Response to EA Submissions

The Preferred Project Report (November 2012) provided a response to the submissions made following the exhibition of the Environmental Assessment (EA).

In April 2013 NSW Planning & Environment requested that the response to community submissions be presented in a revised format which responds to submissions in an individual manner, identifying the individual submitter, the issue(s) raised and the response.

Note that in some cases the response included below has been superseded by the updated response in the body of this Preferred Project & Submissions Report (Sep 2014).

1.1 Public Exhibition

The Yass Valley Wind Farm Environmental Assessment (EA) is comprised of:

- The Environmental Assessment;
- Attachments: Involved land parcels, turbine grid co-ordinates, Part 3A declaration, DGRs, planning focus meeting minutes and community consultation plan & materials;
- Appendix 1 – Landscape & Visual Impact Assessment;
- Appendix 2 – Noise Assessment;
- Appendix 3 – Biodiversity Assessment;
- Appendix 4 – Archaeology Assessment;
- Appendix 5 – Communications and Aviation Assessment;
- Appendix 6 – Traffic & Transport Assessment; and
- Appendix 7 – Shadow Flicker Assessment

The Yass Valley Wind Farm Environmental Assessment was on public exhibition from 13 November 2009 to 14 December 2009 at the following locations:

- NSW Planning & Environment, 23-33 Bridge St, Sydney;
- Nature Conservation Council, 301 Kent St, Sydney;
- Yass Valley Council office, Yass;
- Harden Shire Council office, Harden;
- Binalong Post Office, Binalong; and
- On the NSW Planning & Environment website

Local residents were notified of the exhibition period through advertisements placed in the local newspapers by NSW Planning & Environment and a newsletter was sent to residents in the vicinity of the project site by the proponent.

1.2 Submissions Received

NSW Planning & Environment received a total of 22 submissions. Of the 22 submissions, 7 were from government agencies and the remaining 15 submissions were from individuals or private organisations. One of the individual submissions was in support of the wind farm and the other 14 submissions were opposed to the project.

In accordance with section 75H of the Environmental Planning and Assessment Act 1979, this Preferred Project & Submissions Report provides considered responses to the issues raised in submissions received in relation to the EA for the proposed Yass Valley Wind Farm.

The individual submissions and government agency submissions have been listed and addressed individually.

1.3 Assessment of Submissions

The issues raised in each submission have been summarised and tabulated in Table 0-1 on the following page to identify the most frequently and infrequently raised issues.

Table 0-1 Summary of submissions received

Submission Number	Visual Impacts	Operational Noise	Biodiversity Impacts	Heritage Impacts	Consultation/ community	Property Value Impact	Health Impacts	Safety Impacts	Fire Hazards	Aviation Impacts	Communications Impacts	Traffic Impacts	Resource Impacts	Soil Erosion	Tourism Impacts	Decommissioning
1	■	■	■		■	■	■									■
2	■	■														
3	■				■									■		
4	■														■	
5				■									■			
6	■	■	■			■	■									
7	■		■								■					■
8																
9	■	■	■		■	■	■									
10	■	■	■			■	■		■							
11	■				■	■			■							■
12	■															
13													■			■
14					■	■	■									
15	■		■		■							■			■	
16													■			
17										■						
18				■									■	■		
19			■	■												
20												■				
21					■							■				
22		■					■									

■ Indicates government agency submission

1.4 Response to Individual Submissions

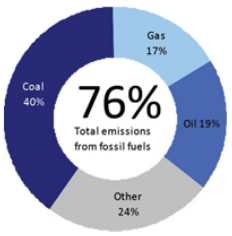
1.4.1 David Burraston, Cootamundra (approximately 60 km away)

<table>
<tr><th>Issue</th><th>Response</th></tr>
<tr><td>Poor greenhouse gas reduction

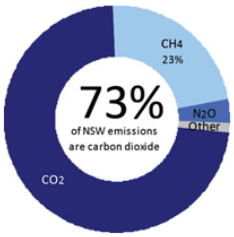
The stated GHG reduction figures are incorrect and inconsistent</td><td>A comparison of the original estimate and a revised estimate using the NSW government wind farm greenhouse gas savings tool www.greenhousegas.nsw.gov.au is shown below:
<table>
<tr><th></th><th>Epuron estimate in Environmental Assessment 2009</th><th>NSW Government Wind Farm Greenhouse Gas Savings Tool</th></tr>
<tr><td>Number of Turbines</td><td>152</td><td>144</td></tr>
<tr><td>Turbine Capacity (MW)</td><td>2.5</td><td>2.5</td></tr>
<tr><td>Wind Farm Capacity (MW)</td><td>380</td><td>360</td></tr>
<tr><td>Capacity Factor</td><td>0.36</td><td>0.36</td></tr>
<tr><td>Wind Farm Energy Output (MWh)</td><td>1,198,368</td><td>1,135,296</td></tr>
<tr><td>Emissions avoided per annum (t CO_2-e)</td><td>1,143,243</td><td>1,097,831</td></tr>
<tr><td>Equivalent average number of households</td><td>142,905</td><td>141,912</td></tr>
</table>
The Government's greenhouse gas savings tool is the most relevant tool to use.

The website of the NSW Office of Environment and Heritage (http://www.environment.nsw.gov.au/climatechange/emissionsoverview.htm) depicts the dependency on fossil fuels and resultant emissions. The need to transition to low GHG emitting renewable energy is apparent.

Over three quarters of NSW emissions come from the extraction, processing and burning of fossil fuels, primarily coal. Nearly three quarters of emissions are in the form of carbon dioxide, with methane emissions the next largest form of emissions.

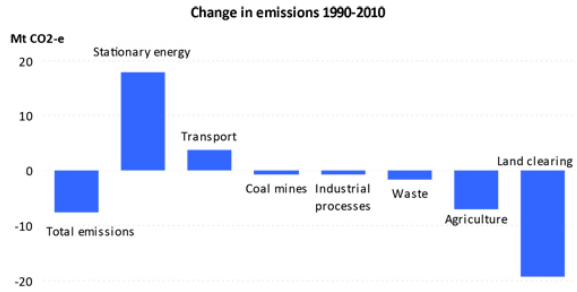
Source: Australian greenhouse emissions information system

Source: Australian greenhouse emissions information system

Trends in emissions

NSW emissions are lower now than in 1990 due mainly to a reduction in the rate of land clearing. In the fossil fuel burning sectors, emissions have grown by 27 per centsince 1990, including a 33 per cent increase in emissions from electricity generation.

 
</td></tr>
<tr><td>Lack of community consultation</td><td>Epuron has contacted and continues to consult with the neighbouring landowners as noted in section 6.2 and set out in the consultation plan in Attachments 6 to 9 of the EA. The consultation program includes:

▸ Ongoing telephone contact
▸ Ongoing individual meetings with landowners</td></tr>
</table>

Issue	Response
	▸ Newsletters – distributed to landowners, neighbours and the broader community ▸ An Open House information day held on 10 December 2008 During the early stage of the project representatives from Epuron made telephone calls to neighbours in the vicinity of the project and this was followed in most cases with a face to face meeting to provide any further information required and answer individual questions. Since Epuron re-acquired the project from Origin Energy in July 2012 it has: ▸ Issued six project newsletters ▸ Established a project website ▸ Establish a Community Consultation Committee ▸ Held seven CCC meetings ▸ Contacted or attempted to contact all neighbours with a residence within 5 km of a turbine and in some cases beyond 5km
Illegibility of figures and diagrams. E.g. Fig 2-1, 3-2, 3-4, 3-5 …	Revised maps have been included in the Preferred Project & Submissions report (PP&SR) including an A1 scale map of the site. It is intended that these revised and additional maps will assist in developing an understanding of the proposal.
Number of landholders is inconsistent	There has been a change to the landholders from the exhibited EA to the final development described in this PP&SR. A number of new landholders associated with the alternate transmission line are now included and landownership to the west of the Coppabella precinct has been amended. Details of the properties and landholders involved in the project are included in Attachment 18.
Decommissioning	Decommissioning the wind farm at the end of its commercial life is the proponent's obligation and carried out by, and at the expense of, the wind farm proponent (owner). This is expected to be a condition of any project approval. Refer to the Decommissioning Plan (Attachment 20) for further details.

1.4.2 James Middleton, Harden (Approximately 30 km away)

Issue	Response
The proposed wind farm is not viable or cost efficient and the landowner is at risk of having a product that requires to be removed.	Like a DA for a home or business, the commercial viability of the wind farm is the proponent's risk and is not a planning issue. Given the costs involved it is unlikely that an application would be lodged without the full intention to take the project to construction. The responsibility for decommissioning of the wind farm at the end of its economic life is the proponent's. See the draft Decommissioning and Rehabilitation Plan (Attachment 20) for more details.
The land where turbines will be positioned will not be properly managed for control of weeds, feral animals and erosion. Land management could be compromised as the land owner could rely on the income from the wind turbines rather than efficient management of the land.	Areas disturbed during construction will be protected by the installation and maintenance of appropriate erosion and sediment control measures to avoid contributing to any soil and landform degradation. An Erosion and Sediment Control Plan will be prepared as part of the Construction and Environment Management Plan that will be submitted to the Director-General of NSW Planning & Infrastructure for approval prior to the commencement of construction. Land management is an existing landowner obligation and it is presumed that having more funds available would not be a hindrance to the management of existing obligations. Existing wind farm developments have been associated with improved property management.
Employment opportunities on farms where the wind turbines will be positioned will cease, as the farming of that land has been replaced, which will also affect rural enterprises. I cannot see how the jobs created by these	There is no reason to consider that existing farms would stop employing farm workers because of the wind farm. This is not known to have occurred elsewhere. Jobs created by the construction and operation of the wind farm do not generally offset other jobs; they are additional jobs to those existing. Jobs lost which might be attributed to increased electricity costs are not related to the wind farm application. Taxpayer's money is not diverted to subsidise wind farms. Epuron is not aware of any

Issue	Response
wind farms offset the jobs that could be lost due to increased electricity costs and the diversion of tax money to subsidise these farms.	direct Commonwealth or NSW subsidy for the construction or operation of wind farms. Electricity customers pay for renewable energy as part of their bill – in NSW the cost of wind farms has been identified by IPART as $40 per household per year on the average $2100 bill. Most wind farms apply for eligibility to create Large -scale Generation Certificates (LGCs), formerly Renewable Energy Certificates, under the Commonwealth's Renewable Energy Target (RET) scheme. Eligible renewable energy generators are able to create 1 LGC for every megawatt hour (MWh) of eligible electricity generated. Other parties, predominantly electricity retailers, known as liable parties, are required to surrender LGCs equivalent to a proportion of their total electricity sales (increasing up to 20% by 2020). Wind farm operators are able to sell the certificates they create to liable parties, thereby gaining additional revenue to help offset the costs of wind energy generation compared to other generation, such as coal or gas. Wind farms have higher upfront capital costs than other forms of generation but they have no ongoing fuel costs where other forms of generation have ongoing and increasing fuel costs.
As a local resident and Managing Director of properties in the Yass Valley Shire I am concerned with the noise and light pollution that each wind turbine could create.	The wind farm would comply with the guidelines specified by NSW Planning and Environment for noise and subject to ongoing compliance monitoring. There are no aircraft warning lights proposed for the wind farm so there will be no light pollution.

