

**APPENDIX E:**  
**AGENCY COMMENT ON RTS AND AMENDED DA**

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**From:** Michael Thompson [REDACTED]  
**Sent:** Friday, 24 November 2017 8:11 AM  
**To:** Nicole Brewer  
**Subject:** RE: Jupiter Wind Farm (SSD 6277) Amended application (QPRC)

Dear Nicole,

Thank you for the opportunity to submit further comments on the Jupiter Windfarm proposal following amendments to the project. In particular Council notes the significant reduction in the number of turbines, the relocation of a number of turbines (within 100m) and the subsequent reduction in the visual and noise impacts on some properties.

Notwithstanding the above, and based on the information provided and discussions with the proponent, Council confirms that it still considers there to be residual issues which the amendments have failed to satisfactorily address.

Those issues are:

1. While the severity of the visual impacts on some properties has been reduced by the removal and relocation of turbines the density of housing in the affected areas means that there are still too many properties which will suffer adverse visual amenity impacts. The height of the turbines means that for many properties the amendments will make little difference. Council considers that while this area is zoned rural land the configuration of land and housing results in a more rural residential character with the result that more properties are affected. Given this character and the resultant density Council believes this is not a suitable site for the wind farm.
2. While Council still believes that impacts from additional landscaping will increase fire hazards in the area and that the height of the towers may impact on the ability to undertake aerial fire fighting activities, Council would defer to the expertise of the RFS when making these assessments.
3. There are potential impediments to further residential and infrastructure development.
4. Council has previously identified an increase in construction noise

Given the above Council continues to object to the proposal.

If the application is approved Council considers that in addition to standard conditions of consent that would be applied consideration should be given to conditions relating to the following matters:

- A condition should be included requiring the infrastructure to be removed by the proponent if and when the project reaches its end. Someone needs to be responsible for removing the structures from the landscape when they are no longer in use. There are many mines and quarries which were never properly decommissioned to support the need for this condition.
- Conditions relating to managing and minimising nuisance from noise, dust and other constructing related activity including a contact person for complaints. This is to avoid Council being the recipient of complaints over which it has no jurisdiction.
- Wherever possible ensuring the cost of proposed landscaping works and other mitigation measures to minimise visual amenity impacts are borne by the proponent rather than residents.

Many thanks for the opportunity to comment.

**Mike Thompson**  
Portfolio General Manager  
Natural and Built Character  
**Queanbeyan-Palerang Regional Council**  
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**Web:** [www.qprc.nsw.gov.au](http://www.qprc.nsw.gov.au)  
**Mail:** PO Box 90 Queanbeyan NSW 2620

**From:** Louise Wakefield [REDACTED]  
**Sent:** Thursday, 23 November 2017 4:20 PM  
**To:** Nicole Brewer  
**Subject:** RE: Jupiter Wind Farm (SSD 6277) Amended application (GMC)

Hi Nicole

Thank you for your patience in receiving Council's response. Council thought it was important to attend the Tarago Outreach Meeting last week prior to confirming its view. In addition, EPYC attended Tuesday night's Council Meeting and spoke to the proposal in the public forum.

Following review of the additional information, Council wishes to confirm that it acknowledges that the reduction in the number of turbines is a direct response to the concerns raised by Council and the community earlier in the process, however the matters raised in Councils previous correspondence remain as issues of concern.

At the Council meeting on Tuesday night, the Councillors did discuss their concerns about construction vehicle impacts resulting from the wind farm development on the local road network and sought further clarity on the terms and financial contributions offered in the VPA.


Kind regards  
Louise

**Louise Wakefield**  
**Director Growth Strategy & Culture**

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**From:** Warwick L Bennett [REDACTED]  
**Sent:** Wednesday, 29 November 2017 2:42 PM  
**To:** Nicole Brewer  
[REDACTED]  
**Subject:** Jupiter Wind Farm  
**Attachments:** Jupiter Wind Farm.pdf

Good afternoon Nicole

Further to Louise Wakefield's email to you earlier this week I wish to confirm that the Goulburn Mulwaree Council does not support the amended development application for Jupiter Wind Farm.

As you are aware Council made a submission in May 2016 outlining a number of issues including:

1. Unacceptable visual impact – Although the number of wind towers has been amended downwards to 57 the visual impact on residences in the region is still significant. Please find attached a graph showing the impacts these towers have on the dwellings in the region within the Goulburn Mulwaree area. If you look at the graph you will see for example that tower 25 can be seen by 22 houses.
2. The traffic impacts during construction – Jupiter have not made any arrangements at all with the Council for the road impacts both during construction and ongoing operations. We don't believe that this application can be approved unless agreement is reached with us on how and where these towers will be transported.
3. The lack of consultation – Jupiter has continually failed to consult appropriately with the community. Although they have reduced a number of towers in the impact area that reduction was notified to the community by newsletter. No public meetings other than the consultative committee have been held.
4. Zoning - Council is concerned that the proposed location of the wind farm towers is on an E3 Zoning which should be protected because of its environmental significant. We are aware that the infrastructure SEPP can override the endorsed LEP but we would hope that the Planning Assessment Commission would not override the general intent of Council, The Department of Planning and most importantly the community.

In summary the Goulburn Mulwaree Council are seeking that the Planning Assessment Commission decline this application. Council wishes to be heard in support of this submission.

Regards

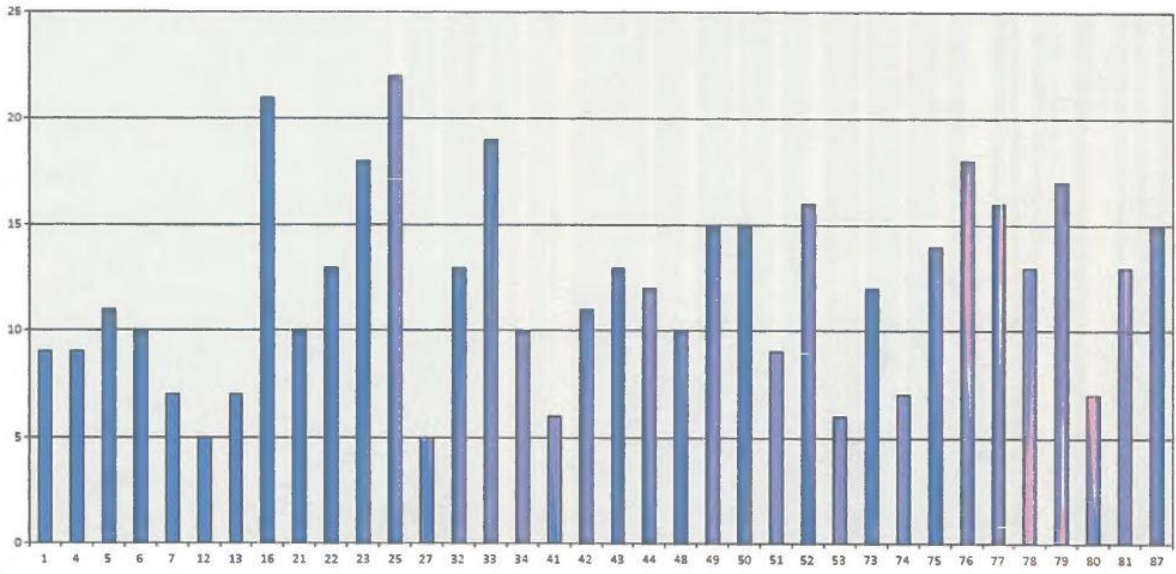
**Warwick L Bennett**  
**General Manager**

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**Jupiter Wind Farm: Northern Precinct - North Cluster: Count of Uninvolved Dwellings <= 3km**



DOC17/537554  
SSD 13 6277

Mr Mike Young  
Director, Resource Assessments  
NSW Department of Planning and Environment  
320 Pitt Street  
SYDNEY NSW 2001

Attention: Nicole Brewer [nicole.brewer@planning.nsw.gov.au](mailto:nicole.brewer@planning.nsw.gov.au)

Dear Mr Young

**Jupiter Wind Farm Response to Submissions (RTS) and Preferred Project Report (PPR) -  
OEH review**

The Office of Environment and Heritage (OEH) has reviewed the Jupiter Wind Farm Response to Submissions (RTS) and Preferred Project Report (PPR). We note that 34 turbines have been removed from the layout for a variety of reasons, nine of which correspond to advice provided by OEH. We are of the view that the revised layout will reduce the impacts of this development on biodiversity, particularly the removal of the southern precinct.

Nevertheless, there are a number of outstanding significant matters relating to impacts on biodiversity and Aboriginal cultural heritage. These impacts, and our recommendations for avoiding, minimising and offsetting these impacts, are summarised in this letter and described in detail in the attachments.

