, size or location - all of which will effect power output (when power output occurs). For long periods of little or no wind it would produce little or no power. When the wind did blow coal and gas fired power stations would still operate in order to ensure base load power.

I submit that not one coal fired power station would be shut down or not built due to the construction of this project.

Turbine Description, Layout and Location

The EA's vagueness concerning final positioning of the towers makes precise assessment extremely difficult. Maps provided are small in scale and tower positions indicated don't allow for precise preferred positions to be accurately identified. It would appear from viewing one of the maps in question (Figure 3-4) that 6 proposed towers (BAN 05, BAN 06, BAN 08, BAN 11, BAN 14 AND KIA 12) are placed extremely close to my property boundaries.

Adding to this confusion is the fact that Epuron is requesting a license to relocate the towers within a 250m radius.

Nowhere does the EA state a separation distance from tower or extent of blade sweep to boundary of neighbouring property.

This lack of detail is reprehensible given the magnitude of the proposal.

A developer in an urban/suburban environment would NOT gain permission to build even a garden shed, let alone a 45 storey structure, without SPECIFYING building height, materials, separation distances from neighbouring boundaries.

Further, no information is given as to the separation distance between towers. Presumably, given that towers can be moved up to 250m in any given direction, they may well form clusters. This would obviously have ramifications for visual impact and noise and make the information presented in the EA totally irrelevant .

The EA does not take into account the Upper Lachlan Shire Council's DCP on Wind Turbines (2005 , amended 2007) developed in order to protect non host properties from the kind of unprofessional proposal which Epuron has presented.

I submit that this proposal be rejected until a more professional and instructive EA be presented for assessment which includes (a) specific separation distances from non host property boundaries and (b) specific tower locations

The proposed site is unsuitable for wind turbine development compared with the small number of properties hosting wind turbines there is a large number of properties (118 residences within 3kms) which will suffer greatly from this development.

The area is not one of good wind resource. Winds are extremely variable as has been suggested by other prospective developers who have commented that the site was not a viable one for wind power generation.

Wind turbines are not agriculture – the area proposed for this development is zoned 1(a) – rural.

Community Consultation

I have attended **public meetings** held by Epuron at Evandale, Gunning (twice) Yass and Grabben Gullen.

Simon Davey (Project Manager) and Andrew Durran have also visited our home.

I submit that none of these meetings have been held in the spirit of genuine consultation. All have been characterised by outlandish statements made by Epuron's spokespeople to community members who questioned their intentions our expressed opposition to their intended projects.

I recite some of Epuron's outlandish claims -

Evandale public meeting

that Epuron would buy anyone's property who did not want to live next to their wind turbine development – Martin Poole Epuron Director.

Some residents suggested to Poole that they would take him up on this offer. My information is that Poole contacted Mr Neville Osbourne (NSW Dept of Planning) asking advice as to how best to renege on this offer. I understand that he was advised to print a retraction which was published in the Goulburn Post shortly after.

Cullerin public meetings

Publicly Epuron gave the impression that a significant number of people at this meeting were in favour of the Cullerin development. This is untrue. A Cullerin resident took a list of those present, noting those in favour of and in opposition to the development. The figures showed an overwhelming majority against the proposal.

Conroy's Gap public meeting (Yass)

That Epuron would provide fire trucks and fire crews 24 hours per day , every day throughout the fire season. (Andrew Durran – Epuron Director)

At the same meeting a “visual expert” admitted that no study had been undertaken on shadow flicker, stating that she had not been requested by Epuron to do so. She then informed me that shadow flicker is “not a visual effect”.

Gullen Range public meeting

A community member (Christopher Lee) politely expressed his concerns regarding wind turbine development in this location. Andrew Durran responded with “ I don't want your opinions, just ask questions”

Epuron states in its Community Update No. 3 – July 2008

“It is important for the community to voice their views on the project whether you support the project or not, or would just like to make comments”

Given the above descriptions of how Epuron has reacted to community views, this statement is staggering in its hypocrisy.

“Glan Aber” meeting

Present : Simon Davey, Andrew Durran, Sean Egan, Humphrey Price-Jones, Jennifer Price-Jones

Simon Davey rang me and requested a meeting at my home.

He was vague when questioned about the subject of this meeting

He arrived with Andrew Durran

The concerns of the Price-Jones' and their opposition to this project were made clear to Epuron reps During the course of the discussion, when the problems of fire danger in the area was raised, Andrew Durran said Epuron would equip the Grabben Gullen fire brigade with a fire fighting unit. (THERE IS NO REFERENCE TO THIS IN THE EA)

In relation to turbines Andrew Durran also stated “You're going to have them on your boundary fences so why don't you have some.” I interpreted this statement as a threat.

