I object to the EPYC proposed Jupiter Windfarm

I was affected by the bushfires in December 2016 and January 2017.

Objection lodged by: Mr David Neil Hargan

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## My objections include:

- 1 An objection to the holistic impact on my property which is at no point articulated as the totality of the impact on my property and family.
- 2 An objection to the quality of the EIS based on errors of fact I have identified.
- 3 An objection to the Visual assessment of my property.
- 4 An objection to the proposed visual mitigation.
- 5 An objection to the quality of the Electromagnetic annexe.
- 6 An objection to the trite proposition that the Windfarm is being located in my area for the benefit of the community.
- 7 The bushfire Annexe and failure to address the SEARs.
- 8 A concern I hold over the implementation of WHS legislation.

My house is identified in the EIS as J 142

### **Holistic Impact**

1. Critically at no point has the cumulative effect of all the negative outcomes of this proposal been assessed against each dwelling. While this is not the EIS purpose from the perspective of the proponent it must be a critical consideration in the approval process. The disaggregated approach leaves the impression that people are only concerned about individual elements and that each of these is a minor point, a little bit of noise – at or below the threshold, a little bit of loss of visual amenity, a little EMI, a little blade flicker, an increase in the residual fire risk – Never is the totality assessed by household and hence the genuine total effect on people and families reflected. This parsing makes it simple for the proponent and consultants; however the EIS should contain a statement of impact – aggregating all the impacts – for each dwelling or affected person. In order to provide this perspective I provide a summary for my household –based on my assessment of the correct inputs – ignoring the errors of fact

in the EIS – dealt with separately in this submission:

- a. I will experience an increase in noise as a direct result of the windfarm. This noise will be up to the mandated threshold of 35 Db for many wind speeds as my house is actually far quieter. This in most cases will involve greater than a trebling of the experienced noise (5dB increase). For a number of identified wind conditions there is no margin of error (without any impact from micrositing) as the noise will be at the maximum permissible level. This will be coupled with;
- b. I will experience a very significant deterioration in my visual amenity as I will view Wind Turbines to both the North and South of my house off my front and back verandas and from key living space windows. The proposed mitigation is stupid (there is no other suitable word) as it poses a direct bushfire risk to my house that I have expressly avoided. This will be coupled with:
- c. My television reception and very weak mobile phone signals will also be affected. This will be coupled with;
- d. The increased traffic within the Project Area directly translates to more traffic on my road, inherently increasing risk as the road is not due for improvement.
- 2. The overall effect, on both my family and I, is very significant when all the negative effects of the windfarm on lifestyle are considered together. They directly undermine the reasoning for moving to a rural (non-industrial) area.

# Quality of the EIS

- 3. The EIS contains a number of errors of fact which I have drawn to EPYC's attention (see Enclosure 1 for Email trail). These errors immediately call into question the overall accuracy of the EIS; it is at best a lack of attention to detail and at worst unlawful. If for a single point (J 142) there are at least two egregious errors of fact then the quality of the document itself is reasonably questionable. Had these errors not been pointed out to EPYC (who consider them minor) they would remain for the life of the project. In the case of the error for the noise curve, were it to be referenced then there would have been an acceptance of a 45 Db minimum level. The two key errors are outlined below:
  - e. The Noise profile curve utilised for my property was a hybridised J141/J145 curve shown as Fig 5.27 in the EIS Noise Annex. There was a clear error in the curve EPYC have stated that it was simply a small error and that it was not the definitive statement of noise levels, the table was for this purpose however it definitely shows a lack of attention to detail and a certain laziness in the checking of the product that is symptomatic of poorly prepared work.
  - f. The visual annex stated that the wind turbines to the south of my property would not be visible due to the topography. This has now been clearly proven as in error (see enclosure two the quality is as a result of me scanning) there are an additional sixteen wind turbines in the photomontage provided by EPYC with the closest less than a mile away. This error may indicate an inherent error in the Geographic Information System (GIS) that was used for the modelling or again laziness on the part of a second consultant team and a failure of the

prime EIS consultant ERM to ensure the accuracy of the work presented as factual. Sixteen additional wind turbines is a very significant error and the fact that my property is now bracketed both North and South when the EIS indicates that it would only be to the North is a major error of fact.