1.4.3 Louise Hufton, Harden (4.4 km to nearest turbine)

Issue	Response
Night lighting	The installation of obstacle lighting is not currently proposed for the wind farm. The CASA Advisory Circular AC 139-18 in relation to Obstacle Marking and Lighting of Wind Farms has been withdrawn and wind farms that have previously operated red flashing obstacle lighting have now turned these off permanently.
The open house forum proved to be highly uninformative and doesn't provide any understanding of what issues may be of concern.	The submitter has provided very useful information about the possibilities for projects being carried out by the local landcare groups. While the open house may not have provided valuable information to the submitter the proponent is appreciative of the clarification of issues of concern and possible options for addressing them that the submitter has provided.
Where water is to be sourced from.	The water usage over a two year construction period has been estimated to be around 16.2 ML (EA section 8.1.2 on page 197). A number of potential water sources have been identified including Jugiong Creek, Lake Burrinjuck, Goldenfields Water County Council pipeline, Yass Dam and a number of ground water bores. None of these potential water sources would be used for the wind farm to the extent that they placed any restrictions on existing agricultural and potable water usage. The estimated annual water use required for turbine construction (8ML) is less than 0.5% of the total water capacity of Yass Dam alone. The main construction contractor would discuss water availability and terms with the relevant authorities before commencement of construction.
Management of soil erosion	Areas disturbed during construction will be protected by appropriate erosion and sediment control measures to avoid contributing to any soil and landform degradation. An Erosion and Sediment Control Plan will be prepared as part of the Construction and Environment Management Plan that will be submitted to the Director-General of the NSW Department of Planning & Environment for approval prior to the commencement of construction.
Concerns about loss of television signal strength	Concerns about television reception quality are noted. The draft standard conditions note: *Prior to the commencement of commissioning of the Development, the Applicant*

Issue	Response
	shall undertake an assessment of the existing quality of the television/radio transmission available at a representative sample of receivers located within 5 kilometres of any wind turbine. The submitter will be invited to be one of the receivers to have existing reception quality assessed.

1.4.4 The Crisp Galleries, Bowning (nearest turbine 2.4km)

Issue	Response
We request that Epuron not build 10 of the 180 proposed wind turbines. These 10 wind turbines will have a serious impact on our existing tourism business and our proposed tourism educational eco sustainable village for 800 people.	The Crisp Galleries tourism village is a proposed eco-tourism development which required the adoption of a new LEP to be permissible. Since the submission this has now occurred. Epuron has had correspondence and a number of meetings with Crisp Galleries and have noted the request through the 2009 submission not to build a number of the proposed wind turbines. The original concerns of the Crisps were night lighting and shadow flicker. No night lighting is proposed for the wind farm and due to the distance between the general location of the tourism village and the wind farm (2 ½ km) there will be no shadow flicker experienced. For the 2009 Environmental Assessment ERM visited the location of the proposed eco-tourism village and prepared a photomontage. The wind turbines, at over 2.5 km away, would be compliant for noise and shadow flicker in the vicinity of the eco-tourism village. Should the wind farm proceed to construction it would enable the Gallery owners to see the wind farm in situ and determine what screen planting might assist. The proponent would provide any reasonable screen plantings to screen both the existing overhead transmission lines in the foreground view of the eco-tourism village as well as the wind turbines in the distance if requested. At this stage it is not clear that the proposed eco-tourism village will go ahead and as there are no compliance issues, Epuron is seeking approval for all wind turbine locations. Discussions will remain open between the Proponent and Crisp Galleries to maximise the benefits of the co-existence of the two projects.

1.4.5 Sam & Rowena Weir, Bookham (approximately 9 km away)

Issue	Response
The proposal would transfer the ridgelines of this rural landscape into an industrial zone. The aesthetic beauty of the area would be lost.	As both submitters are on the wind farm CCC their views have been noted. The Landscape and Visual Impact Assessment noted that the proposed Yass Valley Wind Farm will have a generally low visual impact on its surrounds, and the site is a suitable landscape for the construction of a wind farm. It is noted that the recent removal of a tree from the submitters' garden has left a gap in screening towards the Conroy's Gap Wind Farm. While the nearest wind turbine in the Yass Valley Wind Farm is over 9 km away, there is the potential for a wind turbine form the Conroy's Gap wind farm to be within 4 km. New tree planting should assist with filling in the gap and screening the house from the Conroy's Gap wind farm.
Neighbours most affected receive no compensation or consideration whatsoever, and are forced to suffer huge reductions in the value of their properties and quality of life.	The wind farm will establish a community fund which is intended to benefit the neighbours closest to the wind turbines. The Proponent will contribute $2,500 per wind turbine per annum and at least 50% of the funds may be allocated to residential clean energy improvements or similar benefits to non-involved properties located within 5km of a wind turbine. The submitters are, however, over 9km from the Yass Valley Wind Farm. The main finding in a report prepared for the NSW Valuer General in August 2009 was that "*wind farms do not appear to have negatively affected property values in most cases*." The value of a property is made up of a myriad of considerations and not only includes proximity to wind turbines but also to other infrastructure, the potential

Issue	Response
	use of the property and any improvements. It is possible to find real estate agents who consider there is an impact and those who consider there is not an impact. However, it is objective studies that provide the basis for sound consideration of this matter and numerous studies conclude that wind farms do not have any discernible impact on property values. Studies include those by Hinman – 3,851 sales over 9 years, Carter – 1,298 sales over 13 years and the 2013 study by Lawrence Berkeley National Laboratory which examined 51,276 sales of homes within 10 miles of 67 different wind farms. This study concluded "we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods". It is important to remember that the issue of impacts to property values was considered in the 2007 Land and Environment Court ruling in the Taralga Landscape Guardians challenge to the approval of the Taralga Wind Farm. This decision states: "*If the concepts of blight and compensation, as pressed by the Guardians, were to be applied to this private project (a proposition which I reject) than any otherwise compliant private project which had some impact in lowering the amenity of another property (although not so great as to warrant refusal on general planning grounds …) would be exposed to such a claim. Creating such a right to compensation (for creating such a right it would be) would not merely strike at the basis of the conventional framework of land use planning but would also be contrary to the relevant objective of the Act, in s 5(a)(ii), for "the promotion and co-ordination of the orderly and economic use and development of land*".
The effect on the district's flora and fauna too, and as importantly, would be detrimental.	The design and layout of the wind farm infrastructure has been optimised to avoid and minimise the potential impact on flora and fauna. Where the residual impacts cannot be avoided, appropriate biodiversity offsets will be provided to mitigate the impacts.
The environmental benefit of wind turbines is questionable. Studies overseas and in Australia show appallingly low rates of efficiency.	The government's greenhouse gas savings tool (see section 2.4.1) gives a clear calculation of the electricity produced and the emissions saved. The environmental benefits are tangible. Modern wind turbines are extremely efficient and capture around 50% of the kinetic energy of the wind passing through the swept area of the turbine rotor (The theoretical limit is 59.3% - Betz's law). Depending on the average wind speed on the wind farm site, wind turbines will operate for about 90% of the time with an average capacity factor in the range of 35 – 40%. None of the studies alluded to by the submitter are referenced so a more specific response is difficult. However, it should be noted that wind energy has been installed around the world at increasing rates over the last three decades which is mark of its financial viability, generating efficiency and environmental efficacy.

1.4.6 Rosemary Henderson, Binalong (Approximately 6 km away)

Issue	Response
Number of turbines The proposed number of turbines could be as high as 152. Consideration should be given to lowering that number which would lessen the impact of the development on surrounding properties and towns.	As a result of the submissions, to minimise the overall impact of the wind farm the number of turbines has been reduced from 152 in the original EA to 148 in the Preferred Project Report exhibited in November 2012 to 134 in this Preferred Project and Submissions Report.
Height of turbines Turbines could reach 150 metres in height. Could the height be reduced	The maximum tip height is 150, but the actual turbine model selected could be lower. Wind speed increases with increasing height above the ground. The wind turbines