When my daughter's great distress at the proposal was mentioned it was treated with obvious glibness by Andrew Durran.

I found Andrew Durran's attitude offensive and his uninvited visit provocative given that he was well aware that I had objected to his attitude in past meetings.

Phone Survey

The statistics presented in the “community” phone survey of attitudes towards wind turbine development cannot be taken at face value.

This poll was conducted under the guise of it being representative of the local community - ie those to be immediately affected by the proposal. When Katrina Hodgkinson, MP for Burrinjuck, asked Epuron to provide her with numbers of respondents who lived within 5kms of the proposal Epuron was unable to do so. I know of no one in my local community of Kialla / Bannister who was contacted.

The statistics produced by this survey are flawed as the wording of the questions is loaded – this prompts particular responses

It is notable that the vast majority of people contacted did not wish to take part

I submit that the above does not represent meaningful community consultation and that due process in this regard has not been followed by Epuron and therefore the

information on this subject presented in the EA be ignored by the Department of Planning

Airstrip

It is the view of 2 local pilots, one of whom has many years of experience in using this airstrip as a crop duster and water bomber pilot, that unless turbines on the ridge within 2.5 nautical miles of the strip are removed, this facility will be rendered unusable for these purposes.

The airstrip is of vital importance, not only to Crookwell, but to a much wider area. It is listed for use by emergency services and situations such as medical evacuations.

It is used as an aerial fire fighting base and has been of great importance in recent years in combating a number of serious fires. This airfield is also used for general aviation and as a training facility by groups from Bankstown, Camden, Wollongong, Goulburn and Bathurst.

I therefore submit that turbines BAN01, BAN02, BAN03, BAN04, BAN05, BAN06, BAN07 and BAN 08 and turbines KIA01, KIA02, KIA03, KIA04, KIA05, KIA06, KIA07, KIA08, KIA09, KIA10, KIA11, KIA12, KIA13 and KIA14 be removed from the proposal to ensure that this vital service be retained.

Visual Assessment

At Epuron's Grabben Gullen public meeting I engaged the visual consultant in conversation. When questioned about some photo montages on display he was unable to say where the photographs used were taken from. When it was pointed out that the images of the turbines superimposed on the photographs were too small, he agreed that they appeared too small but attempted to explain this away by saying they were on a more distant ridge. It was pointed out to him that there was no ridge where he suggested. He stated that he didn't know how tall the towers would be. Later in the discussion he suggested that a 6m power pole has as much visual impact as a 135m wind turbine.

He also stated that our landscape was ideally suited to wind turbine development. I asked him which landscapes he thought were not suited to wind turbine development. His reply was those near National Parks or scenic lookouts. This begs the question as to why he had visited our area. He mentioned that he had visited our area on parts of two separate days. He was unable to answer basic questions as to where significant landmarks and infrastructure were located.

I submit that this "visual expert" was ill prepared and/or incompetent.

Epuron's Community Update No. 3 July 2008 document in part states "The studies show that the wind farm can be built with minimal environmental impacts." The EA does not demonstrate this. How a series of 84 turbines the height of 45 storey buildings can be erected on a 22 km length of ridge line on top of the Great Dividing Range and have minimal visual/environmental impact has yet to be revealed.

I submit that any reasonable person would find Epuron's quoted statement ridiculous.

This development would dominate the landscape and destroy the existing character of the area. The EA apparently attempts to conceal this despite the fact that the "viewshed" would have an area of 2,000 sq. kms.

Evidence presented in the EA's Landscape and Visual Assessment Attachment p18 in relation to

UK attitudes towards wind turbines is biased (wind energy industry paper) and selective and outdated. There is no mention of the recent outrage directed against wind turbine development in areas such as the Scottish Highlands and parts of Wales.

The EA states that the landscape has low visual sensitivity to wind turbines. Dame Mary Gilmore would not agree. She wrote poems lauding the high, delicate horizon of the Southern Tablelands.

The EA states (page 118) “visual impact assessment demonstrates that the site and its surrounds within the Southern Tablelands have a low visual sensitivity to a wind farm development.” and yet on page 102 of the EA Main Report it states that the visual impact for an observer 1.5 – 3.0km from the site is “highly visible and will usually dominate the landscape” and for observers <1.5km the towers will “dominate the landscape in which they are sited”

The EA also states (page 105) that from our property we will view	
tip to base of up to 40 towers -	up to <u>20 from my house</u>
entire swept path of the blades of up to <u>60 towers</u> -	up to <u>40 from my house</u>
at least half of the swept path of up to <u>84 towers</u> -	up to <u>84 from my house</u>
any part of turbines of up to <u>84 towers</u> -	up to <u>84 from my house</u>

If the proposed turbine locations were permitted, we would have turbines constructed on 3 of our boundaries -APPARENTLY LESS THAN 20 m FROM OUR BOUNDARY FENCES.