- 4. The EIS also asserts that having native plantings up to four metres from my home and then a line of trees in close proximity is also acceptable (my alternate word for feasible). This clashes with the Bushfire Annexe of the document and makes clear the untruthfulness of the mitigation strategy leading a reasonable person to call into question the validity of the entire document.
- 5. The failure to adequately address the impact of micrositing on both the noise limits and the visual assessment leaves open the very real possibility that the modelling does not come close to reflecting the effect that MAY be experienced. In the case of the closest turbines this is potentially a 6.5 % error. How then can the model deliver results that are meaningful? Clearly this assessment has been produced down to a price not up to a standard that allows a Planner to make a reasonable assessment of the issues and risks surrounding the decision.

### Visual Assessment

6. The visual assessment for my property was based on an assessment that only the wind turbines to the North were visible. This is an error of fact. This was pointed out to EPYC. The consultants have apparently reviewed the impact, after having had the changed conditions brought to their attention, and determined no change to the assessment. Yet there are an additional 16 wind turbines now visible from my property. This has the effect of encircling my property. The term partially visible has been utilised in their rebuttal of the change. This is patently nonsense as in almost every event the turbines are partially visible as the base can infrequently be seen. The failure to adequately reflect the error of fact in a changed assessment, or adequately address the changed circumstances beyond a cursory dismissal undermines the quality of all actual assessments. Changed facts must lead to changed assessments for the professionalism and impartiality of the consultants and indeed the validity of the document to be recognised. Similarly the statement that the house is oriented North belies the fact that I have an 85 square metre back verandah that will look out on these sixteen additional turbines to the South – providing no respite from the visual impact at any outdoor living area I have. This unrelieved viewing extends to all living areas inside the house, both on the North side and the South side.

## **Visual Mitigation**

7. The proposed mitigation is not feasible – it provides a clearly unacceptable bushfire risk and will take fifteen to twenty years to become effective to the standard shown in the document. To present a mitigation that is unacceptable for safety reasons and then make bald statements that the acceptability of the mitigation is not considered is untruthful. It implies that this 'natural' mitigation is an acceptable exemplar of mitigation. It is no different to putting up a 10m high concrete wall in terms of feasibility as the document has chosen to use this word. The Macquarie dictionary provides two meanings for feasible:

- g. Feasible
  - i. Capable of being done, effected or accomplished: a feasible plan
  - ii. Likely; probable: a feasible theory; a feasible excuse
- 8. Clearly the proponent is utilising the first meaning yet implying the second. It is feasible to put up a ten metre concrete wall in so far as it is capable of being done, however it is neither likely nor probable. The same is true of the thoughtlessly constructed natural barrier and extreme bushfire risk proposed, which takes no account of local growth rates. I average a foot a year on planted eucalypts and max heights on my wattles of four metres. This implies that even were I prepared to accept a Very significant increase in the bushfire risk it would take tube stock over twenty years to grow to the 'demonstrated ' height or tress at 1.8 m still fifteen years. This is not feasible.
- 9. The bushfire risk implied in the mitigation stands in direct contrast to the actual bush fire Annexe of the document which makes clear that a key to reducing risk is clearing the area around infrastructure. This inconsistency again calls into question the validity of the entire document as clearly no single accountable person has checked it end-end for coherence and accuracy.