Biodiversity

The risk to Eastern Bentwing-bat (EBB) has not been adequately assessed. This threatened species is known to be killed by blade strike and given the very close proximity to the staging cave at Mt Fairy, mortality may be very high. Given this, as we have previously advised, adequate surveys need to be undertaken in both the spring and autumn migratory periods to assess the level of risk.

The other key issue is the closeness of turbines to the linear remnant open forest running north-south through the southern cluster. This remnant is in good condition and will therefore provide important habitat for a range of threatened and at-risk species. Birds and bats utilising the ridgetop forest in this area are likely to fly from the treetops directly into the rotor swept area (RSA) of the adjacent turbines (at lower elevations surrounding the forest). The buffer between the turbines and this remnant should be increased on the western side to at least 300 m and the locations of the turbines staggered so that they are not in a straight line. This would increase the chances of safe passage for at risk species in and out of habitat.

Fourteen of the 54 turbines (numbers 37, 40, 8, 69, 2, 9, 10, 11, 24, 28, 31, 59, 5 and 6) present a risk to biodiversity. This risk would be significantly reduced if they are removed or relocated away

from biodiversity constraints. Detailed recommendations and impacts for each turbine are provided in Attachments 1 and 2, along with a discussion of other biodiversity concerns.

### Aboriginal cultural heritage

The proponent does not intend to do a full archaeological survey and subsurface testing of the project footprint until the Aboriginal Cultural Heritage Management Plan (ACHMP) is prepared. We disagree with this strategy because the survey and testing results should be used to identify sensitive areas that need to be avoided. The results are also required to develop the management and mitigation measures that form the basis of the ACHMP. It is not appropriate to develop management measures before the archaeological values have been identified.

Because the assessments are incomplete, the RTS and PPR still do not adequately consider impacts on Aboriginal cultural heritage values. Many of the issues raised in our submission to the EIS have not been addressed, specifically;

- All areas to be impacted by the project need to be archaeologically surveyed;
- subsurface test excavations need to be undertaken in areas of archaeological potential as part of the environmental assessment; and
- the Cultural Heritage Assessment Report needs to be revised to include correct information regarding the Aboriginal consultation process and the results of survey and subsurface test excavations.

While some survey of the footprint has already occurred, the corridor was only 30m which is not enough to support the 100m micro-siting radius that the EIS has proposed. These areas need to be resurveyed.

Subsurface testing is needed in sensitive landforms to identify any Aboriginal objects within the top 30cm of deposit (the plough zone). Although these objects may not be in their original location, they are still protected under the *National Parks and Wildlife Act*. Furthermore, intact archaeological deposits could be present beneath the plough zone and some of the project infrastructure will be as deep as 3m. Testing should occur at the environmental assessment stage to identify the nature and extent of any subsurface sites and to develop management and mitigation measures.

Detailed advice on our Aboriginal cultural heritage concerns is provided in Attachment 3.

If you have any queries regarding the issues raised in this letter please do not hesitate to contact Virginia Thomas for biodiversity matters or Sarah Robertson for Aboriginal cultural heritage matters at [rog.southeast@environment.nsw.gov.au](mailto:rog.southeast@environment.nsw.gov.au).

Yours sincerely



1/11/2017

**MICHAEL SAXON**  
Regional Director – South East  
Regional Operations Division

Contact officer: Virginia Thomas - 6229 7105

## **Attachment 1 –Additional information on biodiversity impacts of Jupiter Wind Farm revised PPR layout**

### **Biodiversity issues previously raised in OEH's submission to the EIS that have not been adequately addressed in the RTS/PPR**

#### Eastern Bentwing-bat (EBB) - Conservation status in NSW: Vulnerable

- The assessment of the EBB and migratory pathways does not address the Director-General's Requirements (DGRs). The DGRs required the proponent to assess the impact of the project, specifically in the rotor swept area (RSA), on the migrating EBB, with specific consideration of the nearby staging cave at Mount Fairy.
- EBB is at-risk of blade strike and is particularly vulnerable at this site due to the proximity of the staging cave at Mt Fairy. At a minimum OEH considers adequate surveys must be undertaken in both spring and autumn migratory periods to assess the risk of a wind farm to this species. Further surveys targeting the migration times of Sep-Nov and March needs to be done using more detectors.
- OEH acknowledges correspondence between the proponent and OEH from March 2015 about the 3-week survey for EBB during the autumn migration period that year. However, this correspondence did not indicate this was the only survey necessary.
- We consider that a survey in the Spring migratory period is still required (and was always required) and a greater number of detectors should be employed for that survey. The Spring migration takes place between early October and late November and is likely to entail bats passing through the Jupiter wind farm, as they move from the coast to Wee Jasper. OEH expert Doug Mills may be able to provide a more defined period for monitoring based on his monitoring of the maternity cave.
- EBB mitigation measures are inappropriate (p. H13) and need to be revised to provide realistic mitigation.

#### Habitat exclusion / Connectivity

Several of the turbines in this proposal are poorly located within the landscape and may result in considerable impacts on birds and bats during operation. OEH recommends that the design layout for this wind farm should aim to maintain habitat connectivity and ensure a buffer distance from intact remnants.

OEH is particularly concerned about the ecological implications of locating turbines along the eastern and western edges of contiguous ridgeline vegetation. There is inadequate consideration given to the impact of loss of connectivity and disruption to the fauna movement pathways both north-south and east-west.

We recommend moving turbines 2, 9, 10, 11, 24, 28, 31 and 59 much further away from the vegetation. Turbine 40 should be removed as it is in the middle of the N-S remnant, and there is nowhere for it to move to without impact. Despite some micro-siting these turbines create significant barriers to birds and bats flying in and out of the forest at rotor swept area height (RSA). The vegetation on the hilltop is higher than 750m asl, whereas the surrounding turbines are as low as 690-720m asl. RSA height is 47-173m, creating a high risk of collision for aerial fauna at this site.

Many aerial species will move into or out of this woodland patch periodically, thus needing to move between turbines; being surrounded by turbines will increase their risk of blade strike. Raptors and owls are also likely to be attracted to this area for hunting, and will be at greater risk of blade-strike due to this design.

The EIS suggests habitat alienation around turbines is a positive response that will reduce blade-strike, but is of concern if it also causes adjacent patches to be avoided because of the concentration of turbines along the edges.



## Turbines

Fourteen of the 54 turbines in the revised turbine layout present a high risk to biodiversity and OEH recommends they be removed or relocated away from biodiversity constraints: 37, 40, 8, 69, 2, 9, 10, 11, 24, 28, 31, 59, 5 and 6.

- T37 and T40 should be removed as their biodiversity impacts are too high;
- T8 and T69 have been micro-sited closer to high biodiversity constraints and should be removed or relocated (>100m from constraint);
- T2, 9, 10, 11, 24, 28, 31, 59 should be removed or relocated (>100m from important biodiversity constraints). Despite some micro-siting these turbines still run down the eastern and western edges of the remnant forest, causing significant barriers to birds and bats flying in and out of the forest at rotor swept area height (RSA);
- T5 and T6 should be removed or relocated (>100m from important biodiversity constraints).

## **Other problematic biodiversity issues in the revised PPR layout:**

### *Glossy Black Cockatoo (GBC) - Conservation status in NSW: Vulnerable*

OEH notes that the removal of turbines 51, 78 and 81 will reduce the impact on GBC habitat. All foraging habitat (*Allocasuarina*) or any trees with hollows greater than 15cm diameter within the development footprint must be clearly marked to avoid impact during construction of turbines, cables and roads. OEH recommends that the access road between turbines 48 and 43 be realigned to avoid impacting on GBC habitat.

### *Box-Gum Woodland Endangered Ecological Community (EEC)*

*Conservation status in NSW: Endangered Ecological Community*

*Commonwealth status: Critically Endangered*

The project will have a significant impact on Commonwealth-listed Box-Gum Woodland Endangered Ecological Community (EEC). OEH recommends removal of turbines 37, 40 and 69 to protect the most significant stands of BGW and Hoary Sunray habitat. The Hoary Sunray is listed as Endangered under Commonwealth legislation. OEH notes that turbines 37 and 40 have all been relocated in the PPR revised layout, however there is nowhere these turbines can move to avoid impact. Turbine 69 has been relocated in the PPR, but its new position will have a greater impact on BGW than before.

### *Golden Sun Moth (GSM)*

*Conservation status in NSW: Endangered Ecological Community*

*Commonwealth status: Critically Endangered*

In our EIS submission, OEH requested further information so that we could assess whether the survey effort and timing had been appropriate. We did not request further survey. The RTS / PPR still does not provide sufficient information to determine whether the survey days at Jupiter aligned with active days at the reference sites. This information is required before an assessment can be made on the adequacy of the survey for this species.