Issue	*Response*
to make the visual impact on surrounding areas less obvious? They are all to be built along ridgelines, if some could be located below the top of ridges and hills they would be less obtrusive. As it is only the fans that are catching the wind there does not appear a necessity for them to be located on the highest points, as the fans could catch the wind, whilst the towers could be lower down the ridgeline making them far less obvious	are located on the top of ridges and hills to maximise the exposure of the turbines to the wind and hence maximise the energy yield and associated benefits from each wind turbine. For the wind farm to provide the most value in generating electricity it must maximise its use of the available wind resource which means locating the wind turbines at the highest points along the ridges. If the turbines were to be taken off the ridge tops the energy loss is not proportional with lost height it is an exponential loss.
Visual impacts The house where I live was built in 2000 to take in the views towards Bookham. This sweeping panorama will now be littered with turbines, totally ruining the views. The visual impact will be very high and very disturbing.	The closest wind turbine in the Marilba precinct is over 6 km and the closest wind turbine in the Coppabella precinct is over 9 km. It is considered that even without vegetation screening the distances are such that the wind turbines would present as very diminished forms in the landscape from the residence. That is not to say that the view would not be an altered one but not sufficiently so to merit action or amendment of the proposal.
Existing environment Throughout the assessment there are constant references to the degraded environment, meaning, I suppose, that more degradation is acceptable. Maybe the authors are unaware that this area has been in drought since 2000, and that it is under stress, but it has been a productive and important source of food and crops for many years, so it was not always as it now appears in 2009, ready for takeover by a wind farm.	While there was drought at the time the EA was written and exhibited the phrase 'degraded environment' refers mainly to how much the environment has changed from its pre-settlement condition. Large scale tree clearing occurred across most farmed areas reducing the native flora and fauna. While this altered landscape does provide a man modified setting with highways, railways, and communications towers etc. it is mainly the biodiversity values that this phrase refers to. However, as it is a highly modified landscape, it is considered more suitable for other infrastructure, particularly development that can occur alongside the existing land use of food production adding the benefit of duel use and diversified income to landholders.
Effect on local wildlife Quote "… impacts will not be significant or unacceptable". With the number of turbines proposed, I cannot believe that, there is no way that birdlife in particular will not be affected. For example there are wedge tail eagles all around this areas and no doubt will be killed in large numbers.	A study released in November 2013 by Environment Canada titled 'A Synthesis of Human Related Avian Mortality in Canada' looks at the ranking of human activities that kill birds. The results have the top nine killers as: 1. Domestic and feral cats: 200 million 2. Power lines, collisions and electrocutions: 25 million 3. Collisions with houses or buildings: 25 million 4. Vehicle collisions: 14 million 5. Game bird hunting: 5 million 6. Agricultural pesticides 2.7 million 7. Agricultural mowing: 2.2 million young birds, = to 1 million adult birds 8. Commercial forestry: 1.4 million nests, = to 900,000 adult birds 9. Communications towers: 220,000 Wind energy (with 7,000MW installed according to the Canadian Wind Energy Association) is at no. 19 (13,000) after tall buildings (34,000) and marine gill nets (18,000). The total installed capacity of wind energy in Australia in April 2012 was 2,480MW. It is likely that in Australia other activities, including agricultural practices kill many more birds than wind turbines .
Aircraft warning lights Apparently 50 turbines at least will need these lights.	The installation of obstacle lighting is not currently proposed for the wind farm. The CASA Advisory Circular AC 139-18 in relation to Obstacle Marking and Lighting of Wind Farms has been withdrawn and wind farms that have previously operated red

Issue	Response
	flashing obstacle lighting have now turned these off permanently.
TV, radio and mobile reception The assessment is not certain on the effect on TV, radio etc. If this occurs, who will bear the cost of upgrading or whatever is required?	Binalong had digital TV switched on in June of this year. While analogue will be switched off at the end of this year it is likely that most users are already using digital. The submitter's address is in a good predicted coverage area. It is anticipated that there will be very limited potential for interference with digital TV.
Construction Apparently during construction of this project, it is estimated that 16.23 megalitres of water would be required for building work etc. The proposal is that it be sourced from Jugiong Creek and Burrinjuck Dam. I don't know about Jugiong Creek, but Burrinjuck Dam is presently at a low level, and having being in drought for nearly 10 years with no prospect of rain, doesn't look like filling up any day soon. Groundwater bores are another option apparently, again with the drought this is probably not very environmentally friendly.	The water usage over a two year construction period has been estimated to be around 16.2 ML (EA section 8.1.2 on page 197). A number of potential water sources have been identified including Jugiong Creek, Lake Burrinjuck, Goldenfields Water County Council pipeline, Yass Dam and a number of ground water bores. None of these potential water sources would be used for the wind farm to the extent that they placed any restrictions on existing agricultural and potable water usage. The estimated annual water use required for turbine construction (8ML) is less than 0.5% of the total water capacity of Yass Dam alone. Furthermore, the water used for concrete batching may also be sourced from offsite locations. The main construction contractor would discuss water availability and terms with the relevant authorities before commencement of construction.
Decommissioning and taking down turbines How can there be a guarantee that these turbines will be taken down when they reach the end of their life span in 30 years or whenever?	Decommissioning the wind farm at the end of its commercial life is the proponent's obligation and carried out by, and at the expense of, the wind farm proponent (owner). This is expected to be a condition of any project approval. Refer to the Decommissioning Plan (Attachment 20) for further details.

1.4.7 Brian Murphy, Yass (Approximately 20 km away)

Issue	Response
I feel this is a move in the right direction for Yass.	Support for the project has been noted.

1.4.8 Simon Walker, Bookham (Closest turbine 4.8 km)

Issue	Response
Noise and visual impact	Operational noise issues were addressed in section 7.3 of the EA and supported by a specialist report: Appendix 2 – Noise Assessment. The results of the assessment demonstrated full compliance of the proposed turbine layout to the nominated criteria (Wind Farms Environmental Noise Guidelines, South Australian Environmental Protection Agency, 2003 (SA EPA Guidelines)). The visual impact issues were addressed in section 7.2 of the EA and supported by a specialist report: Appendix 1 – Landscape and Visual Impact Assessment. The assessment concluded that "*the proposed Yass Valley Wind Farm will have a generally low visual impact on its surrounds, and the site is a suitable landscape for the construction of a wind farm.*" Nearly all development has its supporters and its detractors. It is accepted that some neighbours to wind farms do not like the look of them and others do. From discussion with the submitter it is understood that a key concern is the approved

Issue	*Response*
	Conroy's Gap Wind Farm which is more visible from the property address on the submission. The nearest wind turbine on Conroy's Gap Wind Farm will be 2.6 km, the nearest wind turbine on Yass Valley Wind Farm will be 4.8 km. It is incumbent upon the developer of a wind farm to ensure that amenity impacts to the closest neighbours to a wind farm are not unreasonable. We believe that this is the case in this current preferred project.
Aviation lights	The installation of obstacle lighting is not currently proposed for the wind farm. The CASA Advisory Circular AC 139-18 in relation to Obstacle Marking and Lighting of Wind Farms has been withdrawn and wind farms that have previously operated red flashing obstacle lighting have now turned these off permanently.
Property devaluation	The main finding in a report prepared for the NSW Valuer General in August 2009 was that "*wind farms do not appear to have negatively affected property values in most cases*." The value of a property is made up of a myriad of considerations and not only includes proximity to wind turbines but also to other infrastructure, the potential use of the property and any improvements. It is possible to find real estate agents who consider there is an impact and those who consider there is not an impact. However, it is objective studies that provide the basis for sound consideration of this matter and numerous studies conclude that wind farms do not have any discernible impact on property values. Studies include those by Hinman – 3,851 sales over 9 years, Carter – 1,298 sales over 13 years and the 2013 study by Lawrence Berkeley National Laboratory which examined 51,276 sales of homes within 10 miles of 67 different wind farms. This study concluded "we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods". It is important to remember that the issue of impacts to property values was considered in the 2007 Land and Environment Court ruling in the Taralga Landscape Guardians challenge to the approval of the Taralga Wind Farm. This decision states: "*If the concepts of blight and compensation, as pressed by the Guardians, were to be applied to this private project (a proposition which I reject) than any otherwise compliant private project which had some impact in lowering the amenity of another property (although not so great as to warrant refusal on general planning grounds …) would be exposed to such a claim.* *Creating such a right to compensation (for creating such a right it would be) would not merely strike at the basis of the conventional framework of land use planning but would also be contrary to the relevant objective of the Act, in s 5(a)(ii), for "the promotion and co-ordination of the orderly and economic use and development of land*".
Health issues	The National Health and Medical Research Council (NHMRC), the peak national body for research in Australia, issued a *Public Statement: Wind Turbines and Health - July 2010* stating that there was no published scientific evidence to positively link wind turbines to adverse health effects. This is the most relevant document to reference as it is impartial, expert and considered. It is understood this document is likely to be updated as more independent reports are published. The application of stringent noise criteria as demanded by the *Draft NSW Planning Guidelines: Wind Farms* provides a precautionary approach to health issues suggested to result from wind farm noise. A very small number of people in Australia have anecdotally reported that they believe that wind turbines are making them ill. The list of symptoms described is long and all are present in the broader community including in areas not near a wind farm and there is no evidence to link the symptom, however real, to wind turbines. Simon Chapman, Professor of Health at UNSW, offers one explanation for ill health suffered by people living near a wind farm who believe the wind farm is causing their ill health is – that some of these cases could be as a result of the "nocebo" effect which has proven that some people who believe that something is

Issue	*Response*
	making them ill can actually make themselves ill. They suffer a real illness even though there is no physical cause. Consistent with the NHMRC and Professor Chapman, the September 2013 Planning Assessment Commission Determination Report for Bodangora Wind Farm near Wellington notes that "NSW Health also made it clear that noise levels at distances of more than one km from the turbines would not cause health impacts and the 2 km buffer provided in this instance is highly precautionary". The Victorian Department of Health has issued fact sheets on noise and health (http://www.health.vic.gov.au/environment/windfarms.htm). The Australian Medical Association released a statement in 2014 that "The available Australian and international evidence does not support the view that the infrasound or low frequency sound generated by wind farms, as they are currently regulated in Australia, causes adverse health effects on populations residing in their vicinity. The infrasound and low frequency sound generated by modern wind farms in Australia is well below the level where known health effects occur, and there is no accepted physiological mechanism where sub-audible infrasound could cause health effects."
Ecology	Flora and fauna issues were addressed in section 7.4 of the EA and supported by a specialist report: Appendix 3 –Biodiversity Assessment. Please also refer to Attachment 1 – Supplementary Ecology Report of the PPR (November 2012) for the response to specific flora and fauna issues raised by NSW OEH. The Supplementary Ecology Report confirms that the area impacted by the revised infrastructure layout has been adequately surveyed and assessed and that appropriate commitments have been made to ensure that impacts are: • Avoided where required; • Minimised and managed where appropriate; and • Offset in accordance with the relevant NSW guidelines. With the implementation of the revised project Statement of Commitments, flora and fauna impacts are assessed to be acceptable and unlikely to pose a significant impact for any NSW or Commonwealth listed species, population or community.
Lack of consultation from the company erecting the turbines	Epuron has contacted and continues to consult with the neighbouring landowners as noted in section 6.2 and set out in the consultation plan in Attachment 6 to 9 of the EA. The consultation program includes: • Ongoing telephone contact • Ongoing individual meetings with landowners • Newsletters – distributed to landowners, neighbours and the broader community • An Open House information day held on 10 December 2008 During the early stage of the project representatives from Epuron made telephone calls to neighbours in the vicinity of the project and this was followed in most cases with a face to face meeting to provide any further information required and answer individual questions. Since Epuron re-acquired the project from Origin Energy in July 2012 it has: • Issued six project newsletters • Established a project website • Establish a Community Consultation Committee (CCC) • Held seven CCC meetings • Contacted or attempted to contact all neighbours with a residence within 5 km of a turbine and in some cases beyond 5km
Social impact – the dividing of the community	Epuron has created a Community Consultation Committee for the project with representatives from involved landowners, non-involved landowners and other stakeholder groups to be able to provide information to all members of the community. The CCC provides a forum to:

Issue	Response
	▸ establish good working relationships between the proponent, the community and other stakeholders in relation to the wind farm ▸ provide for the ongoing communication of information on the assessment, operation and environmental performance of the wind farm ▸ discuss community concerns and review the resolution of community complaints ▸ advise on the allocation of community enhancement funds in the community ▸ discuss how best to communicate relevant information on the wind farm and its environmental performance to the broader community, and ▸ work together towards outcomes of benefit to the wind farm, immediate neighbours and the local and regional community. Epuron invites feedback from the community on the efficacy of the CCC in relation to the above remit.
Decommissioning of the towers	Decommissioning the wind farm at the end of its commercial life is the proponent's obligation and carried out by, and at the expense of, the wind farm proponent (owner). This is expected to be a condition of any project approval. Refer to the Decommissioning Plan (Attachment 20) for further details.