Any reasonable person would have to agree that this constitutes HIGH visual impact.

As a wildlife artist, farmer and grazier much of my time is spent out of doors on my property. My property is my work place. I do not live on my property because of my house. Suggestions that my house should be screened by hedge planting and therefore solve the visual problems created by wind turbines, is ridiculous/ Much of my property would be subject to shadow flicker. My amenity and my working conditions would be severely affected.

My property value, I have been informed, could be decreased by up to 40%.

I submit that towers KIA12, BAN05, BAN06 ,BAN08 BAN11 and BAN 14 be removed from the development.

Noise

The EA is seeking approval for turbines of “up to 3.3 megawatts” (page 12) and that the “Wind turbines proposed have a maximum tip height of 135m” (EA page 1).

It is understood that an EA for such a proposal should present the worst case scenario and show mitigation against negative impacts.

The EA makes claims about the amount of power to be generated and the proposal's ability to qualify as Critical Infrastructure ALL BASED ON TURBINES OF AT LEAST 3.0 MW

It would appear that the proponent is being disingenuous at best when the noise study presented to provide evidence of aural impact on surrounding residents is based on turbines of only 2 megawatts (REPower MM82 and MM92) and of 121m and 126m respectively.

Therefore The Department of Planning should demand that new noise studies be conducted using the 3.3MW RE Power MM104 as a model (this being the only

model of 3.3MW in the developer's list of wind turbines under consideration -EA page 23). This information should also be provided to the public prior to the Department's determination.

Nowhere in the EA is it recognised that the farmland neighbouring and in close proximity to the proposed site is the workplace of the people living there. As farmers, our days are spent OUTSIDE in the paddocks , in ALL SEASONS.

There is no mention of mitigating noise in our workplace - wouldn't this level of noise represent an occupational health and safety risk ? We are aware that 2 men who were fencing on their property next to the small Crookwell 1 turbines suffered headaches due to the noise of the turbines. These headaches grew in intensity until the men were forced to quit their work and seek assistance.

Such an imposition which can impede one's work and therefore have a negative impact on one's ability to create a livelihood cannot be condoned.

Wind Turbine Syndrome is now accepted by the medical fraternity as a recognised medical condition. Dr Nina Pierpont, MD, PhD in her exhaustive study called '*Wind Turbine Syndrome: A Report on a Natural Experiment*' discusses the adverse effects experienced by those who live near to wind turbines.

Specifically she recommends "a minimum 1.5 mile (2.5km) setback and in hilly or mountainous areas, where valleys act as natural channels for noise, this 1.5 mile (2.5km) setback should be extended anywhere from 2-3 miles (3-5km) from homes".

The Upper Lachlan Shire's DCP on Windfarms gives its accepted setback distance from a turbine to a non host residence as 2 kms.

The Gullen Range proposal ignores both of these documents and **drastically reduces** the setback distance to many non host residences.

EA page 124 shows a noise plot for turbine MM 82. my residence B12 supposedly lies within the 37 -35 DbA. The 37 DbA line however takes a dramatic and sharp shift to the left (towards the turbines) for no apparent geographical / statistical reason other than to minimally avoid my residence and therefore avoid placing it within the 39 -37 band. The plot for MM92 shows a similar, unjustified deviation.

Page 123 of the EA Main Report states

"Predictions using the ISO9613-2:1996 noise propagation standard allow for down wind propagation in all directions, which is analogous to moderate temperature inversion conditions"

The Kialla Valley's topography near my residence provides for greater than moderate temperature inversion conditions to apply.

Further, the noise attachment page 47 states

"In a temperature inversion, the vertical motion in the atmosphere is suppressed due to mild atmospheric conditions (calm and cool conditions that are generally experienced in winter time). "

EA Noise Attachment page 48 states :

"It should be noted that moderate inversions generally occur on cool and calm winter nights, with wind speed of <3ms-1. This is below the proposed turbine cut-in wind velocity of 3-5 ms-1."

This is not the case in the Kialla Valley area near my residence as temperature inversion conditions can apply and have applied on numerous occasions beyond these constraints

EA Noise Attachment page 47 admits in relation to temperature inversion :

"Feedback from the local community suggests that the phenomenon does occur,"

and yet no study was conducted in regard to temperature inversion effects at Kialla.

