



Office of Environment & Heritage

Your reference: MP07_0118 MOD 1
Our reference: DOC 14/44274
Contact: Virginia Thomas 6229 7105

Attention: Toby Philp

Ms Diane Sarkies
Senior Planner, Energy
Planning and Infrastructure
GPO Box 39 Sydney NSW 2001

Dear Ms Sarkies

RE: Gullen Range Wind Farm – MOD 1.

Thank you for your letter, received by email on 3 April 2014, requesting a submission from the Office of Environment and Heritage (OEH) on Modification 1 to the Gullen Range Wind Farm. OEH provides the following comments on the Modification report (MOD 1), in relation to biodiversity and Aboriginal heritage.

OEH notes that the modification seeks endorsement for the relocation of 69 of the 73 approved wind turbines between 1 and 187m from their approved locations. OEH considers that there is little scope for objection considering all turbine footings have been constructed and 58 turbines have already been erected.

Biodiversity

OEH is unable to fully assess the biodiversity implications of the MOD 1 report until a comprehensive map (or series of maps) is received from the proponent (as requested by Planning and Infrastructure on 30/4/14). This map must show correct boundaries and locations for all Endangered Ecological Communities (EECs), threatened fauna records and threatened fauna habitat (and buffers), and the PVP offset area, in relation to the changes in turbine locations and infrastructure.

Of particular concern to OEH is the discrepancy in the mapping and descriptions of vegetation, particularly EECs, within the development footprint and offset area in the MOD 1 report compared to other documents previously provided to us on Gullen Range Wind Farm, such as:

- Compensatory Habitat Package (GR-PM-PLN-0014) – ngenvironmental 2012;
- Bird and Bat Management Plan (GR-PM-PLN-0012) – ngenvironmental 2012; and
- Powerful Owl Management Strategy (GR-PM-PLN-013) - ngenvironmental 2012.

Attachment 1 provides further details on differences in descriptions, extents and mapped information.

In summary, OEH is concerned that the vegetation mapping and analysis that was provided in the EA and CHP may have been flawed, potentially leading to flawed

management decisions. For example, the Compensatory Habitat Package (CHP) report describes a considerably larger extent and higher quality of Box Gum Woodland EEC within the proposed offset than the MOD 1 report which describes extensive "*degradation by infestation with Serrated Tussock*" (p. 115). Two field visits to the Gullen Range Wind Farm by OEH staff in July 2013 and January 2014 confirm that the proposed offset contains a highly degraded area with extensive serrated tussock. The CHP states "A '*like for better*' offset is provided given the large areas of EEC and threatened species habitat to be protected and the provision of landscape connectivity that the proposed offset site provides" (p.22) (see **Attachment 1** for further discussion). Of further concern to OEH is the construction of two turbines and associated roads and cables within the offset area.

When all the requested information has been provided by the proponent, OEH will provide further advice on mitigation of impacts of MOD 1. OEH also strongly recommends that the validity of vegetation mapping in the offset site be examined and proposes to participate in further discussion on the Compensatory Habitat Package with the proponent.

Aboriginal heritage

OEH advised that it is currently unable to consider the full implications of the MOD 1 report on Aboriginal cultural heritage matters as no detailed information relating to the salvage activities that were, according to the MOD 1 report, undertaken in September 2012 have been forwarded to OEH.

OEH therefore requests clarification regarding statements in the Executive Summary of the MOD 1 report (page 16) and EMM report dated 25 February 2014 (Appendix 6), which outline that the salvage collection was conservative, extended beyond the project footprint and encompassed the area of final design locations. Specifically;

Which sites were salvaged and subsequently impacted by project turbines and infrastructure?

A report on the results of the salvage activities should be provided to OEH in order for site records to be updated in the Aboriginal Heritage Information Management System (AHIMS). OEH notes that there is a reference to another EMM report dated 2012, on page 2 of the EMM report in Appendix 6, but there is no subsequent full reference to this report name.

Currently the status for the Aboriginal sites recorded for the Gullen Range Wind Farm remain valid on AHIMS. OEH advises that Aboriginal Site Impact Recording (ASIR) Forms for each Aboriginal site that has been impacted must be submitted to ensure AHIMS data can be updated. Copies of the ASIR forms are available on the OEH website

at:
<http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf>

OEH notes the comment, on page 8 of the 2014 EMM report, regarding the datum being used by AHIMS may be incorrect. OEH request advice as to whether EMM have formally advised the AHIMS Registrar of this issue? If information such as this is not forwarded then details cannot be updated so as to ensure that site locations are correct.