### *Diuris aequalis*

OEH recommends that the entire development footprint should be surveyed for *Diuris aequalis*, including road reserves and transmission lines. We maintain our previous advice that it is inappropriate to rely on pre-clearance surveys for *D. aequalis* due to the narrow seasonal window suitable for survey. Detection of the species during construction will place considerable limitations on the schedule, and the species is difficult to offset.

We also reiterate our advice that *D. aequalis* may have been missed in threatened flora surveys which were confined to one year and some were likely to be too early to detect the species. Ideally orchid surveys should be undertaken over at least two years as a proportion of the population is dormant each year. 2017 appears to be a bad year for orchids, including *D. aequalis*, due to the dry conditions.

OEH recommends that all *D. aequalis* habitat be clearly marked and fenced off to ensure no inadvertent impact during construction.

### *Owls*

The additional information provided in the PPR about owl surveys clearly shows that Sooty Owl was not surveyed. The project area occurs within foraging distance of Sooty and Powerful Owl records. Habitat such as the large linear remnant forest is likely to provide suitable foraging habitat, yet it is surrounded on both sides by turbines – creating a high risk of collision for these species. The vegetation on the hilltop is higher than 750m asl, whereas the surrounding turbines are as low as 690-720m asl. RSA height is 47-173m, so this means that birds flying out of the tree canopy are at RSA and are virtually surrounded by turbines.

### *Raptors*

Autumn and winter raptor surveys must be undertaken prior to construction, for the BBAMP. Ideally these survey results would be available prior to determination and would contribute to the biodiversity constraint layer to inform the layout of the wind farm.

### *Waterbirds*

OEH recommends that more systematic and repeated waterbird surveys are undertaken as part of the baseline pre-construction work for the BBAMP, given the importance of regional habitat and the threatened species records on the site. Survey effort was poor at Lake George and Lake Bathurst and searching in farm dams was cursory and opportunistic.

The surveys for threatened and migratory waterbirds done to date did not adequately meet the DGRs related to the assessment. The DGRs required assessment of the impact of the Project on threatened and migratory waterbirds using Lake Bathurst and The Morass wetland areas, as well as any movements between Lake Bathurst and the nearby Lake George or other waterbodies in the region.

### *Hollow-bearing Trees (HBT)*

OEH notes that extra information has been provided on the HBTs near turbines, however HBTs have not yet been surveyed and mapped throughout the entire development footprint. This important habitat comprises a biodiversity constraint layer and should be an important input to planning the infrastructure layout. OEH strongly recommends that this information therefore be gathered and provided prior to determination.

The EIS repeatedly stated that turbines will cause alienation of adjacent habitat. This alienated habitat needs to be calculated and offset. The WTG setback analysis is essential to inform the placement of turbines.

### Impact calculation and offsetting

- OEH agrees with approach to use 15m wide road width to calculate 'upper clearing limit' and then to calculate a final impact area following construction.
- OEH is willing to be involved in the discussions regarding offsetting for alienated habitat within 100m of turbines, particularly for HBTs (as referred to in the report)
- Any vegetation subject to road-widening needs to be carefully surveyed and managed to avoid impacts to HBT and threatened species. Surveys need to be done in the correct season to determine if habitat occurs, and if so, impacts to threatened species must be avoided or minimised by undertaking work in the appropriate season.
- OEH acknowledges that a table has been provided containing data related to impacts of other wind farms, however we recommend that an analysis and discussion of cumulative impacts is required. This analysis should focus on the potential added pressure on at-risk species from this development, including potential barriers to movement for dispersive and migratory species, avoidance or alienation of scarce remnant vegetation, increased risk of blade-strike, particularly for large raptors and migratory species.
- A revised impact assessment (BBAM 2014) should be provided, based on the revised layout and 15m wide roads. This should include the required number of vegetation plots and updated credit calculations.

## Attachment 2 – Biodiversity impacts for each turbine in revised layout

WTG no	ecological constraint	Feb 2017 comment	PPR revised layout	OEH response Oct 2017
1	OK (has been moved >100m from edge of woodland habitat)	OK	Location Unchanged	OK
2 (moved)	turbines are surrounding remnant veg / GBC habitat, woodland birds	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG	Location Unchanged	maintain concerns about the location of turbines along the eastern and western edges of remnant veg
3		OK - has been moved out of forest. Any remaining forest/woodland habitat within 100m must be offset.	Location Unchanged	OK
4	close to GBC habitat	OK	Location Unchanged	OK
5		It would be better to move this turbine >100m from HBT/scattered trees which are important habitat for bats. OEH previously advised that this was likely to be GSM habitat, but no surveys or habitat assessment were done here (concerns about GSM surveys). At a minimum, woodland habitat within 100m must be offset	Location Unchanged	maintain concerns about the location of this turbine within densey scattered trees
6	close to GBC habitat and forested	Move > 100m from edge of intact forest, known to be TS habitat including foraging for GBC. Adjacent topography increases likelihood of blade-strike. All forest/woodland habitat within 100m must be offset.	Location Unchanged	maintain concerns about the proximity of this turbine to important forest veg - move more than 100m from forest edge
7	ridgeline	OK	Location Unchanged	OK
8	close to Diuris habitat	OK provided no impact to Diuris and woodland within 100m is offset.	Turbine Relocated <100m	Turbine has been moved closer to Diuris habitat so will have greater impact. Remove or relocate >100m from constraints
9 (moved)	woodland birds / turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG (has been moved but not far enough)	Turbine Relocated <100m	Relocation insignificant - maintain concerns about the location of turbines along the eastern and western edges of remnant veg
10	turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG	Turbine Relocated <100m	Relocation insignificant - maintain concerns about the location of turbines along the eastern and western edges of remnant veg
11	turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG	Location Unchanged	maintain concerns about the location of turbines along the eastern and western edges of remnant veg
12		OK	Location Unchanged	OK
13	GBC habitat, woodland birds	OK provided no removal of GBC habitat	Location Unchanged	OK provided no removal of GBC habitat
14		OK	Turbine Deleted	OK but not relevant to OEH advice

WTG no	ecological constraint	Feb 2017 comment	PPR revised layout	OEH response Oct 2017
15	EBB (prob), YBSB (prob)	OK	Turbine Deleted	OK but not relevant to OEH advice
16		OK	Turbine Deleted	OK but not relevant to OEH advice
17	EBB, YBSB (prob), GBNB (prob), EFP (prob)	OK	Turbine Deleted	OK but not relevant to OEH advice
18		OK	Turbine Deleted	OK but not relevant to OEH advice
19	TSC Snow Gum, koala habitat	Move >100m from edge of EEC woodland / koala habitat	Turbine Deleted	OK
20	close to Diuris habitat	OK provided no impact to Diuris and woodland within 100m is offset	Turbine Deleted	OK
21		OK	Turbine Deleted	OK but not relevant to OEH advice
22		OK - HBT within 100m must be offset	Turbine Relocated <100m	OK
23		OK	Turbine Deleted	OK but not relevant to OEH advice
24	GBC habitat, woodland birds / turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG	Location Unchanged	maintain concerns about the location of turbines along the eastern and western edges of remnant veg
25	SOWL within 6 km, EBB, WBNB, YBSB, EFP (prob)	OK	Turbine Deleted	OK but not relevant to OEH advice
26		OK	Location Unchanged	OK
27		OK	Location Unchanged	OK
28	Adjacent to remnant woodland containing GBC habitat, woodland birds / turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG	Turbine Relocated <100m	maintain concerns about the location of turbines along the eastern and western edges of remnant veg
29	EPBC & TSC BGW, Blue-billed ducks on dam, EBB, woodland birds	Remove. Very high biodiversity constraints and high-risk landscape position, surrounded by forested hills. (#1 priority)	Turbine Deleted	OK
30		OK	Location Unchanged	OK
31 (moved)	turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG	Location Unchanged	maintain concerns about the location of turbines along the eastern and western edges of remnant veg
32	EPBC & TSC BGW, adjacent forested ridge line	Move >100m from BGW EEC and forest edge. Adjacent topography increases likelihood of blade-strike.	Turbine Deleted	OK
33	EBB, WBNB, YBSB, EFP (prob)	OK	Turbine Deleted	OK but not relevant to OEH advice
34		OK	Location Unchanged	OK
35	EBB, EFP (prob)	OK - HBT within 100m must be offset	Turbine Deleted	OK
36		OK - HBT within 100m must be offset	Turbine Deleted	OK but not relevant to OEH advice