1.4.9 Sarah Last, Cootamundra (Approximately 60 km away)

Issue	Response
Decommissioning of this industrial development is not adequately guaranteed.	Decommissioning the wind farm at the end of its commercial life is the proponent's obligation and carried out by, and at the expense of, the wind farm proponent (owner). This is expected to be a condition of any project approval. Refer to the Decommissioning Plan (Attachment 20) for further details.
Negative environmental impacts to endangered and vulnerable Box Gum Grassy Woodland habitat	Flora and fauna issues, including Box Gum Grassy Woodland habitat, were addressed in section 7.4 of the EA and supported by a specialist report: Appendix 3 –Biodiversity Assessment. Please also refer to Attachment 1 – Supplementary Ecology Report of the PPR (Nov 2012) for the response to specific flora and fauna issues raised by NSW OEH. The Supplementary Ecology Report confirms that the area impacted by the revised infrastructure layout has been adequately surveyed and assessed and that appropriate commitments have been made to ensure that impacts are: ▸ Avoided where required; ▸ Minimised and managed where appropriate; and ▸ Offset in accordance with the relevant NSW guidelines. With the implementation of the revised project Statement of Commitments, flora and fauna impacts are assessed to be acceptable and unlikely to pose a significant impact for any NSW or Commonwealth listed species, population or community.
Health impacts	The National Health and Medical Research Council (NHMRC), the peak national body for research in Australia, issued a *Public Statement: Wind Turbines and Health - July 2010* stating that there was no published scientific evidence to positively link wind turbines to adverse health effects. This is the most relevant document to reference as it is impartial, expert and considered. It is understood this document is likely to be updated as more independent reports are published. The application of stringent noise criteria as demanded by the *Draft NSW Planning Guidelines: Wind Farms* provides a precautionary approach to health issues suggested to result from wind farm noise. A very small number of people in Australia have anecdotally reported that they believe that wind turbines are making them ill. The list of symptoms described is long and all are present in the broader community including in areas not near a wind farm

Issue	*Response*
	and there is no evidence to link the symptom, however real, to wind turbines. Simon Chapman, Professor of Health at UNSW, offers one explanation for ill health suffered by people living near a wind farm who believe the wind farm is causing their ill health is – that some of these cases could be as a result of the "nocebo" effect which has proven that some people who believe that something is making them ill can actually make themselves ill. They suffer a real illness even though there is no physical cause. Consistent with the NHMRC and Professor Chapman, the September 2013 Planning Assessment Commission Determination Report for Bodangora Wind Farm near Wellington notes that "NSW Health also made it clear that noise levels at distances of more than one km from the turbines would not cause health impacts and the 2 km buffer provided in this instance is highly precautionary". The Victorian Department of Health has issued fact sheets on noise and health (http://www.health.vic.gov.au/environment/windfarms.htm). The Australian Medical Association released a statement in 2014 that "The available Australian and international evidence does not support the view that the infrasound or low frequency sound generated by wind farms, as they are currently regulated in Australia, causes adverse health effects on populations residing in their vicinity. The infrasound and low frequency sound generated by modern wind farms in Australia is well below the level where known health effects occur, and there is no accepted physiological mechanism where sub-audible infrasound could cause health effects."
Property devaluation	The main finding in a report prepared for the NSW Valuer General in August 2009 was that "*wind farms do not appear to have negatively affected property values in most cases*." The value of a property is made up of a myriad of considerations and not only includes proximity to wind turbines but also to other infrastructure, the potential use of the property and any improvements. It is possible to find real estate agents who consider there is an impact and those who consider there is not an impact. However, it is objective studies that provide the basis for sound consideration of this matter and numerous studies conclude that wind farms do not have any discernible impact on property values. Studies include those by Hinman – 3,851 sales over 9 years, Carter – 1,298 sales over 13 years and the 2013 study by Lawrence Berkeley National Laboratory which examined 51,276 sales of homes within 10 miles of 67 different wind farms. This study concluded "we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods". It is important to remember that the issue of impacts to property values was considered in the 2007 Land and Environment Court ruling in the Taralga Landscape Guardians challenge to the approval of the Taralga Wind Farm. This decision states: "*If the concepts of blight and compensation, as pressed by the Guardians, were to be applied to this private project (a proposition which I reject) than any otherwise compliant private project which had some impact in lowering the amenity of another property (although not so great as to warrant refusal on general planning grounds …) would be exposed to such a claim.* *Creating such a right to compensation (for creating such a right it would be) would not merely strike at the basis of the conventional framework of land use planning but would also be contrary to the relevant objective of the Act, in s 5(a)(ii), for "the promotion and co-ordination of the orderly and economic use and development of land*".
Loss of visual amenity during day and night times (due to aircraft warning lighting).	The installation of obstacle lighting is not currently proposed for the wind farm. The CASA Advisory Circular AC 139-18 in relation to Obstacle Marking and Lighting of Wind Farms has been withdrawn and wind farms that have previously operated red flashing obstacle lighting have now turned these off permanently.
Unsustainability, based on our research the "green" outcomes cited by Epuron are dubious generalisations that are	The proposed wind farm, as described in the Environmental Assessment, is a sustainable project which will generate electricity using a renewable fuel source (the wind). The 'green' outcomes are as calculated by the NSW government's wind farm

<table>
<tr><th>Issue</th><th>Response</th></tr>
<tr><td>unsubstantiated</td><td>greenhouse gas savings tool.</td></tr>
<tr><td>Noise pollution will hinder our quality of life and the research activities of our organisation.</td><td>Noise impacts from a wind farm are generally not noticeable at a distance of greater than 1km. Cootamundra is more than 50km away from the wind farm.
Operational noise issues were addressed in section 7.3 of the EA and supported by a specialist report: Appendix 2 – Noise Assessment. The results of the assessment demonstrated full compliance of the proposed turbine layout to the nominated criteria (Wind Farms Environmental Noise Guidelines, South Australian Environmental Protection Agency, 2003 (SA EPA Guidelines).</td></tr>
<tr><td>Increased fire danger</td><td>Epuron wrote to the NSW Rural Fire Service to ask how they viewed the presence of wind farms when fighting fires on the ground or from the air. The August 1, 2013 response from the Assistant Commissioner noted:
On the ground…
“…fire moving across the area of a wind farm is generally managed in the same way as any other bush fire. Fire fighting strategies by ground-based resources would continue and be subject to prevailing weather and topographic conditions. “
And from the air…
“…aircraft would avoid wind turbines in the same manner as they avoid other obstructions, such as power lines.”
The wind farm access roads will provide improved access for fighting fires.</td></tr>
<tr><td>Local meteorological and climate impacts</td><td>Much of the referenced research can be considered fledgling research into this topic - peppered with words such as "could", "possibly" and "might". Effects observed related to near-surface temperature effects such as very localised mixing of the cooler higher air with slightly warmer air above the ground rather than the much wider phenomenon of climate change. For example the studied effects are not likely to have any impact on the area of the troposphere where clouds are formed or on rainfall.</td></tr>
<tr><td>Unnecessary divisions in local communities</td><td>Epuron has created a Community Consultation Committee for the project with representatives from involved landowners, non-involved landowners and other stakeholder groups to be able to provide information to all members of the community including details of the proposed community fund.</td></tr>
<tr><td>Obstruction to the future development of local eco and agri tourism</td><td>All local developments are free to be submitted to the responsible authority for consideration in the same way that the wind farm is to be transparently assessed and determined on its merits. The wind farm is a real opportunity that will be viable over the long term.</td></tr>
<tr><td>Considerable objective research analysing negative environmental and social impacts is required</td><td>The proposed wind farm is sustainable and uses a renewable fuel. Environmental impacts are minimised through the planning process. Social issues are considered during the development of the wind farm and the community while injecting</td></tr>
<tr><td>There has been no community consultation by the NSW government</td><td>The NSW government has established wind farm precincts and a precinct co-ordinator within each precinct to provide an independent source of information to the community. The precinct co-ordinator is an observer member of the CCC and their contact details are included in the CCC minutes.</td></tr>
<tr><td>Poor greenhouse gas reduction capacity</td><td>A comparison of the original estimate and a revised estimate using the NSW government wind farm greenhouse gas savings tool www.greenhousegas.nsw.gov.au is shown below:
<table>
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<tr><td>Emissions avoided per annum (t CO_2-e)</td><td>1,143,243</td><td>1,097,831</td></tr>
<tr><td>Equivalent average number of households</td><td>142,905</td><td>141,912</td></tr>
</table>
The government greenhouse gas savings tool is the most relevant tool to use in these calculations.
See submission 1 re 75% of emissions in NSW being from fossil fuels and 75% of emissions being carbon dioxide. Wind farms do not have carbon dioxide or other gaseous emissions.
2010 data compiled by the World Resource Institute shows that Australia is the highest per capital emitter in the world , has the second highest emissions per GDP and is the 15th highest emitting country. See below
Internationally, Australia is the 15th largest emitter based on 2010 data compiled by the World Resources Institute.
<table>
<tr><th colspan="4">Top 15 countries</th></tr>
<tr><th>Country</th><th>Total emissions (MtCO2e)</th><th>Total emissions per capita (tCO2e Per Capita)</th><th>Emissions per GDP (tCO2e / Million $ GDP)</th></tr>
<tr><td>China</td><td>10385.54</td><td>7.76</td><td>1138.49</td></tr>
<tr><td>United States</td><td>6866.92</td><td>22.20</td><td>527.53</td></tr>
<tr><td>India</td><td>2326.19</td><td>1.90</td><td>618.09</td></tr>
<tr><td>Russian Federation</td><td>2326.10</td><td>16.34</td><td>1153.74</td></tr>
<tr><td>Japan</td><td>1298.89</td><td>10.19</td><td>329.12</td></tr>
<tr><td>Brazil</td><td>1162.62</td><td>5.96</td><td>590.89</td></tr>
<tr><td>Germany</td><td>926.67</td><td>11.33</td><td>337.60</td></tr>
<tr><td>Indonesia</td><td>823.41</td><td>3.43</td><td>883.56</td></tr>
<tr><td>Iran</td><td>727.00</td><td>9.83</td><td></td></tr>
<tr><td>Canada</td><td>726.63</td><td>21.29</td><td>604.51</td></tr>
<tr><td>Mexico</td><td>688.25</td><td>6.07</td><td>486.20</td></tr>
<tr><td>Korea, Rep. (South)</td><td>678.32</td><td>13.73</td><td>512.75</td></tr>
<tr><td>United Kingdom</td><td>627.46</td><td>10.08</td><td>307.12</td></tr>
<tr><td>Australia</td><td>587.53</td><td>26.63</td><td>769.52</td></tr>
</table>
</td></tr>
<tr><td>Poor efficiency and predictability of wind as an energy resource. In NSW we have much better and less negatively impacting alternatives, such as domestic solar.</td><td>Modern wind turbines are very efficient in converting energy in the wind into electrical energy. It is true that wind farms don't generate electricity if the wind isn't blowing. However, it's not true that we need to build additional back-up power plants in order to compensate for the times when wind farms aren't generating. Australia's energy system is built to deal with changes in demand and supply (Wind Energy The Facts, Clean Energy Council, January 2013). Other forms of renewable energy such as solar PV are significantly more expensive than wind energy and the primary benefit is to the householder rather than to power supply for the state. In terms of efficiency in NSW wind turbines have an average capacity factor of around 30%-35% while solar PV has an average capacity factor of 14-20%</td></tr>
</table>