Therefore, I submit that the noise readings and predictions are insufficient and inaccurate and that the Department of Planning should suspend any determination of this proposal until more exhaustive background noise and proposed noise level studies OVER ALL SEASONS (NB Black Springs Windfarm Approval Conditions) have been conducted near my residence and the results provided to the Department and made available to local residents prior to determination.

As outlined in the Director General's list of Approval Conditions for the Black Springs Windfarm , I would request that the same noise restraints are applied to this development in regard to construction noise ie “by installing and maintaining...efficient silencers, low noise mufflers(residential standard) and replacement of reversing alarms on vehicles with alternative silent measures such as flashing lights.

Biodiversity

Towers BAN28, POM08, GUR03 and GUR07 are indicated to be on the edge or encroaching upon the habitat of threatened reptiles and another 4 turbines (BAN14, BAN29, GUR13 and GUR18)are apparently within approx. 50m of the identified threatened reptile habitats. The construction process would of necessity greatly disturb this environment .

Turbines when operating increase rates of evaporation and would therefore alter the microclimate - adversely affecting the habitat.

The general area of the Gullen Range is relatively rich bird habitat – being a mosaic of farmland, grazing land and remnant Southern Tablelands Basalt Forest.

The fauna study presented in the EA describes the territorial habits of Australian Raven, Australian Magpie and White-winged Chough.

This is mentioned apparently in order to suggest that these 3 species in some way control and restrict the number of other bird species in the area. This would give the impression that the proposed site is poor bird habitat. Australian Magpies and Choughs defend territories against clans of their own species. Breeding pairs of Australian Ravens defend breeding territories against their own species but not against nomadic sub-adult flocks of Australian Ravens and Little Ravens.

Magpies and ravens mob raptors, but DO NOT deter raptors from occupying the area .

The territorial habits of these birds in no way restricts the numbers of other bird species from occupying their habitat.

The ridge line is frequented by birds of prey – Wedge-tailed Eagles nest close to the northwest boundary of the development and frequently hunt along the ridgetop occupying the same airspace as would be occupied by turbine blades.

The methods indicated in an attempt to minimise raptor kills are to control rabbits in the area and the removal of carrion as soon as possible. For over 100 years attempts have been made to control and eliminate the rabbit. The rabbit has survived hunting, shooting, gassing, poisoning, warren ripping, myxomatosis and more recently calicivirus.

Just how the developer intends to control their numbers is **unspecified** but Epuron should patent this unspecified method as every farmer in Australia will want to use it. Are people going to be employed by the developer to implement this method and if so how many ?

The developers also suggest that carrion should be removed from the proposed site as soon as possible in order to reduce the risk to raptors. They do not say how this is going to be achieved over a site which is 22 km long and some kms wide. It certainly will not be landholders in every case as some continually add to carrion by shooting protected native fauna.

Recently parts of a neighbouring property were littered with carcasses of grey kangaroos – shot illegally on the property of a landholder who has indicated a desire to host turbines in this development.

Other mitigation measures (pages 137-138) are unrealistic and others impossible to assess.

Aviation lighting descriptions and mitigation are too vague to make comment.

Phrases such as “guy lines would not be fitted where practical” “turbine towers would be designed to minimise perching opportunities” - how?

“electrical connection lines should be installed underground where practical” - where is that?

“power poles and overhead power lines would be bird safe using flags and marker balls, large wire size, wire insulation, wire and conductor spacing” - where will this be?

Turbines should not be placed in transfly zones between areas of remnant woodland. This makes collision by birds with turbine blades and deaths caused by turbine turbulence more likely. Many of the turbines proposed are in these locations.

It is not necessarily the number of individual birds killed which is the most important consideration.

Impact upon individual species can, however, be significant. Raptors are particularly vulnerable, large species eg Wedge-tailed Eagles have a very slow replacement rate.

Planning Context - Local Government Instruments and Policies

The EA (page 88) states

“All works proposed for the Gullen Range wind farm would occur within land zoned 1 (a) Rural Zone. The objectives of this zone differ under each LEP. Wind farms are not prohibited under any of these LEPs.” That is the Gunning LEP 1997, Mulwaree LEP 1995 and Crookwell LEP 1994.

Although these LEPs do not prohibit wind farms specifically, wind farms do not comply with the spirit of these LEPs Zone 1(a) objectives.

I cite Gunning LEP 1997

(a) to maintain the rural character of Gunning

I cite the Crookwell LEP 1994

(a) To protect, enhance and conserve the area's

(i) agricultural land (particularly prime crop and pasture land) to sustain its efficient and effective agricultural production potential.