Why was the salvage extended beyond the project footprint?

OEH believes that salvage activities should have been restricted to only those areas where Aboriginal objects were to be impacted by the development. If objects were

not to be impacted by the project they should not have been collected without justification.

What has happened to the Aboriginal objects that were salvaged/ collected?

OEH advises that it is a legal requirement under the *National Parks and Wildlife Act 1974* that Aboriginal objects transferred to Aboriginal people for safe keeping must be undertaken under a section 85A Care Agreement. This requirement was outlined in Statement of Commitments under No. 28.

Further to the EMM report, dated 25 February 2014, (Appendix 6) OEH requests further clarification on the Figures 2-4 whereby:

There are a number of sites listed on the Figures that are not adequately defined in the Key, i.e. B10/1, P11/1 or G13/1. Are these the sites where objects were not subsequently located during the 2012 salvage activities?

It appears that some sites, according to the Key, have been collected but they appear to be a fair distance from actual turbine locations i.e. K21/1, K22/1 and G17/1. Why were these sites salvaged when they appears to be located some distance away from either the approved turbines or final turbine locations?

Where are the sites B5/3 and B5/4 on Figure 2 or P8/1 on Figure 3? Are they under a proposed turbine location?

Are the turbine locations on Figures 2-4 the proposed/ approved or final/ already constructed locations?

OEH notes that on page 87 of the MOD 1 report it is stated that OEH was a critical review organisation during development and approval of the Aboriginal Heritage Management Plan (AHMP). OEH advises however, that it has not previously been provided with a copy of the AHMP. As such, in order to assist with providing comments on the MOD 1 report, OEH requested and received a copy of the AHMP for Gullen Range Wind Farm, dated March 2012 and prepared by nghenvironmental, via Planning and Infrastructure on 30 April 2014.

If you require any further advice on biodiversity matters, please contact Virginia Thomas at virginia.thomas@environment.nsw.gov.au or the telephone number above, and for further advice on Aboriginal heritage matters, please contact Jackie Taylor at jackie.taylor@environment.nsw.gov.au.

Yours sincerely

 2/5/14

ALLISON TREWEEK
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OFFICE OF ENVIRONMENT AND HERITAGE

Attachment 1 – Further detail on biodiversity issues.

Offset / Compensatory Habitat Package

OEH seeks clarification as to why the vegetation mapping in the Compensatory Habitat Package (CHP) report (see **FIGURE 1**) shows considerably more Box Gum Woodland EEC within the proposed offset than the maps in the MOD 1 report (**FIGURE 2** and **FIGURE 3**). OEH requests that the proponent provide further information and clarification of the vegetation in the offset area. The CHP report states that the offset site comprises approximately 39.28 ha of “*mostly densely forested vegetation*” (p. 16) including 26.73 ha of Apple Box – Yellow Box Woodland and derived grassland EEC and 12.55 ha of Broad-leaf Peppermint – Brittle Gum Forest. These figures indicate that nearly 70% of the offset area is EEC.

The CHP report described the EEC in the offset area as generally “*in reasonable condition with an intact overstorey and mostly native understorey (although low diversity)*” (p.16). The figures quoted on p.14 (23.89ha woodland and 12.55 ha forest) indicate that over 90% of the offset area is treed.

Description of the offset area in the CHP

“A small area (0.55 ha) of Narrow-leaf Peppermint Forest which is listed as Tablelands Basalt Forest under the TSC Act will be permanently removed by the development. This vegetation type is not represented within the offset site. The offset therefore fails to provide a “like for like” offset, however given the relatively large area of Apple Box – Yellow Box Woodland in relatively good condition to be conserved compared to the total area (1.08 ha) of mostly degraded EEC (Box Gum Woodland and Tablelands Basalt Forest) to be permanently removed (a 25:1 ratio) the offset is considered to provide a “like for better” conservation outcome. Further, the proposed offset site provides one consolidated area of vegetation which will minimise edge effects and improve management outcomes. This also provides a ‘like for better’ outcome as areas to be impacted by the development are disjunct and vulnerable to further degradation. (p.16)

The proposed offset site provides good conservation outcomes in terms of providing habitat for species and communities of conservation significance and protecting a valuable habitat link in a highly fragmented landscape. The overall offset ratio of 3.2:1 exceeds the required 2:1 ratio and although an exact ‘like for like’ offset is not proposed the site is considered to provide a ‘like for better’ offset considering the large areas of EEC and continuous forest/woodland habitat to be protected”. (p17)

OEH considers that these assertions of “like for better” are incorrect. OEH notes that the approval from Planning & Infrastructure for the CHP was granted in September 2012 “*subject to inclusion of a plan indicating the final infrastructure layout as it relates to the proposed conservation area*”. OEH requests a copy of that map.