WTG no	ecological constraint	Feb 2017 comment	PPR revised layout	OEH response Oct 2017
37 (moved)	EPBC & TSC BGW, Leucochrysum habitat	Remove - impacts on EPBC & TSC BGW, Leucochrysum (has been moved into high constraint woodland (EEC / TS habitat)) OK provided no impact to Diuris and HBT within 100m are offset OK	Turbine Relocated <100m	Turbine should be removed - relocation has not reduced impact of turbine in the middle of EEC/EEC and TS habitat. There is no alternative turbine to move to that can avoid impacts OK provided no impact to Diuris habitat OK
38	close to Diuris habitat		Location Unchanged	
39			Location Unchanged	
40	close to EPBC & TSC BGW and Leucochrysum habitat, woodland birds	Remove. High risk to species moving through this N-S linear forest remnant habitat Remove. Surrounded by Glossy Black Cockatoo breeding habitat. Retain all trees with hollows of suitable size (>15 cm diameter entrance). Retain all foraging habitat. All woodland within 100m must be offset. Move >100m from woodland OK provided no impact to GBC habitat. All forest/woodland habitat within 100m must be offset OK OK	Turbine Relocated <100m	Turbine should be removed - relocation has not reduced impact as it is now in EEC/EEC and TS habitat. There is no alternative turbine to move to that can avoid impacts OK provided no removal of GBC habitat OK OK provided no removal of GBC habitat OK but not relevant to OEH advice OK but not relevant to OEH advice
41	GBC habitat		Location Unchanged	
42	TS - woodland birds		Turbine Deleted	
43	GBC habitat		Location Unchanged	
44			Turbine Relocated <100m	
45			Turbine Relocated <100m	
46	EEC within 100m	OK All HBT and forest/woodland habitat within 100m must be offset	Location Unchanged	OK
47	TSC Snow Gum, koala habitat, remnant forest, threatened bats all within 100m	Remove. High biodiversity constraints and high-risk landscape position, surrounded by forested hills. Remove. Surrounded by Glossy Black Cockatoo breeding habitat. Retain all trees with hollows of suitable size (>15 cm diameter entrance). Retain all foraging habitat. All woodland within 100m must be offset. OK OK	Turbine Deleted	OK OK provided no removal of GBC habitat OK
48	GBC habitat		Location Unchanged	OK provided no removal of GBC habitat OK
49			Location Unchanged	OK
50			Location Unchanged	OK

WTG no	ecological constraint	Feb 2017 comment	PPR revised layout	OEH response Oct 2017
51	GBC habitat	Remove. Surrounded by Glossy Black Cockatoo breeding habitat. Retain all trees with hollows of suitable size (>15 cm diameter entrance). Retain all foraging habitat. All woodland within 100m must be offset.	Turbine Deleted	OK
52	GBC habitat, POWL record within 10km	OK	Location Unchanged	OK
53		OK	Location Unchanged	OK
54		OK	Turbine Deleted	OK but not relevant to OEH advice
55	YBSB	OK - HBT within 100m must be offset.	Location Unchanged	OK
56		OK	Location Unchanged	OK
57		OK. All HBT and forest/woodland habitat within 100m must be offset	Location Unchanged	OK
58		OK	Location Unchanged	OK
59	turbines are surrounding remnant veg	Move away from edge of vegetated hills. High risk of alienation of habitat or blade-strike, especially in combination with other WTG. Farm dam within 100m high risk for waterbirds	Location Unchanged	maintain concerns about the location of turbines along the eastern and western edges of remnant veg
60	TSC Snow Gum, koala habitat, 100 WTNeedletails, GBC	Remove - too many ecological constraints. TSC Snow Gum, koala habitat, 100 WTNeedletails, GBC	Turbine Deleted	OK
61		OK	Turbine Deleted	OK but not relevant to OEH advice
62	TSC Snow Gum, koala habitat, remnant forest, threatened bats all within 100m	Remove. High biodiversity constraints and high-risk landscape position, surrounded by forested hills.	Turbine Deleted	OK
63	TSC Snow Gum, koala habitat, remnant forest, threatened bats all within 100m	Remove. High biodiversity constraints and high-risk landscape position, surrounded by forested hills.	Turbine Deleted	OK
64 (moved)		OK - HBT within 100m must be offset	Turbine Deleted	OK
65		OK - HBT within 100m must be offset	Turbine Deleted	OK but not relevant to OEH advice
66	EPBC & TSC BGW, Leucochrysum habitat, EBB, YBSB (prob), EFP (prob)	Remove - impacts on EPBC & TSC BGW, Leucochrysum. Has been moved but still problematic, poses design concern and high risk to species moving through this N-S remnant veg.	Turbine Deleted	OK
67	turbines are surrounding remnant veg	OK	Turbine Deleted	OK but not relevant to OEH advice
68	turbines are surrounding remnant veg	OK	Turbine Relocated <100m	OK but not relevant to OEH advice
69	EPBC & TSC BGW, Leucochrysum habitat	OK - has been moved but still within 100m of EEC/TS habitat which must be offset	Turbine Relocated <100m	Turbine has been moved further into BGW EEC/TEC so will have greater impact. Remove or relocate >100m from constraints

WTG no	ecological constraint	Feb 2017 comment	PPR revised layout	OEH response Oct 2017
70	YBSB, HBT	OK provided no impact to Diurns and woodland and HBT within 100m are offset	Location Unchanged	OK
71		OK provided no impact to Diurns and woodland and HBT within 100m are offset	Location Unchanged	OK
72	close to Diurns habitat	OK provided no impact to Diurns and woodland and HBT within 100m are offset	Location Unchanged	OK
73		OK	Turbine Relocated <100m	OK but not relevant to OEH advice
74		OK	Location Unchanged	OK
75		OK	Turbine Relocated <100m	OK but not relevant to OEH advice
76	GBC habitat, woodland birds	OK	Location Unchanged	OK
77	EBB, WBNB, YBSB, EFP (prob)	OK	Turbine Deleted	OK but not relevant to OEH advice
78	GBC habitat, woodland birds	Remove. Surrounded by Glossy Black Cockatoo breeding habitat. Retain all trees with hollows of suitable size (>15 cm diameter entrance). Retain all foraging habitat. All woodland within 100m must be offset.	Turbine Deleted	OK
79		OK	Turbine Deleted	OK but not relevant to OEH advice
80		OK	Location Unchanged	OK
81	GBC habitat, woodland birds	Remove. Surrounded by Glossy Black Cockatoo breeding habitat. Retain all trees with hollows of suitable size (>15 cm diameter entrance). Retain all foraging habitat. All woodland within 100m must be offset.	Turbine Deleted	OK
82		OK but all woodland within 100m must be offset	Turbine Deleted	OK
83		OK but all woodland within 100m must be offset	Turbine Relocated <100m	OK but not relevant to OEH advice
84		OK but all woodland within 100m must be offset	Location Unchanged	OK
85	EPBC & TSC BGW	Move >100m from BGW EEC and forest edge	Turbine Deleted	OK
86		OK	Location Unchanged	OK
87		OK	Location Unchanged	OK
88		OK	Turbine Deleted	OK but not relevant to OEH advice

ok	62
move	13
remove	13
total	88

40	ok
2	remove or relocate >100m from constraint - have been moved into high constraint
10	remove or relocate >100m from constraint - maintain concerns about high risk of layout



## **Attachment 3– Information on Aboriginal cultural heritage impacts of Jupiter Wind Farm**

OEH has reviewed the Jupiter Wind Farm Heritage Addendum – RTS and PPR prepared by ERM and dated September 2016, and Jupiter Wind Farm Cultural Heritage Assessment Report (CHAR), prepared by ERM and dated October 2016. We have the following concerns about the assessment of Aboriginal cultural heritage values.

### **Survey effort should include a micro-siting buffer**

All areas proposed to be impacted, including the transmission line and all wind turbines, should be surveyed to determine the effect of the project on Aboriginal cultural heritage. Also, all survey corridors should be 200m wide to allow for a 100m micro-siting radius. As the survey corridor in 2014 was only 30m wide previously surveyed areas will need further survey effort.

### **Subsurface impacts to Aboriginal cultural heritage**

Regardless of disturbance level, subsurface testing should be undertaken in archaeologically sensitive landforms where subsurface disturbance greater than 30cm will occur. Much of the project area has been assessed as having low potential for intact subsurface deposits because ploughing has disturbed the top 30cm of deposit. However, this does not take into account the potential impact of infrastructure such as turbine footings, which are 3m deep. Furthermore, disturbed sites are still protected as Aboriginal objects under the Act. The assessment should therefore consider the potential impact of turbine footings, electrical cabling and transmission lines on subsurface archaeological sites. Our areas of concern are the creeklines within the following survey units: SU1, SU7, SU9-SU9, SU12, SU17, SU19 and SU27. It should be noted that in some areas the survey units and proposed impacts may not be aligned. In these cases, our area of concern is not the creekline within the survey unit, but the adjacent impact area.

Within the Southern Tablelands there has been significant archaeological research into subsurface deposits within landforms impacted by agricultural practices such as ploughing. This has shown that the surface expression of artefact assemblages is not an accurate reflection of what is below the surface, and that in situ deposits may be present beneath the plough zone.