1.4.10 Paul Regan, Binalong (Approximately 6 km away)

Issue	*Response*
Visual impacts People chose to live in the country for various reasons but top of most lists would be the lack of infrastructure surrounding where we live and/or work. An interesting point to note is that a number of participating landholders in this proposal either do not reside on the land where the turbines are to be located or will not be able to see them from their residence.	The benefiting landowners own 32 (more than 25%) of the 125 residences located within 5km of the wind farm and the majority live on the land.
Impact on property values Apart from the possible impacts on the value of the land, the mere presence of wind turbines on the ridgeline will reduce potential buyers of the land.	The main finding in a report prepared for the NSW Valuer General in August 2009 was that "*wind farms do not appear to have negatively affected property values in most cases*." The value of a property is made up of a myriad of considerations and not only includes proximity to wind turbines but also to other infrastructure, the potential use of the property and any improvements. It is possible to find real estate agents who consider there is an impact and those who consider there is not an impact. However, it is objective studies that provide the basis for sound consideration of this matter and numerous studies conclude that wind farms do not have any discernible impact on property values. Studies include those by Hinman – 3,851 sales over 9 years, Carter – 1,298 sales over 13 years and the 2013 study by Lawrence Berkeley National Laboratory which examined 51,276 sales of homes within 10 miles of 67 different wind farms. This study concluded "we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods". It is important to remember that the issue of impacts to property values was considered in the 2007 Land and Environment Court ruling in the Taralga Landscape Guardians challenge to the approval of the Taralga Wind Farm. This decision states: "*If the concepts of blight and compensation, as pressed by the Guardians, were to be applied to this private project (a proposition which I reject) than any otherwise compliant private project which had some impact in lowering the amenity of another property (although not so great as to warrant refusal on general planning grounds …) would be exposed to such a claim.* *Creating such a right to compensation (for creating such a right it would be) would not merely strike at the basis of the conventional framework of land use planning but would also be contrary to the relevant objective of the Act, in s 5(a)(ii), for "the promotion and co-ordination of the orderly and economic use and development of land*".
Environmental impacts The main concerns being removal of trees, the removal of topsoil, construction of roads, construction of foundation pads, and the source of water required for all this construction. The Coppabella range is very steep, very fragile part of our landscape. There is absolutely no way a project of this scale cannot have a significant impact on that group of hills.	Access to surface water from existing dams and creeks or sourcing groundwater from bores may require additional permits or licences. The water usage over a two year construction period has been estimated to be around 16.2 ML (EA section 8.1.2 on page 197). A number of potential water sources have been identified including Jugiong Creek, Lake Burrinjuck, Goldenfields Water County Council pipeline, Yass Dam and a number of ground water bores. None of these potential water sources would be used for the wind farm to the extent that they placed any restrictions on existing agricultural and potable water usage. The estimated annual water use required for turbine construction (8ML) is less than 0.5% of the total water capacity of Yass Dam alone. Furthermore, the water used for concrete batching may also be sourced from offsite locations. The main construction contractor would discuss water availability and terms with

Issue	*Response*
	the relevant authorities before commencement of construction. Erosion control and management of impacts would be a condition of consent with a Construction Environment Management Plan requiring the sign off of the Director General before construction commences. Many contractors likely to tender for this wind farm would have experience of building infrastructure in significantly more challenging terrain than the Coppabella hills.
Aerial water bombing plays a major role in controlling and/or reducing the devastating impacts a bushfire can inflict. No mention was made in the Environmental Assessment about the inability to utilise aircraft in the event of a fire within a set area around a wind farm.	Epuron has consulted with the NSW RFS and can confirm that there are no procedures that restrict the operation of an aircraft within the vicinity of a wind turbine. The RFS Aviation section deals with a large number of obstacles in the landscape when fighting fires and they treat wind turbines like any other obstacles in the terrain and work around them to fight fires. On site tracks will provide improved access for fighting fires.
Decommissioning: who is responsible? who finances it?	The proponent (wind farm owner) is responsible (including for financing) for the decommissioning of the wind farm at the end of its economic life. See the draft Decommissioning and Rehabilitation Plan (Attachment 20) for more information.
Social impacts As hard as we try to keep our close community together this project will inevitably cause friction between people. These will not be short term impacts either as these turbines will dominate our landscape for a minimum of 25 years.	The proponent has committed to establishing a community fund for the benefit of the wider community and especially the neighbours living within 5km of the wind farm. The CCC raises issues as presented to the members by the community. As the information is provided back to the community in a positive way it is likely to address concern, deal with anxieties and should provide opportunities for community building. As with all development the cohesion or division of a community rests significantly with the community itself.
Public consultation Initial consultation with the community was good when the majority of people had little or no knowledge of wind farms. As people's knowledge and understanding of wind farms increased so did their need for questions to be answered but there was no one to ask. I have spoken to at least 3 people who requested to be on the mailing list of Epuron but have received no correspondence since making the request. I myself only became aware of the Environmental Assessment being on public exhibition through our Catchment Authority officer more than 8 days after it was made available.	Epuron has contacted and continues to consult with the neighbouring landowners as noted in section 6.2 and set out in the consultation plan in Attachment 6 to 9 of the EA. The consultation program includes: • Telephone contact • Individual meetings with landowners • Newsletters – distributed to landowners, neighbours and the broader community • Open House information day held on 10 December 2008 During the early stage of the project representatives from Epuron made telephone calls to neighbours in the vicinity of the project and this was followed in most cases with a face to face meeting to provide any further information required and answer individual questions. Since Epuron re-acquired the project from Origin Energy in July 2012 it has: • Issued six project newsletters • Established a project website • Establish a Community Consultation Committee (CCC) • Held seven CCC meetings Contacted most neighbours with a residence within 5 km of a turbine.
Quality of the environmental assessment For a project of this scale I thought that the quality of detail in this assessment was very poor. Of particular concern was the quality of maps outlining the location of: access roads, transmission lines, substations. Also the lack of detail regarding earthworks, erosion	The Environmental Assessment was prepared in accordance with the Director General's Requirements issued by the NSW Department of Planning & Environment. Additional and more detailed maps have been included in the Preferred Project & Submissions Report to address the concerns about maps. Details of the earthworks and associated erosion control measures to be applied during construction will be documented in the Construction Environment Management Plan (CEMP) which needs to be approved by the Director General prior to the commencement of construction.

Issue	Response
control, sediment run-off.	

1.4.11 Paul Miskelly, Mittagong (Approximately 200 km away)

<table>
<tr><th>Issue</th><th>Response</th></tr>
<tr><td>The claimed greenhouse gas (GHG) emissions offsets are grossly exaggerated</td><td>A comparison of the original estimate and a revised estimate using the NSW government wind farm greenhouse gas savings tool www.greenhousegas.nsw.gov.au is shown below:

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The government greenhouse gas savings tool is the most relevant tool to use for these calculations.