# **Electromagnetic Annexe and impacts**

10. Clearly the electromagnetic annexe received very little attention with no more than desktop analysis. There were no readings taken of current signal strength and hence any change will be open to contesting by the proponent. This is an unacceptable standard for an EIS that affects this many families. There is a clear body of evidence indicating the impact of wind turbines on the propagation on Radio Frequency electro magnetic (EM) waves. While some literature makes clear that the impact may not be major, other literature indicates more significant local effect. The Annexe assures us that they will remediate any change – yet in the absence of a baseline set of measurements how can change be measured? Similarly if I contend that I currently have great reception and subsequently contend that this has diminished who is responsible. This particular Annexe is very weak and even the modelling appears inadequate for the consideration of the full range of impacts including diffraction and reflection while the near field zone appears to have been considered.

"In general, for areas with good coverage, interference to mobile phone signals is unlikely. However, for areas where the reception is likely to be marginal, such as those where an external antenna is required, the possibility for interference exists if a WTG intercepts the signal between a mobile phone and the tower.

In case of marginal network coverage, simple procedures are available to mitigate interference, such as moving a short distance to a new or higher location until the signal improves, or using an external antenna to improve the signal." Annexe K pg15

Clearly all that is needed is for me to move my house – or stand in the rain. This is a

very poor approach to a negative impact and implies a callous disregard for those with limited mobility or who have already taken all practical measures to make the most of weak signals. A trite treatment of the negative impact reflects effectively the poor consultation by EPYC, as I brought this issue to the notice of EPYC at each meeting with them. The fact that the desktop analysis was undertaken with no attention to the topography or geology of the area reflects again on the overall quality of the EIS and its unsuitability to be the basis for decision making.

# The contention that Jupiter is sited for the benefit of the community

- 11. During the recent public meeting hosted by DPE in Tarago it was acknowledged that the Jupiter windfarm impacted far greater numbers of residences than previous windfarm proposals had. The summary of the EIS contains a non-contextual quote by a judge that peoples views should not be a sole determinant of the location of windfarms (I paraphrase).
  - h. "There is a recognised 'broad public interest in the establishment of viable renewable energy sources' which must be balanced against 'the geographically narrower' potential impacts of the Project" (as was stated by Chief Justice Preston of the NSW Land and Environment Court in Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd [2007] NSWLEC 59 (12 February 2007)). Whilst it is acknowledged that the Project will have an impact on visual amenity, this must be balanced against the public interest benefits which accrue from the development of renewable energy projects such as this Project." Exec Summary PgE.20
  - i. "the broader public good of increasing the supply of renewable energy" outweighed the "geographically narrower concerns of" the objector community group and, therefore, approved the proposed wind farm.
- 12. Critically this judgement was an 'on balance' judgement. In the case of Jupiter, with a vastly larger number of affected properties and people, and increased and increasing population density (see comments by OPRC Administrator Mr. Overall), the balance decision is not self-evident. It would then beg the reasonable question of where is the threshold for this balance. If the case is such that some people can have their views affected – it is reasonable to ask what is the threshold number of people/properties? - could the wind turbines be built in Sydney and affect hundreds of thousands of people or would the impact be considered too great. Could it be built in Outback Queensland or would the cost be too great for the energy generated. The effect of this consideration is the transfer of real cost to my local community by dent of EPYC's purely profit motivated choice of site. If the need for renewables is acknowledged as a key change required to mitigate climate change then clearly cost is not the determinant – so locate them in a distant less cost effective area that impacts markedly fewer people – and preferably only 'involved' land owners. If cost is a serious consideration then we must consider proximity to major population centres – i.e. Blue Mountains or within suburban Sydney. Obviously this actually requires a balance between cost effectiveness and negative impact on communities. In this case at no point has EPYC openly outlined that it is trying to find the lowest cost option for them – with community impact clearly a distant second. This unbalanced approach has resulted in the seriously negative general opinion of non-involved landholders

within the local community to the windfarm.

13. These two issues both ignore the simple fact – not mentioned in the EIS - that Jupiter is proposed for this location because it is more cost effective for EPYC. I ask that EPYC be asked to provide the cost effectiveness modelling that led them to their assessment of location so that this can be genuinely considered against the community impact.