OEH considers any subsurface testing should occur at the environmental assessment stage to ensure an adequate understanding of the Aboriginal heritage values prior to Project approval. It also allows for the development of appropriate management measures before finalisation of the Project design. If significant deposits are located post approval it will be highly problematic for the proponent.

The recommendation for subsurface testing outlines that “significant archaeological deposits” may be subject to salvage excavation. The recommendations should include a clear definition of a high site density for this region, for example N artefacts per square metre. This section should also define the type of regional site characteristics that would be unusual enough to warrant salvage.

### **Mapping**

Survey effort should be mapped against the development footprint, all wind turbines should be clearly labelled. Landforms with the potential to contain subsurface deposits, regardless of disturbance, should also be mapped against the development footprint.

### **Addition of newly recorded Aboriginal sites to the AHIMS database**

Aboriginal site recording forms must be submitted to AHIMS for JWF1, JWF2 and JWF3, JWF PAD1 or JWF PAD2. This is a legal requirement under section 89A of the *National Parks and Wildlife Act 1974*.

### **Aboriginal community consultation process**

The details in the Aboriginal community consultation log in Annex A of the CHAR should be reviewed and updated because the details of stakeholders and dates under the Stage 1.4 lists are incorrect.

The Addendum Report dated September 2017 and CHAR, dated October 2016, must be sent to the Registered Aboriginal Parties (RAPs) for review and comment. It is not clear if this has happened. The RAPs must be given adequate opportunity to consider and comment on any changes to the project footprint.

OEH requests that copies of all correspondence between ERM and the RAPs is included in Annex A of the report.

### **Potential for burials**

The CHAR (ERM 2016: 37) should consider in greater detail the potential for burials to occur in the "alluvial soils that make up the PAs flood plain, creek and river terraces or found in crests and hill tops".

### **Aboriginal Cultural Heritage Management Plan (ACHMP)**

We support the preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP). This needs to be prepared by a qualified archaeologist in consultation with OEH and the RAPs. OEH recommends that the ACHMP is prepared sooner rather than later to assist with the management and mitigation measures for the PA.

The plan must include but not be limited to:

- a) Identifying and mapping the known Aboriginal objects or sites within the project area.
- b) describing the procedures of how known Aboriginal sites will be managed during the life of the Project including,
  - an outline of the management measures to avoid and protect sites that will not be impacted by the project activities through fencing and signage,
  - an outline of the mitigation measures for test excavations of PADs that will be impacted by the project,
  - details on the long term management of any excavated or salvaged objects.
- c) describing the procedures that would be implemented if any new Aboriginal objects are found at any stage during the life of the project,
- d) describing a contingency plan and reporting procedure should damage to Aboriginal objects or sites occur outside of the approved disturbance areas of the project area,
- e) detailing the procedures to be followed if any Aboriginal skeletal material is uncovered during the project and allow for the development of appropriate management measures, and
- f) outlining the process that will be followed for continuing consultation with the RAPs and OEH as required.



Nicole Brewer  
Team Leader  
Resource Assessments - Planning Services Division  
Department of Planning & Environment  
GPO Box 39  
SYDNEY NSW 2001

[Nicole.Brewer@planning.nsw.gov.au](mailto:Nicole.Brewer@planning.nsw.gov.au)

Dear Nicole

**Jupiter Wind Farm (SSD 6277)  
Response to Submissions & Preferred Project Report (RTS-PPR)**

I refer to your email dated 20 October 2017 inviting the Division of Resources & Geoscience (the Division) to provide comments on the Jupiter Wind Farm (SSD 6277) RTS-PPR (the Project) submitted by EPYC Pty Ltd on behalf of Jupiter Wind Farm Pty Ltd (the Proponent).

The Division has assessed the information provided by the Proponent in the RTS-PPR for the Project and advises that the issues raised previously in the EIS review have not been satisfactorily addressed by the Proponent.

For further advice in addressing outstanding matters please contact:  
Erin Foate, A/Senior Geoscientist  
(02) 4931 6697 or [landuse.minerals@industry.nsw.gov.au](mailto:landuse.minerals@industry.nsw.gov.au)

For enquiries regarding general Division projects please contact:  
Adam Banister, Senior Advisory Officer (Industry Coordination)  
(02) 4931 6439 or [industry.coordination@industry.nsw.gov.au](mailto:industry.coordination@industry.nsw.gov.au)

Yours sincerely

Matt Gagan  
**A/Manager Royalties & Advisory Services**  
7 November 2017



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30 October 2017

Contact: *Miles Ellis*  
Telephone: 98652502  
Our ref: *D2017/127635*

Nicole Brewer  
Team Leader  
Resource and Energy Assessments  
NSW Department of Planning & Environment  
GPO Box 39  
SYDNEY NSW 2001

Dear Ms Brewer

### **Jupiter Wind Farm (MP 13\_6277)**

Thank you for your email received 20 October 2017 seeking WaterNSW's comments on the Response to Submissions (RTS) report on the proposed Jupiter Wind Farm (MP 13\_3277).

WaterNSW has reviewed the RTS prepared by ERM on behalf of EPYC Pty Ltd (dated September 2017) and notes that while WaterNSW's concerns have been acknowledged, the proponent's responses varied as to how WaterNSW's comments have been taken into consideration as follows.

#### **NorBE Assessment**

The supplied NorBE Assessment is a print out from the NorBE Tool, which states that WaterNSW concurrence is required. For Part 4.1 State significant developments where the Minister for Planning is the consent authority, WaterNSW's concurrence is not required. The proponent has not addressed how the proposed development will achieve a neutral or beneficial effect on water quality pursuant to State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 (the SEPP).

#### **Current Recommended Practices**

The proponent has provided a blanket statement that the development will be undertaken in accordance with WaterNSW's current recommended practices (CRPs), yet there is no demonstration of such in the RTS. Clause 9 (2) of the SEPP states that if the development does not incorporate WaterNSW's CRPs then the consent authority (in this case, the Minister for Planning or its delegate) should be satisfied that the practice and performance standards proposed will achieve outcomes not less than WaterNSW's CRPs. This standard has not yet been demonstrated in the EIS or RTS.

WaterNSW request that it be consulted in the preparation of the Soil and Water Management Plan, including waterway crossings and design and siting of any on-site wastewater management system associated with the development prior to commencement of construction to ensure that the development can proceed to a level commensurate with WaterNSW's CRPs.

#### **Erosion Hazard**

The response to WaterNSW's concerns regarding potential interaction with dispersible and saline soil resulting in a moderate to high erosion hazard has only considered the erosion risk associated with the Wind Turbine construction pads, which are invariably flat and is based on a soil

landscapes map scale (i.e. does not account for local variability). WaterNSW's site inspection revealed evidence of salinity, and previous erosion and a significant amount of erosion control works in the development footprint.

WaterNSW would expect that the erosion hazard of land associated with other elements of the project e.g. access roads, batching plants, site compounds and substation be considered in the preparation of the Soil and Water Management Plan and in the design of detailed erosion and sediment control measures.

### **Existing Erosion Control Works**

WaterNSW appreciates the proponent's acknowledgement of the existence of erosion control works on the development site and its commitment to avoiding these works and repairing them if required.

### **Watercourse Crossings**

WaterNSW consider it is imperative that all watercourse crossings be identified and routes selected to minimise the number and impact of these crossings. All watercourse crossings will need careful engineering design and route choice selection to meet the requirements of the relevant CRP for unsealed road construction e.g. Managing Urban Stormwater – Soils and Construction – Volume 2C Unsealed Roads (DECC, 2008). WaterNSW expects that it will be consulted as to further design and construction of watercourse crossings in the preparation of Soil and Water Management Plan prior to construction.

### **Southern Access Road**

WaterNSW notes that the southern precinct has been removed from the scope of the project.

### **Appendix 1, Section 6.3**

This section has not been updated from the information available on the Department's website.

Water NSW would appreciate being notified when this application is determined.

If you wish to discuss this letter or the project more generally please do not hesitate to contact James Caddey on 48243401 or Miles Ellis on 98652502.



**MALCOLM HUGHES**  
**Manager Catchment Protection**



**Australian Government**

**Civil Aviation Safety Authority**

Air Navigation, Airspace and Aerodromes

File Ref: EF11/1146-14

20/11/2017

Ms Nicole Brewer  
Team Leader, Resource Assessments  
NSW Department of Planning  
GPO Box 39  
Sydney NSW 2001

Dear Ms Brewer

### **Jupiter Wind Farm**

Thank you for consulting us on the proposed Jupiter Wind Farm.

As you are aware, CASA was consulted by the proponent about the proposal and we provided a copy of our advice to NSW Planning in February 2017. I attach a copy of correspondence for the record.

We previously recommended the installation of obstacle lights consistent with NASF Guideline D and advised the proponent that the turbines that should be lit are those identified in the drawing '100503 Jupiter Wind Farm Obstacle Lighting Design v0.2 150823'.