See emissions data about NSW, fossil fuels and per capital emissions in above submissions. With 75% of NSW emissions coming from fossil fuels a large wind farm can make a significant contribution to reducing those emissions.</td></tr>
<tr><td>The noise impact assessment is totally inadequate. In my opinion the Meteorological Assessment has been prepared by persons who have no understanding of meteorology whatsoever. Clearly the authors did not attend any of the presentations by Dr Frits van den Berg when he was in Australia in 2006, otherwise they would have been rather less likely to give his findings the airy dismissal shown in this report. Also, clearly, they have limited understanding of the likely effects of Temperature Inversion Sound Enhancement as it is called, and discussed at length, in the NSW Industrial Noise Policy. In my opinion this noise impact assessment is flawed.</td><td>The noise impact assessment has been prepared and reviewed by well qualified practitioners who have significant experience in the relevant noise guidelines, methodology and assessment of the impacts of wind farm noise. The assessment includes consideration of the van den Berg effect and temperature inversions (page 35 of the Noise Impact Assessment).</td></tr>
</table>

1.4.12 Name Withheld, Location Withheld

Issue	Response
The question must be asked, is it 182 or 152 turbines	The number of turbines proposed in the EA (2009) was 152. The number of turbines proposed in the Preferred Project & Submissions Report (September 2014) is 134.
Further discrepancies identified	This is not a discrepancy. The distance to Yass depends on whether it is to the

Issue	*Response*
within the EA relates to the location. Evidence submitted through mapping demonstrates the proposal is some 15km from the Yass township, however the executive summary states the closest wind farm precinct being located 20 kilometres west of the township.	closest turbine or the approximate distance to centre of the wind farm. 5 km is not significant in terms of assessment of wind farm impacts.
The evidence submitted demonstrates a clear lack in the level of consultation carried out with the people of Yass and the ability to participate in identifying the socio-economic impacts and therefore ability to define the scale and location of the proposed Yass wind farm.	Epuron has contacted and continues to consult with the neighbouring landowners as noted in section 6.2 and set out in the consultation plan in Attachment 6 to 9 of the EA. The consultation program includes: • Telephone contact • Individual meetings with landowners • Newsletters – distributed to landowners, neighbours and the broader community • Open House information day held on 10 December 2008 During the early stage of the project representatives from Epuron made telephone calls to neighbours in the vicinity of the project and this was followed in most cases with a face to face meeting to provide any further information required and answer individual questions. Since Epuron re-acquired the project from Origin Energy in July 2012 it has: • Issued six project newsletters • Established a project website • Establish a Community Consultation Committee (CCC) • Held seven CCC meetings • Contacted most neighbours with a residence within 5 km of a turbine.
The Environmental Assessment did not assess the ongoing carbon dioxide emissions from the proposed wind farm.	The generation of electricity by a wind turbine does not emit any carbon dioxide. There are very low emissions associated with the wind farm as a result of the need to draw electricity supply from the grid when the wind farm is not operating.
The findings of the report (Community Perceptions …) in assessing and measuring potential Yass community concerns and concerns of the impacts from wind farms are inappropriate and invalid.	The findings of the Reark Wind Farm Impact Study are relevant for the Southern Tablelands of NSW including the Yass area. This study was just one of the means used to identify community concerns and queries. Refer to section 5.10 of this report for more details of the community consultation, issues raised and how these issues have been addressed.
The numerous number of potential options for proposed turbines provides too great a variance in the potential scale of proposed turbines, therefore leaving the potential impacts also greatly undefined as to impacts that individual turbine types may have.	The selection of the turbine make and model is a commercial decision that normally only happens following planning approval of the project. A conservative approach to assessing the impacts has been followed by selecting a worst case (physical dimensions and noise characteristics) for the visual impact and noise impact assessments. It is generally expected that impacts will no greater than those outlined in the EA.
The evidence on reduced land values submitted within the EA abundantly demonstrate that wind farms have both a real and perceived reduction in the value of landowner's residential properties.	The main finding in a report prepared for the NSW Valuer General in August 2009 was that "*wind farms do not appear to have negatively affected property values in most cases*." The value of a property is made up of a myriad of considerations and not only includes proximity to wind turbines but also to other infrastructure, the potential use of the property and any improvements. It is possible to find real estate agents who consider there is an impact and those who consider there is not an impact. However, it is objective studies that provide the basis for sound consideration of this matter and numerous studies conclude that

Issue	*Response*
	wind farms do not have any discernible impact on property values. Studies include those by Hinman – 3,851 sales over 9 years, Carter – 1,298 sales over 13 years and the 2013 study by Lawrence Berkeley National Laboratory which examined 51,276 sales of homes within 10 miles of 67 different wind farms. This study concluded "we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods". It is important to remember that the issue of impacts to property values was considered in the 2007 Land and Environment Court ruling in the Taralga Landscape Guardians challenge to the approval of the Taralga Wind Farm. This decision states: "*If the concepts of blight and compensation, as pressed by the Guardians, were to be applied to this private project (a proposition which I reject) than any otherwise compliant private project which had some impact in lowering the amenity of another property (although not so great as to warrant refusal on general planning grounds …) would be exposed to such a claim.* *Creating such a right to compensation (for creating such a right it would be) would not merely strike at the basis of the conventional framework of land use planning but would also be contrary to the relevant objective of the Act, in s 5(a)(ii), for "the promotion and co-ordination of the orderly and economic use and development of land*".
The response to identifying the impacts on the health of individuals from constant noise has not been addressed within the EA. Considering the potential severity of these noise impacts on the health and capacity for individuals to sleep cannot be ignored from a professional planning perspective.	The National Health and Medical Research Council (NHMRC), the peak national body for research in Australia, issued a *Public Statement: Wind Turbines and Health - July 2010* stating that there was no published scientific evidence to positively link wind turbines to adverse health effects. This is the most relevant document to reference as it is impartial, expert and considered. It is understood this document is likely to be updated as more independent reports are published. The application of stringent noise criteria as demanded by the *Draft NSW Planning Guidelines: Wind Farms* provides a precautionary approach to health issues suggested to result from wind farm noise. A very small number of people in Australia have anecdotally reported that they believe that wind turbines are making them ill. The list of symptoms described is long and all are present in the broader community including in areas not near a wind farm and there is no evidence to link the symptom, however real, to wind turbines. Simon Chapman, Professor of Health at UNSW, offers one explanation for ill health suffered by people living near a wind farm who believe the wind farm is causing their ill health is – that some of these cases could be as a result of the "nocebo" effect which has proven that some people who believe that something is making them ill can actually make themselves ill. They suffer a real illness even though there is no physical cause. Consistent with the NHMRC and Professor Chapman, the September 2013 Planning Assessment Commission Determination Report for Bodangora Wind Farm near Wellington notes that "NSW Health also made it clear that noise levels at distances of more than one km from the turbines would not cause health impacts and the 2 km buffer provided in this instance is highly precautionary". The Victorian Department of Health has issued fact sheets on noise and health (http://www.health.vic.gov.au/environment/windfarms.htm). The Australian Medical Association released a statement in 2014 that "The available Australian and international evidence does not support the view that the infrasound or low frequency sound generated by wind farms, as they are currently regulated in Australia, causes adverse health effects on populations residing in their vicinity. The infrasound and low frequency sound generated by modern wind farms in Australia is well below the level where known health effects occur, and there is no accepted physiological mechanism where sub-audible infrasound could cause health effects."

1.4.13 Deborah Hope, Binalong (Approximately 8 km away)

Issue	*Response*
Excessive size and scope of project There is significant potential for cumulative adverse impacts on the hosting shires of Harden and Yass with a project of such inordinate size as is currently proposed. It is imperative that energy conservation schemes and alternative sources of renewable and low-carbon energy are more thoroughly explored before enormous swathes of the high country of rural NSW are lost to industrial wind plants.	The scale of the project provides a number of benefits as outlined in of the EA and this Preferred Project Report. A project of this size would contribute to both Federal and State Government renewable energy targets. Wind energy is currently one of the lowest cost forms of renewable energy. Rural land is not "lost" to wind farms – they take up a very small proportion of the land and existing landuse will continue to coexist with the operation of the wind farm.
Loss of visual amenity and rural character I believe that the photomontages understate the probable visual impact of the wind turbine arrays in several ways. The arguments to support the visual impact assessments are not consistent with an appropriately nuanced and accurate assessment of cumulative visual impact.	The Landscape and Visual Impact Assessment (LVIA) has been prepared in accordance with the Director Generals Requirements, the referenced guidelines and best industry practice. The photomontages have been prepared following an industry accepted methodology. Refer section 1.4.2 of the Supplementary LVIA (Attachment 5) for more details. Photomontages have been shown to be reliable indicators of the scale of the structures in the landscape.
Night lighting	The installation of obstacle lighting is not currently proposed for the wind farm. The CASA Advisory Circular AC 139-18 in relation to Obstacle Marking and Lighting of Wind Farms has been withdrawn and wind farms that have previously operated red flashing obstacle lighting have now turned these off permanently.
Adverse impact on threatened or iconic species: Wedge-tail eagle Superb Parrot	Flora and fauna issues, including potential impact on the Wedge-tail eagle and Superb Parrot, were addressed in section 7.4 of the EA and supported by a specialist report: Appendix 3 –Biodiversity Assessment. Please also refer to Attachment 1 – Supplementary Ecology Report of the PPR (Nov 2012) for the response to specific flora and fauna issues raised by NSW OEH. With the implementation of the revised project Statement of Commitments, flora and fauna impacts are assessed to be acceptable and unlikely to pose a significant impact for any NSW or Commonwealth listed species, population or community.
Adverse impact on tourism and residential values. Many of these values are placed under threat by the prospect of a giant industrial wind plant covering the western portion	Wind farms can have a positive impact on tourism by providing a point of interest and encouraging visits to the area. The main finding in a report prepared for the NSW Valuer General in August 2009 was that "*wind farms do not appear to have negatively affected property values in most cases*." The value of a property is made up of a myriad of considerations and not only includes proximity to wind turbines but also to other infrastructure, the potential use of the property and any improvements. It is possible to find real estate agents who consider there is an impact and those who consider there is not an impact. However, it is objective studies that provide the basis for sound consideration of this matter and numerous studies conclude that wind farms do not have any discernible impact on property values. Studies include those by Hinman – 3,851 sales over 9 years, Carter – 1,298 sales over 13 years and the 2013 study by Lawrence Berkeley National Laboratory which examined 51,276 sales of homes within 10 miles of 67 different wind farms. This study concluded "we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods".