(c) To control development that could :

(i) have an adverse impact on the rural character of land in the zone

I cite the Mulwaree LEP 1995

(a) promoting, enhancing and preserving

(v) trees and other vegetation in sensitive areas and in any place where the conservation of

the vegetation is significant to the protection of scenic amenity or natural wildlife habitat or is likely to control or contribute to the control of land degradation

The EA chooses to ignore the turbine setback distances laid out in the Upper Lachlan Shire Council's DCP on Windfarms 2005 amended 2007 Planning and Environment Controls.

I cite from this document :

- f. Where visible from a non related dwelling or immediate surrounds the development shall not be located within 15 times the blade tip height or 2.0 kms (which ever is the greater) of any dwelling not associated with the development or 15 times the blade tip height or 2.0 kms (which ever is the greater) from any lot that has been created for the purpose of a dwelling. Where turbines are proposed to be significantly higher than such properties / dwellings or where the turbines will dominate the immediate view from the dwelling or dwelling lot, increasing these separation distances is recommended.
- h. The development shall not be located within two times the height of the turbine (including the tip of the blade) from a non related property boundary.

This would mean that a turbine should be 2 kms from a non host residence and 270 m from a non host property boundary.

Communications

In regard to TV and radio interference, The EA outlines conditions in which interference WILL occur. The EA mitigation measures is to undertake a monitoring operation IF REQUESTED BY A RESIDENT and if interference is registered then to investigate why. Then mitigation measures may be put into place.

My objections are that:

- (a) the EA already recognises that interference will happen and yet non host residents will have to suffer poor TV reception for as long as Epuron wish to take in “investigating” the matter.

Within at least 1km of a tower Epuron should be instructed to provide mitigation measures BEFORE construction so that non host residences do not suffer any inconvenience.

- (b) the possible mitigation measures are outlined on page 157-8 of the report BUT it is not stated WHO WILL DECIDE on which method is to be used. The effected landowner of a non host property should be the only one to decide this matter.

As cable based broadband internet is not available in this area (and we have advice from the Regional Manager of Telstra that our exchange will NEVER be upgraded to make this possible) residents in the area of the development are forced to rely on other forms of broadband internet.

The statement made by Epuron in the EA is simply

“The Proponent appreciates the importance of Wirefree broadband to the local community and commits to work with Wirefree to avoid any impact on the service’

This IS NOT a mitigation against loss of broadband service.

It is important for the Department of Planning to know that Wirefree no longer exists as this internet company was bought by Cirrus Communications Pty Ltd. some time ago. Therefore Epuron CANNOT work with Wirefree and so NO MITIGATION IS IN PLACE FOR A LACK OF WIRELESS INTERNET SERVICE.

In this rural area we all need internet availability to conduct business.

I submit that this development be rejected until the developer, Epuron Pty Ltd, can prove that it will provide all residents of non host properties within a 2km radius of

any turbine with free satellite broadband internet services PRIOR to construction of this development so that people's businesses are not negatively affected.

Concluding Remarks

The so-called “Gullen Range” is demonstrably inappropriate and unsuitable for massive wind turbine development. It is an elevated site in an area of the Southern Tablelands which can justifiably be described as heritage landscape.

If built, turbines would have a profound impact not only on the Gullen range but on a significantly large area of the Southern Tablelands.

The massive size of the turbines would mean that they would dominate the landscape over a vast area – 2,000sq. kms described as “viewshed”. To make the statement which appears in the EA that the landscape has a “low visual sensitivity” is arrant nonsense. The area is incorrectly described as “sparsely populated”. There are in fact 118 non host residences within 3kms of the proposed site.

Traffic movements consisting of 834 oversize vehicle movements will require massive road reconstruction, the removal of trees and power lines. Some vehicles will travel in convoys of up to 15. This will cause massive disruption and in fact some roads will probably be rendered impassable to the general public. This inconvenience will last for 2 years or longer. Mitigation measures suggested by Epuron Pty Ltd are that affected residents should get double glazing or relocate during the construction period.

For this developer to suggest that non host residents should renovate or leave their homes during the construction phase of this development, highlights the degree of impact that construction will have on these residents and is totally unacceptable.

The site is not a good wind resource area. This is borne out by comments made by other wind turbine developers. This area was rejected as a viable site for such development by Origin Energy.

The EA under assessment is either a work of monumental incompetence or deliberately disingenuous.

By presenting this EA, Epuron Pty Ltd demonstrate a contempt for local residents, the Upper Lachlan Shire Council's planning documents and the NSW Department of Planning.

I respectfully submit that this proposal be rejected.

Humphrey Price-Jones