We also advised that the proponent could consider the use of radar activated lighting systems as an alternative to standard obstacle lighting.

You have now advised that the number of turbines would be reduced from 88 to 54 and that the location of 14 of the remaining wind turbines would be varied from the original proposal. However there would be no change to the maximum height of 173m above ground level (AGL).

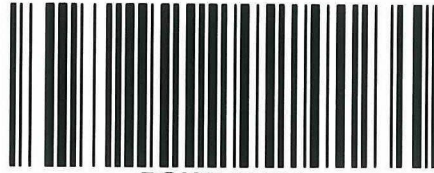
I can confirm that our recommendation remains that wind turbines at this site should be lit at night with steady red low intensity obstacle lights consistent with NASF Guideline D. NSW Planning may also like to consider the use of radar activated lighting systems as an alternative.

The actual number of wind turbines that should be lit depends on the layout and we note that the current layout is different to the original proposal. CASA is therefore prepared to examine a lighting plan based on the current layout and provide comments on its consistency with NASF Guideline D.

Yours sincerely,

A handwritten signature in black ink that reads 'A. Tiede'.

Andrew Tiede  
Manager



SF15/50631: DOC17/553775

Department of Planning & Environment  
Resource and Energy Assessments  
GPO Box 39  
SYDNEY NSW 2001



Attention: Nicole Brewer – Team Leader

Dear Ms Brewer

**Re: Jupiter Wind Farm Project – SSD 6277  
Response to Submissions and Amended Development Application**

I refer to your email of 20 October 2017, advising that the Department of Planning and Environment (DP&E) has received a Response to Submissions (RtS) and an amended Development Application (amended DA) from EPYC Pty Ltd for the Jupiter Wind Farm (SSD 6277). You requested in your email that the NSW Environment Protection Authority (EPA) provide any comments on the amended proposal, including advice on recommended conditions of consent.

It is understood that the amended development proposes a reduction in the total number of turbines, and minor changes to the location of a small number of turbines.

The EPA has reviewed the additional information as displayed on DP&E's major projects website. **Attachment A** provides commentary on the RtS and amended DA. **Attachment B** provides updated Recommended Conditions of Approval for noise which DP&E may wish to consider in any potential approval of the amended DA.

As advised in previous correspondence regarding this project, should approval be granted by DP&E the proponent will need to make a separate application to the EPA for an Environment Protection Licence prior to undertaking any construction works. Additional information on EPA licensing is available through the EPA's *Guide to Licensing* document: (<http://www.epa.nsw.gov.au/licensing/licenceguide.htm>).

Thank you for the opportunity to provide comment on this matter. Should you wish to discuss this matter further, please contact me or Michael Heinze on 02 6229 7002.

Yours sincerely

*Stefan Press. 09/11/17*

**STEFAN PRESS**  
**Acting Unit Head – South East Region**  
**NSW Environment Protection Authority**

**ATTACHMENT A**

**NSW EPA - Review and comments on Response to Submissions and Amended  
Development Application**

**Jupiter Wind Farm – SSD 6277**

**November 2017**

**1. Sector management mode**

The EPA notes that sector management or operating some turbines in a sound management mode could be used on selected wind turbines to enable otherwise non-compliant turbine models to meet the adopted noise criteria. Sound management mode means specific turbines always operate in a low noise operation mode whereas sector management means specific turbines would only operate in a low noise mode under certain meteorological conditions.

The EPA recommends that DPE should confirm with the proponent whether the project would remain financially viable if sector management mode was indeed required.

**2. Compliance monitoring**

The proponent must also provide the parameters and meteorological conditions which trigger the use of sound management and sector management modes and an auditable process by which compliance can be independently confirmed.



## ATTACHMENT B

### Revised recommended conditions for noise and blasting – Jupiter wind farm

#### Noise Limit Conditions

**L6.1** For wind speeds from cut in to rated power of the wind turbine generators, wind turbine noise generated from the premises must not exceed, at non-involved residential receivers, the greater of:

- a) 35 dBA or
- b) the existing background noise level plus 5 dBA for each integer wind speed at 110 metres above ground level (hub height) at the wind farm site.

**L6.2** For the purpose of determining compliance with condition L6.1, the locations and noise limits in the table below apply. The locations referred to in the table below are defined in condition L6.4.

Location	$L_{eq(10\text{minute})}$ NOISE LIMITS (dBA)												
Integer wind speed (m/s) at 110 metres above ground level	3 or less	4	5	6	7	8	9	10	11	12	13	14	15
J3, J60, J76, J76B, J152, J153, J154_DA_approved, J155, J221, J230A, J230B, J239, J244, J258, J259, J260, J261, J325, J339, J430_DA, J431	35	35	35	35	35	35	37	39	41	43	45	46	47
J142, J147, J148, J162_DA_Approved, J174A, J174B, J190, J193, J196, J214, J225, J234A, J234B, J246, J391, J396-(J205), J441(J242)	35	35	35	35	35	36	38	40	42	44	45	45	45
J141	35	35	35	35	35	36	38	40	42	44	46	48	49
J10, J19, J33, J65, J72_DA_approved, J93, J126, J126B, J130, J135, J156, J157, J158, J198, J257, J272, J394, J435_DA, J437-(J134)	35	35	35	35	36	37	39	40	41	41	41	41	41
J178, J416-(J83), J422, J423, J424, J425, J438(J83A)	35	35	35	35	36	38	40	41	42	43	43	43	43

J5, J15, J16, J23, J40, J43, J46, J58A, J58B, J63, J101, J116, J116A, J116B, J180, J181, J184, J185, J186, J186a, J188, J428- (J75A) J428-(J75B) J439-(J87) J440(J182)	35	35	35	35	37	39	41	43	44	45	45	45	45
J20, J85, J85B_DA	35	35	35	36	38	39	41	42	43	43	43	43	43
J26, J91, J97A, J97C, J127, J138, J139_DA J392-(J189)	35	35	35	36	38	40	42	43	45	45	45	45	45
J144, J145, J146	35	35	35	37	39	41	42	44	45	45	45	45	45
J191, J199, J208, J216, J217, J226, J235, J243, J243A, J247, J269	35	35	36	37	39	40	41	42	43	44	46	48	50
All other non-associated residences	The higher of 35 dBA or the existing background level (LA90(10minute)) plus 5 dB												

**L6.3** The noise limits specified in conditions L6.1 and L6.2 do not apply to any sensitive receiver location (residence) where a noise agreement is in place between the licensee and the respective land owner(s) in respect to noise impacts and/or noise limits.

**L6.4** For the purpose of condition L6.2, locations are defined in the table below. Grid references (eastings and northings) refer to the Map Grid of Australia 1994 (MGA94), zone 55.

Location	Easting (m)	Northing (m)
J3	745692	6110374
J60	744900	6111980
J76	745945	6110174
J76B	745980	6110265
J152	746501	6110413
J153	746929	6110488
J154_DA_approved	747123	6111182
J155	746531	6111097
J221	747589	6110421
J230A	747497	6110096
J230B	747576	6110176
J239	747310	6111056
J244	747474	6110737
J258	748378	6110125
J259	748543	6109461

<b>Location</b>	<b>Easting (m)</b>	<b>Northing (m)</b>
J260	748830	6109539
J261	748934	6109094
J325	748072	6110022
J339	748099	6110871
J430_DA	746227	6111519
J431	746287	6111475
J142	746010	6104388
J147	746447	6104325
J148	746014	6104219
J162_DA_Approved	748557	6101408
J174A	748193	6102321
J174B	748387	6102234
J190	748027	6103988
J193	749399	6103723
J196	749286	6103448
J214	749543	6103681
J225	749681	6103552
J234A	747774	6103681
J234B	747601	6103861
J246	750199	6102261
J391	749662	6102960
J396-(J205)	750518	6102128
J441(J242)	748511	6103740
J141	746551	6103871
J10	740571	6109368
J19	740894	6109882
J33	740791	6110997
J65	740496	6110573
J72_DA_approved	740061	6108313
J93	740797	6110817
J126	740993	6111981
J126B	741615	6111462
J130	741215	6110328
J135	741319	6110706
J156	741685	6111844
J157	741703	6112262

Location	Easting (m)	Northing (m)
J158	741673	6112940
J198	741265	6112270
J257	741556	6110433
J272	740583	6110244
J394	740575	6111681
J435_DA	741073	6110105
J437-(J134)	741536	6110624
J178	742061	6099366
J416-(J83)	742930	6096592
J422	741808	6098273
J423	741244	6098128
J424	741606	6098909
J425	741737	6098901
J438(J83A)	742663	6096728
J5	742375	6102772
J15	741405	6101319
J16	743867	6104375
J23	741018	6101963
J40	744089	6104771
J43	741925	6103019
J46	741729	6102476
J58A	741335	6103449
J58B	741388	6103527
J63	741203	6103106
J101	741845	6103423
J116	740672	6100974
J116A	742069	6102101
J116B	742116	6101885
J180	740996	6100757
J181	742108	6102518
J184	741451	6100095
J185	741591	6100736
J186	742063	6102778
J186a	742040	6102828
J188	741550	6102968
J428-(J75A)	742333	6104756