Issue	Response
	It is important to remember that the issue of impacts to property values was considered in the 2007 Land and Environment Court ruling in the Taralga Landscape Guardians challenge to the approval of the Taralga Wind Farm. This decision states: "*If the concepts of blight and compensation, as pressed by the Guardians, were to be applied to this private project (a proposition which I reject) than any otherwise compliant private project which had some impact in lowering the amenity of another property (although not so great as to warrant refusal on general planning grounds …) would be exposed to such a claim.* *Creating such a right to compensation (for creating such a right it would be) would not merely strike at the basis of the conventional framework of land use planning but would also be contrary to the relevant objective of the Act, in s 5(a)(ii), for "the promotion and co-ordination of the orderly and economic use and development of land*".
Inadequate community consultation	Epuron has contacted and continues to consult with the neighbouring landowners as noted in section 6.2 and set out in the consultation plan in Attachment 6 to 9 of the EA. The consultation program includes: ▸ Telephone contact ▸ Individual meetings with landowners ▸ Newsletters – distributed to landowners, neighbours and the broader community ▸ Open House information day held on 10 December 2008 During the early stage of the project representatives from Epuron made telephone calls to neighbours in the vicinity of the project and this was followed in most cases with a face to face meeting to provide any further information required and answer individual questions. Since Epuron re-acquired the project from Origin Energy in July 2012 it has: ▸ Issued six project newsletters ▸ Established a project website ▸ Establish a Community Consultation Committee (CCC) ▸ Held seven CCC meetings ▸ Contacted most neighbours with a residence within 5 km of a turbine
Increasing concern of the general public	A number of independent studies including *Community Attitudes to Wind Farms in NSW* prepared by the NSW Department of Environment Climate Change & Water in 2010 confirm increasing support for wind energy development.

1.4.14 Binalong Landcare (Subgroup of Harden Murrumburrah Landcare Group)

Issue	Response
Binalong Landcare seeks funding to assist surrounding landowners offset the impacts on local vegetation, soil structure, water quality and biodiversity.	The proponent has committed to establish community fund with 50% of the fund proposed to be made available to the neighbours living closest to the wind farm (within 5km). The funds could be used for improving soil structure, water quality and biodiversity.
Binalong Landcare is particularly concerned about the impact of the: ▸ Roadwork,	The impacts from the construction of the wind farm infrastructure, including roads and associated clearing of vegetation, has been assessed in the EA. The Construction Environment Management Plan (CEMP), which is required to be approved by the Director General prior to construction, will ensure that the

Issue	Response
▸ Clearing of vegetation, ▸ Water quality in local dams and streams, ▸ Removal of surface/ subsurface water for construction, ▸ Changes to the composition of native grasses.	appropriate controls and mitigation measures are in place to manage these impacts. Licences will be required if any water for construction is to be sourced from surface or subsurface sources. The composition of the extensive grasslands, both exotic and derived native grasslands has been identified and mapped as part of the biodiversity assessment. No change to the composition of the native grasses is anticipated as a result of the wind farm and weed management protocols will be enforced during construction to prevent the spread of weeds.
Binalong Landcare offers its natural resource management experience and skills to minimise the adverse impacts so that the broader community can fully benefit from the planned clean renewable energies and reduced CO_2 emissions	The offer of management experience and skills has been noted. A copy of the draft CEMP will be provided to Binalong Landcare for comment and input prior to finalisation.

1.4.15 Kathy Russell – Gnarwarre, Victoria

Issue	Response
Noise The Marshal Day report does not address in any significant manner the know effects of audible wind farm noise due to special audible characteristics (modulation effects in particular) on human perception, annoyance and sleep disturbance. The Marshal Day report does not address in any significant manner the known, but debated, effects of infrasound and low frequency sound on human perception, annoyance and sleep disturbance as well as the debated potential for adverse health effects on persons within the locality of the wind farm. On balance, the Marshall Day report contains substantial technical deficiencies and does not address in any meaningful way the concerns raised by residents.	The Marshall Day report is a scientific document which addresses the guidelines set in the Director General's Requirements for the wind farm. As the submitter may know, being from Victoria, the Victorian Civil and Administrative Tribunal (VCAT), earlier this year deferred its decision on Infigen's Cherry Tree Wind Farm in Victoria until it had considered evidence on health related matters. The Waterloo wind farm had been blamed for a wide array of problems by some wind farm critics, in particular the anti-wind farm lobby group The Waubra Foundation which claims that Waterloo and, indeed, wind farms more generally produce a form of low frequency sound known as infrasound which they claim is dangerous to human health. In December 2012, SA EPA officers met with residents from Waterloo to discuss their concerns regarding the wind farm. Concerns included a rumbling noise and a variable pulsing noise that was dependent on wind direction. The residents spoke of various symptoms such as headaches, sleep disturbance and exhaustion, flu-like symptoms and tinnitus. To assess whether the wind farm was responsible for producing noise harmful to residents the SA EPA put in place noise and weather monitoring at locations at distances of 1.3km to 7.6km and a range of directions from the Waterloo Wind Farm over the period of April to June 2013. In addition they asked residents with concerns about the wind farm to keep a diary documenting experience of disturbing noise and symptoms they believe were caused by the wind farm. As part of the study the wind farm was also shut off six times during wind conditions where it would normally produce power. The SA EPA has concluded from the study that: The Waterloo Wind Farm meets relevant South Australian and international standards and there is no evidence linking the noise from the wind farm to adverse impacts on residents. The study found that: – Noise events that could be attributed to the wind farm were periodically audible at four locations, but at very low levels, which did not dominate the noise environment; however, no attributable events were found at the two remaining houses. Where detectable, the noise levels were compliant with the EPA's wind farm noise guidelines. – While the wind farm did increase the level of low frequency sound under some conditions, it was found at levels "significantly below the accepted perception

Issue	*Response*
	threshold of 85dB(G)". Instead, background noise resulting from local winds and other noise sources was shown to contribute to increases in low frequency noise that were comparable with, or higher than, contributions from the wind farm. – A barely perceptible 'rumbling' effect was found using resident diary records to focus the analysis. However, in many cases the EPA was unable to determine that described events could be attributed to the turbines; and at times reported events coincided with shutdowns of the plant. See also the health conclusion below. The findings of the SA EPA contributed to the VCAT decision to approve the Cherry Tree Wind Farm.
Health	The National Health and Medical Research Council (NHMRC), the peak national body for research in Australia, issued a *Public Statement: Wind Turbines and Health - July 2010* stating that there was no published scientific evidence to positively link wind turbines to adverse health effects. This is the most relevant document to reference as it is impartial, expert and considered. It is understood this document is likely to be updated as more independent reports are published. The application of stringent noise criteria as demanded by the *Draft NSW Planning Guidelines: Wind Farms* provides a precautionary approach to health issues suggested to result from wind farm noise. A very small number of people in Australia have anecdotally reported that they believe that wind turbines are making them ill. The list of symptoms described is long and all are present in the broader community including in areas not near a wind farm and there is no evidence to link the symptom, however real, to wind turbines. Simon Chapman, Professor of Health at UNSW, offers one explanation for ill health suffered by people living near a wind farm who believe the wind farm is causing their ill health is – that some of these cases could be as a result of the "nocebo" effect which has proven that some people who believe that something is making them ill can actually make themselves ill. They suffer a real illness even though there is no physical cause. Consistent with the NHMRC and Professor Chapman, the September 2013 Planning Assessment Commission Determination Report for Bodangora Wind Farm near Wellington notes that "NSW Health also made it clear that noise levels at distances of more than one km from the turbines would not cause health impacts and the 2 km buffer provided in this instance is highly precautionary". The Victorian Department of Health has issued fact sheets on noise and health (http://www.health.vic.gov.au/environment/windfarms.htm). The Australian Medical Association released a statement in 2014 that "The available Australian and international evidence does not support the view that the infrasound or low frequency sound generated by wind farms, as they are currently regulated in Australia, causes adverse health effects on populations residing in their vicinity. The infrasound and low frequency sound generated by modern wind farms in Australia is well below the level where known health effects occur, and there is no accepted physiological mechanism where sub-audible infrasound could cause health effects."
The siting of turbines too close to each other, near plantations or on gradients greater than 10 degrees is detrimental from an efficiency standpoint, but more importantly detrimental with respect to noise/vibration.	The siting of wind turbines is optimised to maximise the efficiency and energy yield of the wind farm within the identified environmental constraints. The proximity of wind turbines to each other does not have any impact on the noise generated by the wind turbines. The noise assessment has confirmed compliance with the specified noise criteria.
Cost benefit analysis (or lack thereof)	Wind energy is currently the most cost effective form of renewable energy. The Commonwealth Renewable Energy Target (RET) aims to deliver over 20% of Australia's electricity generation from renewable sources by 2020. The RET is technology neutral and allows all renewable technologies to compete equally. Currently large scale wind energy is meeting the majority of RET target demonstrating that it is the most cost effective energy source.

On 31 July 2014 another submissions to the EA was provided to Epuron by the Department of Planning and Environment. This submission had been misplaced by the Department until that date.

Angela Regan of Binalong, (submission made on 6 November 2009):

Issue	*Response*
Solar is preferable to wind energy	Solar is an excellent technology but significantly more expensive than wind energy. Each technology has a number of optimal locations and the Coppabella and Marilba hills are excellent for wind energy.
Wind farms take jobs away	Wind farms generate jobs on the wind farm and provide revenue for the host farmers who anecdotally are more inclined to employ individuals than to cut back on employing others.
Only those whose land is impacted benefit	There is a significant community fund with benefits proposed for neighbours up to 5km and community benefits proposed for others. See Statements of Commitment
Decommissioning concerns	A decommissioning and rehabilitation plan has been prepared to address the issue of what happens at the end of the life of the wind farm. See Attachment 20

1.5 Response to Government Agency Submissions

1.5.1 Industry & Investment NSW

Industry & Investment provided a coordinated response from the Minerals Resources, Agriculture and Fisheries divisions of the former Department of Primary Industries. No particular issues were raised, but the following recommendations were provided:

Issue	*Recommendation*
Fisheries mitigation measures	The proposed safeguards and mitigation measures in relation to surface water and ground water should be included in any project approval. The design and construction of any waterway crossings to be carried out in accordance with Industry & Investment guidelines.
Agriculture mitigation measures	A qualified geotechnical engineer should be engaged if any groundwater is required for use on site. A weed management plan should be developed and implemented for all areas that will be subject to surface disturbance.
Minerals mitigation measures	Continue liaison with the holders of Exploration Licences on the wind farm site.

1.5.2 Harden Shire Council

Issue	*Response*
Potential impact of wind farm water use during construction on availability of water for agricultural and potable water supplies	The water usage over a two year construction period has been estimated to be around 16.2 ML (EA section 8.1.2 on page 197). A number of potential water sources have been identified including Jugiong Creek, Lake Burrinjuck, Goldenfields Water County Council pipeline, Yass Dam and a number of ground water bores. None of these potential water sources would be used for the wind farm to the extent that they placed any restrictions on existing agricultural and potable water usage. The estimated annual water use required for turbine construction (8ML) is less than 0.5% of the total water capacity of Yass Dam alone. Furthermore, the water used for concrete batching may also be sourced from offsite locations.