### **Bushfire Risk**

- 14. The Annexe on bushfire risk spends significant effort in outlining the basis for reducing the likelihood that the windfarm will start a fire (ie likelihood) but does a poor job of addressing consequence. The Annexe does not sufficiently address the explicit SEAR directed task to address the impact on aerial fire fighting. With two fires in the past two months that required aerial fire fighting to control. This is a critical issue for the proposed Project area regardless of the fire risk rating for the area. The annexe over-commits to mitigations around the starting of a fire. It lacks clarity on the commitment of EPYC to fighting fires (for example the time constrained availability of a water tanker in one area of the Annexe, while it is unconstrained in another area).
- 15. There is no discussion of the changes to Tactics Techniques and Procedures (TTPs) that will be caused by the presence of 600 ft high turbines. The EIS does not lay out the current TTPs and what if any changes may occur as a result of JUPITER. This failure to address a specific SEAR is not remediated by Rural Fire Service input, nor will suggestions that ground based fire fighting be an alternative.

## Work Health and Safety legislation

16. There is a further key weakness that concerns me. At no point has EPYC or the consultants addressed their responsibilities under Commonwealth/State WHS legislation. As a PBCU they are directly responsible for the effect of their business on me from a WHS perspective, as I am affected by their operation. This includes its impact on my mental health and that of my family. This is an area of growing concern for me as the proposed windfarm is directly increasing the stress in my life and resulting in poor sleep.

D.N. Hargan 24 Feb 17

## **Enclosures:**

- 1. Email trail ref Errors of Fact in EIS
- 2. Photo Montage provided by EPYC of rear view form J142 Not included in EIS

Email received from Mr. Ibrahim (ibs) Eid (EPYC) on Fri 10 Feb 17 at 1053 Hi Mr Hargan,

Further to our meeting at the information day we have followed up with our consultants on the Visual and noise concerns:- Their responses are in Red text

VISUAL Assessment.

We have asked the visual consultant to check your assessment ratings, review the site images and update any text if required. We have also raised the bush fire hazard issue.

The below is extracted from his email

I am confident that the ratings remain accurate. The northern turbines are the most relevant as this is the direction the house is orientated – hence a Mod/High unmitigated rating.

The text should however say 'southern turbines **partially** blocked by undulating topography' as some will be visible. This has no impact on the rating though as it is already mod/high. Moderate is a correct assumption of the post mitigation rating.

Tree growth would depend on planting size and bush fire hazard obviously a legitimate concern.

#### **NOISE Curves**

Similarly we asked our consultant who completed the wind farm noise assessment to check the noise curves. I have extracted the below from his email and provided the updated graph. It turns out it was only an issue with the plot and had occurred on another graph.

I have looked into your query and the Figure 5.27 (J141\_J145\_Hybrid\_24hr\_Limit) in the report is indeed incorrect. Similarly the Figure 5.24 (J197\_24hr\_Limit) is also incorrect. However this issue only affects the report plots; the correct limits have been applied in the assessment used to determine compliance. Basically the issue was caused when noise limit curves instead of background curves were pasted into the template we used to produce these plots.

So in summary the error is cosmetic only and does not affect the outcomes of the assessment.

You will note that the assessment tables differ from the original graph and are correct. I have attached the updated correct graph.

If you still would like to submit an objection on the above issues you may certainly do so. However we will be providing these updates to the department and you should expect a similar response. Following this, the department will conduct their assessment based on final response to submissions.

Overall thank you for highlighting these minor issues to us. We are confident that the assessment outcomes are accurate and the issues raised will require minor updates.

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I apologise for the quality of the scanning – only a single hard copy (A3 size) was provided to us by EPYC. DPE staff have sighted these. I presume the originals – at A0/1 size - are available from EPYC for consideration.



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