Location	Easting (m)	Northing (m)
J428-(J75B)	742283	6104697
J439-(J87)	742702	6105043
J440(J182)	741088	6100167
J20	742740	6102263
J85	742574	6102275
J85B_DA	742626	6102356
J26	741183	6107638
J91	740881	6108236
J97A	741336	6105789
J97C	741204	6105879
J127	741047	6106970
J138	742295	6107519
J139_DA	741292	6107157
J392-(J189)	742308	6107841
J144	746494	6104799
J145	745726	6105138
J146	746184	6104994
J191	746118	6096795
J199	746012	6097947
J208	745869	6099526
J216	744854	6099403
J217	745680	6099319
J226	745401	6099419
J235	745302	6099055
J243	745411	6098303
J243A	745358	6098308
J247	745265	6098403
J269	746899	6097757

**L6.5** For the purpose of condition L6.1, noise must be determined in accordance with the methodology in the *Environmental Noise Guidelines: Wind Farms* (SA EPA 2009). The modification factors in Section 4 of those guidelines must be applied, as modified by the NSW Wind Energy: Noise Assessment Bulletin For State significant wind energy development (2016), to the noise levels measured by the noise monitoring equipment.

**L6.6** For the purpose of condition L6.5, the presence of excessive tonality (a special noise characteristic) must be determined in accordance with ISO 1996.2:2007 *Acoustics - Description, measurement and assessment of environmental noise - Determination of environmental noise levels*.

If tonality is found to be a repeated characteristic of the wind turbine noise, 5 dBA should be added to measured noise level from the wind farm. If tonality is only identified for certain wind directions and speeds, the penalty is only applicable under these conditions.

The tonal characteristic penalty applies only if the tone from the wind turbine is audible at the relevant receiver. Absence of tone in noise emissions measured at an intermediate location is sufficient proof that the tone at the receiver is not associated with the wind farm's operation.

The assessment for tonality should only be made for frequencies of concern from 25 Hz to 10 kHz and for sound pressure levels above the threshold of hearing (as defined in ISO 389.7:2005 *Acoustics - Reference zero for the calibration of audiometric equipment - Part 7: Reference threshold of hearing under free-field and diffuse-field listening conditions*).

For the purposes of condition L6.5, the presence of excessive low frequency noise (a special noise characteristic) must be determined with reference to the NSW Wind Energy: Noise Assessment Bulletin For State significant wind energy development (2016).

The maximum penalty to be added to the measured noise level from the wind farm for any special noise characteristic individually or cumulatively is 5 dB(A).

**L6.7** For the purposes of condition L6.1, wind speed is to be measured directly in accordance with a method nominated by the proponent and at a location nominated by the proponent, consistent with the method and location used to determine the background noise regression curves in the Noise Impact Assessment.

**L6.8** To determine compliance:

- a) with the  $L_{eq(10\text{ minute})}$  noise limits in conditions L6.1 and L6.2, the noise measurement equipment must be located:
  - approximately on the property boundary, where any dwelling is situated 20 metres or less from the property boundary closest to the premises; or
  - within 20 metres of a dwelling façade, but not closer than 5m, where any dwelling on the property is situated more than 20 metres from the property boundary closest to the premises.
- b) with the noise limits in conditions L6.1 and L6.2, the noise measurement equipment must be located:
  - at the most affected point at a location where there is no dwelling at the location; or
  - at the most affected point within an area at a location prescribed by condition L6.8(a).

**L6.9** A non-compliance of condition L6.1 or L6.2 will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- at a location other than an area prescribed by conditions L6.8(a) and L6.8(b); and/or
- at a point other than the most affected point at a location.

### **Blasting Conditions**

**L7.1** The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any

monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

- L7.2** The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.3** Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.4** Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.5** Blasting at the premises may only take place between 9:00am-5:00pm Monday to Friday. Blasting is not permitted on public holidays.
- L7.6** Blasting outside of the hours specified in L7.5 can only take place with the written approval of the EPA.
- L7.7** The airblast overpressure and ground vibration levels in conditions L7.1 to L7.4 do not apply at noise sensitive locations that are owned by the licensee or subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and land owner.

#### **Additions to Definition of Terms of the licence**

- Noise – ‘sound pressure levels’ for the purposes of conditions L6.1 to L6.9.
- “Noise sensitive locations” includes buildings used as a residence, hospital, school, child care centre, places of public worship and nursing homes. A noise sensitive location includes the land within 30 metres of the building.

## **RECOMMENDED CONDITIONS FOR ANY PROJECT APPROVAL**

### **Pre-commissioning validation monitoring**

If any wind turbine is operated before the project commences operation, then the proponent must perform a compliance test on each one of those turbines within three months of it coming in to operation.

### **Operational Noise Monitoring**

The Applicant must prepare a Noise Compliance Strategy which must be submitted to and approved by the Secretary prior to commissioning of the wind turbines. The Noise Compliance Strategy must describe the process by which any noise management modes or sector management can be verified and outline how the noise criteria will be achieved.

Within 3 months of the commencement of operations (or the commencement of operation of a cluster of turbines, if the development is to be staged), the Applicant must:

- a) undertake noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and
- b) submit a copy of the monitoring results to the Department and the EPA.

The Applicant must undertake further noise monitoring of the development if required by the Secretary.

### **Mode checking**

Before using sector management or a noise management mode for any operational wind turbine, the proponent must provide a method by which the Department of Planning and Environment, EPA and community can easily verify that each wind turbine is operating in the correct mode at any time.

### **Noise Management Plan**

Prior to commissioning of the turbines, the Proponent must prepare and implement a Noise Management Plan to manage noise emissions from the operation of the project. The Plan must include, but not necessarily be limited to:

- a) compliance monitoring within one year of commissioning, in accordance with the *Environmental Noise Guidelines: Wind Farms* (SA EPA 2009)
- b) procedures to certify noise
- c) identification and implementation of best practice management techniques for minimisation of noise emissions where reasonable and feasible
- d) measures to be undertaken to rectify annoying characteristics resulting from the operation of the project such as excessive low frequency noise, excessive tonality or adverse mechanical noise from component failure
- e) procedures and corrective actions to be undertaken if non-compliance is detected.

### **Recommended Construction Hours**

Construction must only take place within the hours of 7:00am to 6:00pm Monday to Friday, 8:00am to 1:00pm Saturday. No construction may take place on Sundays or Public Holidays.

### **Exceptions to construction hours**

The following activities may be carried out outside the recommended construction hours:

- a) construction that causes  $L_{Aeq(15\text{minute})}$  noise levels that are:
  - i. no more than 5dB above Rating Background Level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009); and
  - ii. no more than the Noise Management Levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses; or



- b) for the delivery of materials required by the police or other authorities for safety reasons; or
- c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
- d) as approved through the process outlined in "Variation of construction hours" of this approval.

### **Variation of construction hours**

The hours of construction activities specified under "Exceptions to construction hours" d) of this approval may be varied with the prior written approval of the Secretary. Any request to alter the hours of construction shall be:

- a) considered on a case-by-case or activity-specific basis
- b) accompanied by details of the nature and justification for activities to be conducted during the varied construction hours
- c) accompanied by written evidence that appropriate consultation with potentially affected sensitive receivers and notification of relevant Council(s) (and other relevant agencies) has been and will be undertaken
- d) all feasible and reasonable noise mitigation measures have been put in place
- e) accompanied by a noise impact assessment consistent with the requirements of the *Interim Construction Noise Guideline* (DECCW, 2009).

### **Construction Noise Management Plan**

The proponent must prepare and implement a detailed construction noise management plan, prior to commencement of construction activities, including but not necessarily limited to:

- a) identification of each work area, site compound and access route (both private and public)
- b) identification of the specific activities that will be carried out and associated noise sources at the premises and access routes
- c) identification of all potentially affected sensitive receivers
- d) the construction noise and vibration objectives identified in accordance with the *Interim Construction Noise Guideline* and *Assessing Vibration: A Technical Guideline*
- e) assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in (d)
- f) where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts
- g) description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction.



OUT17/42621

Ms Nicole Brewer  
Resource and Energy Assessments  
NSW Department of Planning and Environment

Nicole.brewer@planning.nsw.gov.au

Dear Ms Brewer

**Jupiter Wind Farm (SSD 6277)  
Comment on the Response to Submissions (RTS)**

I refer to your email of 20 October 2017 to the Department of Industry in respect to the above matter. Comment has been sought from relevant branches of Crown Lands & Water and Department of Primary Industries.