Issue	*Response*
	The main construction contractor would discuss water availability and terms with the relevant authorities before commencement of construction.
Planning conditions to ensure that adequate decommissioning of wind turbines & rehabilitation of land	Section 3.5.4 (page 76) of the EA describes the proposed wind turbine decommissioning activities including the commitment that all above ground infrastructure would be removed and that the scrap value of the turbines and other equipment is expected to be sufficient to cover the majority of the costs of their site dismantling and site restoration. In addition, the agreements with the landowners include an obligation to establish a decommissioning fund 5 years prior to the end of the operation of the wind farm to fund the difference (if any) between the expected decommissioning costs and the scrap value of the wind farm equipment. Refer to the draft Decommissioning & Rehabilitation Plan in Attachment 20 for more details.
Lack of details on community fund	As part of the ongoing consultation with all stakeholders in the vicinity of the planned wind farm we welcome any suggestions for possible community projects to be funded by the wind farm. From commissioning the Proponent will contribute $2,500 per wind turbine built per annum to a Community Enhancement Program. The Proponent will pay the annual contribution to the CCC for distribution. At least 50% of the funds may be allocated to residential clean energy improvements such as solar water heating or solar PV panels or similar benefit to non-involved properties within 5km of a wind turbine. When the wind farm construction contracts are finalised a new CCC is to be elected to represent the neighbouring community through the construction and operation phase and manage the Community Enhancement Program. The CCC is to be constituted in line with Appendix C of t*he Draft NSW Planning Guidelines: Wind Farms* or as updated. The allocation of funds will be determined by the elected CCC to ensure the community benefit is distributed in line with the community's own view of an equitable distribution of funds. Epuron have noted the suggestions for the use of the community fund provided by the Harden Council and others such as the Binalong Landcare and expect that the CCC will take a lead role in the appropriate allocation of the community fund. Please refer to the revised Statement of Commitment 72.
	Epuron met with the Director of Environmental Services of the Harden Shire Council on 9th April 2013. No additional concerns regarding the wind farm were raised.

1.5.3 NSW Office of Water

Issue	*Response*
Potential options for water supply	Access to surface water from existing dams and creeks or sourcing groundwater from bores may require additional permits or licences. The water usage over a two year construction period has been estimated to be around 16.2 ML (EA section 8.1.2 on page 197). A number of potential water sources have been identified including Jugiong Creek, Lake Burrinjuck, Goldenfields Water County Council pipeline, Yass Dam and a number of ground water bores. None of these potential water sources would be used for the wind farm to the extent that they placed any restrictions on existing agricultural and potable water usage. The estimated annual water use required for turbine construction (8ML) is less than 0.5% of the total water capacity of Yass Dam alone. Furthermore, the water used for concrete batching may also be sourced from offsite locations.

Issue	Response
	The main construction contractor would discuss water availability and terms with the relevant authorities before commencement of construction.
Watercourse crossings	Any watercourse crossings will be designed in accordance with NOW guidelines
Potential impacts from blasting	If blasting is required an assessment of the potential impact on groundwater resource and existing users should be carried out.

1.5.4 Australian Department of Defence

The Department of Defence has no concerns regarding the proposed wind farm.

Comment	Recommendation
Tall structures and potential flight safety hazard	Supply final design documentation before construction commences

1.5.5 Department of Environment & Conservation (Now NSW OEH)

Issue	Response
Aboriginal Cultural Heritage for transmission line easements needs to be assessed	Please refer to the supplementary Archaeological and Heritage Assessment in Attachment 2 of this report. An archaeological field survey and assessment was carried out on the proposed powerline route which connects the Coppabella and Marilba precincts to the existing TransGrid 330kV transmission line to the south of the site. The field survey results are in keeping with the patterns of site distribution identified during the earlier 2008 assessment. The recorded sites do not pose a constraint to the proposal, however a number of management and mitigation measures are proposed.

Issue	*Response*
Turbines and associated infrastructure be reduced and/or realigned to decrease impact on Box Gum Woodland EEC	Turbines and associated infrastructure have been deleted and relocated to decrease the impact on Box Gum Woodland EEC. Please refer to the SER (Attachment 1) for further details.
Calculation of impact areas and offsets	Please refer to Appendix B in the Supplementary Ecology Report (Attachment 1 to the PPR Nov 2012) for the revised impact area calculations and also section 7.3 of this PP&SR (Sep 2014. Epuron accepts that where overhead powerline easements pass through forested areas that clearance of trees will be required to achieve technical and safety clearance requirements. The clearance will not need to be for the full easement width. For example, the maximum conductor clearance for an overhead 300kV powerline is 8m. The impact of overhead powerlines in areas of pasture is limited to the access tracks and footings for the power poles which are spaced between 200 and 250m apart and have a foot print of approximately 1m x 1m. The revised impact area calculations now include these provisions. An Offset Strategy for the project has been developed to provide more certainty on how offset areas will be identified, secured and managed. Please refer to Appendix H in the Supplementary Ecology Report in Attachment 1 for further details. The Offset Strategy sets out a methodology to calculate, manage and secure an offset site to offset the impacts of the construction of the wind farm. There is ample land of suitable type within the project boundaries to demonstrate that offsets are achievable. The plan provides clear incentives, in the form of pre-set ratios that relate to existing mapping, for the proponent to further minimise impacts and thereby reduce the offset requirement for the proposal.
Additional survey and commitment to survey	Some of the additional surveys including for Hollow Bearing Trees, Bush Stone Curlew, Squirrel Glider, Barking Owl and Burrinjuck Orchid have now been completed and included in the Supplementary Ecology Assessment. To assist with micrositing of infrastructure and offsetting of unavoidable impacts the Statement of Commitments have been revised to include additional surveys required including for Hollow Bearing Trees, Bush Stone Curlew, Squirrel Glider, Barking Owl and Eastern Bentwing Bat. The ecology Statement of Commitments have been revised to include all measures required to manage the biodiversity impacts of the project to an acceptable level.
Biodiversity assessment of powerline easements	A biodiversity assessment of the powerline easements has been included in the Supplementary Ecology Assessment in Attachment 1 to the PPR (Nov 2012)

1.5.6 NSW Roads and Maritime Services (formerly RTA)

Issue/Comments	*Response*
Based on compliance with the submitted documentation the RTA would raise no objection to the development.	Noted
Proposed conditions to be included in any approval	The proposed mitigation measures have been noted and will be incorporated into the detailed Traffic Management Plan to be prepared by the transport contractor in consultation with RMS and councils prior to the commencement of construction of the project. Refer to the Statement of Commitments.
Use of truck rest areas adjacent to Conroys Gap – a plan to manage the impacts of such use on the primary	The concern is noted. Access to site via these rest areas has been amended to be by light construction traffic only and subject to consultation with and the agreement of RMS

Issue/Comments	Response
purpose of the rest areas is to be development and agreed to by RMS	

1.5.7 Yass Valley Council

Issue/Comment	Response
There is a high likelihood that the condition of the subject roads and road safety will be compromised as a result	Neither the original traffic impact study nor the supplementary traffic impact study identified any particular issues in relation to potential impacts on the condition of the public roads or on road safety. The improvement works identified in the traffic impact studies as well as appropriate maintenance over the duration of the construction works will ensure that the condition of the roads and safety of the users will be maintained.
Concern over the road network's ability to withstand the heavy vehicle loadings associated with the proposed development	The required improvement works identified in the traffic impact studies will be carried out in consultation with and with approval from the Council to ensure that the ability of the roads to with the heavy vehicle loadings.
Safety is a major concern on the unsealed roads such as Whitefield Road, Waterview Road and Garry Owen Road. Council would require these roads to be upgraded	Safety considerations were assessed in section 4.8 of the Traffic Impact Study. Waterview Road and Garry Owen Road will now not be used for access to the wind farm site. A limited section (approximately 1.1km) of Whitefields Road is planned to be used to provide the primary access to the Coppabella precinct. This section of road will be upgraded to ensure it is adequate for the construction traffic and to ensure safety for all road users. Note that Whitefields Road now forms part of the Harden Shire Council LGA rather than the Yass Valley Council LGA.
A structural assessment of the bridges on Illalong Road should be undertaken prior to heavy vehicles using the roads	The bridge at 3.32km on Illalong Road has been replaced since the original traffic impact assessment in 2009 and there are no structural constraints for heavy vehicles. There are no plans for heavy vehicles to use the two bridges further south on Illalong Road.
The Traffic Impact Study does not adequately address the location and standard of the proposed access points off the road network.	The Traffic Impact Study has considered the impacts, safeguards and upgrades required at the access points off the Hume Highway (sections 5.1 & 5.2 & Appendix C). Any upgrades at the proposed access points will be carried out in accordance with the RMS Design Guidelines and the AUSROADS Pavement Design Guides.
There are a number of mitigation measures detailed in section 5.2 of the Traffic Impact Study which are not explicitly stated in the Statement of Commitments in the Environmental Assessment	The Traffic Impact Study is part of the Environmental Assessment and any mitigation measures specified in the study are considered to be commitments by the Proponent. For clarity, these mitigation measures have been referenced in the updated Statement of Commitments.
Lack of community enhancement fund	As part of the ongoing consultation with all stakeholders in the vicinity of the planned wind farm we welcome any suggestions for possible community projects to be funded by the wind farm. From commencement of operation the proponent will contribute $2,500 per wind turbine built per annum to a Community Enhancement Program. At least 50% of the funds may be allocated to residential clean energy improvements such as solar water heating or solar PV panels or similar benefit to non-involved properties within 5km of a wind turbine. When the wind farm construction contracts are finalised a new CCC is to be elected to represent the neighbouring community through the construction and operation phase and manage the Community Enhancement Program. The CCC is to be constituted in line with Appendix C of t*he Draft NSW Planning Guidelines: Wind Farms* or as updated. The allocation of funds will be determined by the elected CCC to ensure the community benefit is distributed in line with the

Issue/Comment	*Response*
	community's own view of an equitable distribution of funds.
Community and Council communication	Epuron has established a Community Consultation Committee for the project. The Council has a representative who attends the CCC meetings to stay informed about the project.
	Epuron met with the Director of Planning & Environmental Services and the Strategic Planner of the Yass Valley Council on 2nd May 2013 to discuss the above issues and our response. No additional concerns were raised.