Any further referrals to Department of Industry can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

The department has reviewed the RTS and, in addition to comments made previously, provides the following recommendations:

- The proponent should consult with Crown Lands & Water ([water.referrals@dpi.nsw.gov.au](mailto:water.referrals@dpi.nsw.gov.au)) in the event:
  - The proponent is required to adopt alternative water supply solutions to the preferred provision by commercial tankers
  - Groundwater will be encountered

Yours sincerely

Alison Collaros  
**A/Director, Planning Policy & Assessment Advice**  
9 November 2017

*Planning Policy and Assessment Advice appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here: <https://goo.gl/o8TXWz>*

NSW Department of Planning and Environment  
Resource Assessments: Planning Services  
Attention: Nicole Brewer  
GPO Box 39  
SYDNEY NSW 2001

Dear Nicole

**Re: Jupiter Wind Farm, Application No. SSD 6277 – Response to Submissions and Preferred Project Report**

I refer to your email dated 20 October 2017 regarding the exhibition of the Response to Submissions for the Jupiter Wind Farm, and the Preferred Project Report which outlines the basis of an amended development application received by EPYC Pty Ltd for the following:

- Reduction in number of wind turbines proposed from 88 to 54;
- Removal of previously identified Southern Precinct;
- Minor changes to the location of 14 turbines to further reduce impact of the amended development proposal;
- Reduction of area covered by the proposal from 4999 Ha to 4135 Ha.

Our former position in relation to the proposed development remains unchanged. That is, provided the proposed development complies with the recommendations of the Environmental Impact Statement, including the development of and adherence to comprehensive Construction Environmental Management Plans and Operational Environmental Plans, as long as meeting the requirements of the Draft NSW Planning Guidelines: Wind Farms, this office would have no objection to the proposed development as amended.

It is confirmed that the residual issue remains surrounding the provision of a private water supply to the operations and maintenance building, and the need to comply with the requirements of the *Public Health Act 2010*, and *Public Health Regulation 2012*. In this regard, it remains a recommendation that the following conditions are applied to any approval determination of this application:

- The applicant must demonstrate that the drinking water supplied to the site will consistently meet the Australian Drinking Water Guideline requirements; and
- The applicant must develop and adhere to a Quality Assurance Program, prepared in accordance with the requirements of the *Public Health Act 2010*, and *Public Health Regulations 2012*.



Should you have any further queries regarding this matter, please do not hesitate to contact me on (02) 4824 1842.

Yours sincerely

Tabitha Holliday  
**Environmental Health Officer**  
**Public Health Unit**

2 November 2017



Our Ref: STH12/00092/05  
Contact: Kristian Pinochet 4221 2580  
Your Ref: SSD6277



**Transport**  
Roads & Maritime  
Services

30 October 2017

Nicole Brewer  
Department of Planning & Environment  
BY EMAIL: [information@planning.nsw.gov.au](mailto:information@planning.nsw.gov.au)

## **STATE SIGNIFICANT DEVELOPMENT (SSD) 6277 – JUPITER WIND FARM**

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Dear Madam

Roads and Maritime Services (RMS) refers to your correspondence dated 20 October 2017 regarding the subject development application.

RMS has reviewed the information provided and will not object to the development application subject to the following comments being included in the conditions of development consent:

- Prior to the issuing of the construction certificate, the developer shall enter into a Works Authorisation Deed (WAD) with the RMS for all works on Goulburn-Braidwood Road.
- RMS will be exercising its powers under Section 64 of the Roads Act, 1993 to become the roads authority for works on Goulburn-Braidwood Road. Given this, Section 138 consent under the Roads Act, 1993 shall be obtained from the RMS prior to construction.
- All roadworks, traffic control facilities and other works associated with this development, including any modifications required to meet RMS standards, will be at no cost to RMS. All works shall be completed prior to occupation.
- All roadworks and traffic control facilities on classified roads must be undertaken by a pre-qualified contractor. A copy of pre-qualified contractors can be found on the RMS website at:  
<http://www.rta.nsw.gov.au/doingbusinesswithus/tenderscontracts/prequalifiedcontractors.html>

### *Site specific works*

- RMS will not permit the installation of transmission lines within the road reserve. All transverse transmission line crossings over Goulburn-Braidwood Road shall be designed in accordance with relevant standards and to the satisfaction of RMS.
- RMS will permit two access points on Goulburn-Braidwood Road to the project area, as shown in Figure 3.1 of the attached Transport Impact Assessment. The accesses will need to be upgraded to BAR/BAL turn treatments, and completed prior to onsite construction, or as agreed to by RMS.

### **Roads & Maritime Services**

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- All roadworks on classified roads shall be designed in accordance with Austroads *Guide to Road Design – Part 4a: Unsignalised and Signalised Intersections* and Austroads *Guide to Road Design – Part 4: Intersections and Crossings General* and RMS supplements.
- The developer shall apply for, and obtain a Road Occupancy Licence (ROL) from the RMS Traffic Operations Unit (TOU) prior to commencing roadworks on a State Road or any other works that impact a travel lane of a State Road or impact the operation of traffic signals on any road. The application will require a Traffic Management Plan (TMP) to be prepared by a person who is certified to prepare Traffic Control Plans. Should the TMP require a reduction of the speed limit, a Speed Zone Authorisation will also be required from the TOU. The developer shall submit the ROL application 10 business days prior to commencing work. It should be noted that receiving an approval for the ROL within this 10 business day period is dependant upon RMS receiving an accurate and compliant TMP.

Note: An approved ROL does not constitute an approval to commence works until an authorisation letter for the works has been issued by RMS Project Manager.

#### *Transportation of oversize or over mass loads*

- Prior to transporting any oversized or over mass loads, the applicant shall obtain a permit for an oversized and over mass load from the RMS Special Permits Unit in Glen Innes. The contact number is 1300 656 371.

It should be noted that the issue of a Special Permit may be subject to route and bridge assessment/s if deemed necessary by the RMS Special Permits Unit. While the TIS has considered the length, width, height and turning radius requirements for overdimensional loads/vehicles, no details have been given as to the expected weight of loads or axle loadings for the overdimensional movements. The maximum weight of loads associated with the subject development to be moved should be specified in the TIS.

- The Traffic Management Plan (TMP) shall be developed in consultation with RMS Southern Traffic Operations Unit, Queanbeyan Palerang Regional Council and Goulburn Mulwaree Councils' Local Traffic Committees (LTCs). The TMP (and associated Traffic Control Plans) shall be submitted to the Queanbeyan Palerang Regional Council and Goulburn Mulwaree Councils' LTC for final acceptance.
- A copy of the accepted TMP shall be forwarded to RMS (via [development.southern@rms.nsw.gov.au](mailto:development.southern@rms.nsw.gov.au)) prior to any transportation occurring or works commencing on site for this development.
- Concept plans for all roadworks on classified roads identified as part of the accepted TMP shall be submitted to RMS for acceptance of the treatment type (via [development.southern@rms.nsw.gov.au](mailto:development.southern@rms.nsw.gov.au)).
- Should the TMP identify further construction works required on any State classified roads, RMS approval will be required and may require the developer to enter into a Works Authorisation Deed (WAD) with RMS. The WAD would manage the design and construction of the works. If physical construction works on any State classified roads are identified, the details shall be forwarded to RMS for consideration in the first instance (via [development.southern@rms.nsw.gov.au](mailto:development.southern@rms.nsw.gov.au)).

Conditions of development consent relating to road work, traffic control facilities and other structures on the classified road network contrary to those outlined above are unlikely to receive RMS consent under the Roads Act, 1993.

RMS highlights that in determining the State significant development application under Part 4 of the Environmental Planning and Assessment Act, 1979, it is the consent authority's responsibility to consider the environmental impacts of any road works which are ancillary to the development. This includes any works which form part of the proposal and/or any works which are

**Roads & Maritime Services**

deemed necessary to include as requirements in the conditions of development consent. Depending on the level of environmental assessment undertaken to date and nature of the works, the consent authority may require the developer to undertake further environmental assessment for any ancillary road works.

It is requested that the Department of Planning and Infrastructure advise the applicant that conditions of development consent do not guarantee RMS final consent to the specific road work, traffic control facilities and other structures and works on the classified road network. In this regard, prior to undertaking any such work, the applicant is required to submit detailed design plans and all relevant additional information prior to commencing work on the State road network. The developer will need to pay all RMS fees and charges associated with works. In the first instance, to progress the post consent process, the applicant should email the conditions of development consent to: [development.southern@rms.nsw.gov.au](mailto:development.southern@rms.nsw.gov.au)

Upon the determination of this matter, it would be appreciated if the Department could forward a copy of the Notice of Determination to RMS within the appellant period for advice and consideration.

Yours faithfully



Joanne Parrott  
Network & Safety Manager  
Network Management, Southern Region