There is no mention in the CHP report of turbines or infrastructure being constructed within the offset area. The Map included in the CHP indicates the turbines are right on the edge of the compensatory habitat area, however no roads or other infrastructure are shown within the area. The MOD 1 report indicates that two turbines (POM_06 and POM_07) and associated infrastructure have been constructed within the offset area. POM_06 has been moved into a patch of “degraded Box Gum Woodland EEC”. The MOD 1 report states: “*the constraints mapping is designed to protect the viability of the overstorey vegetation which in this location is sparse*”, and yet a tree was removed in this area of EEC to reposition the turbine 57m from the approved location. The report also states “*due to an error in GIS mapping, the location of POM_06 was not identified by the Principal Contractor, as being within an area of EEC. At the time of construction the ecologist did not identify the area as an EEC due to the extent of the degradation by infestation with Serrated Tussock.*” OEH seeks clarification of how this happened within the offset area, given the offset had been mapped as 70% EEC. OEH has identified that

the offset area indicated in the CHP appears to have a significantly different boundary than the area indicated in the MOD 1 as the offset area. OEH therefore requests clarification why the boundaries were altered and turbines placed in the Offset area.

FIGURE 1

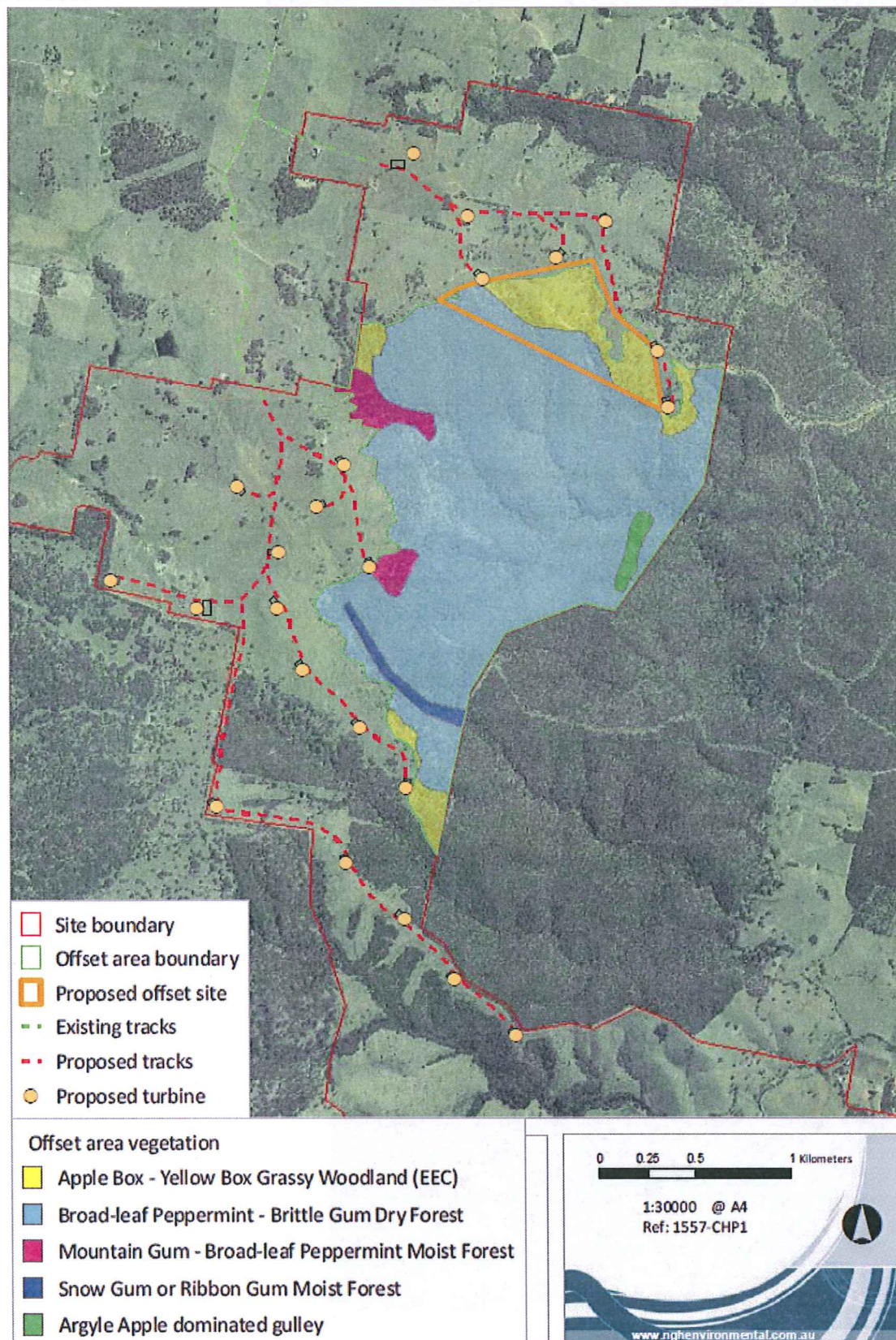
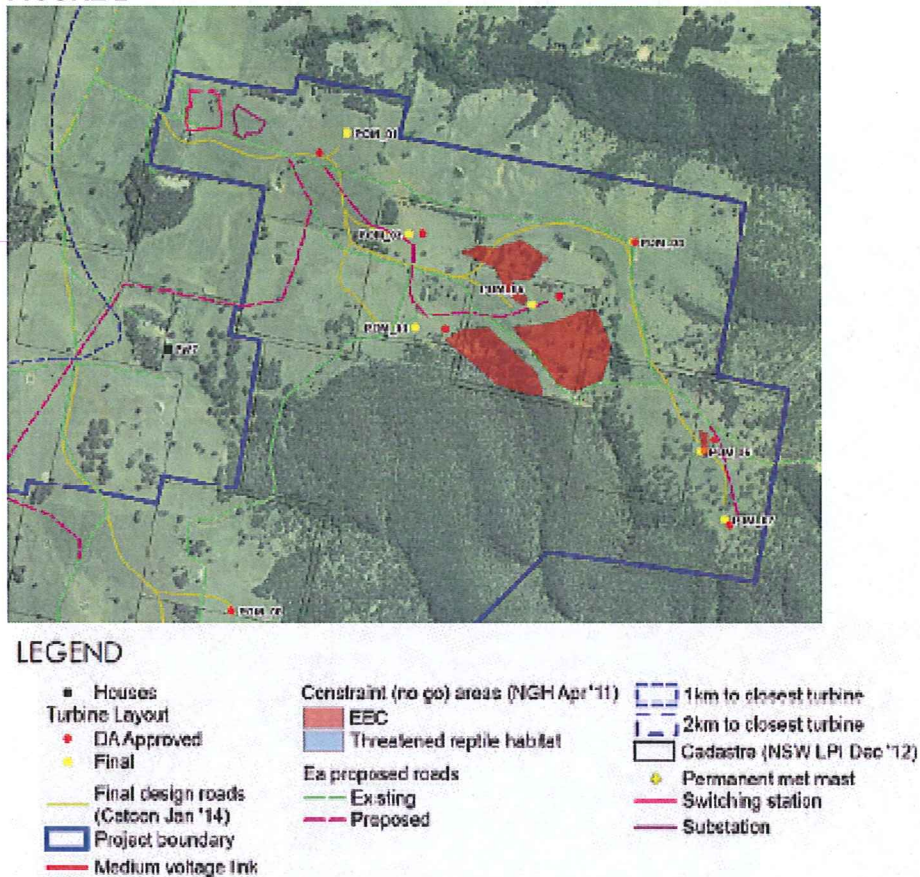


Figure 4-1 Vegetation types within the designated offset area and proposed offset site
(Compensatory Habitat Package (GR-PM-PLN-0014) Gullen Range Wind Farm – nghenvironmental)

FIGURE 2



Part of Fig 6-4 - Pomeroy Ecological Constraints
 (Gullen Range Wind Farm - Modification Application - Environmental Assessment - March 2014)

FIGURE 3

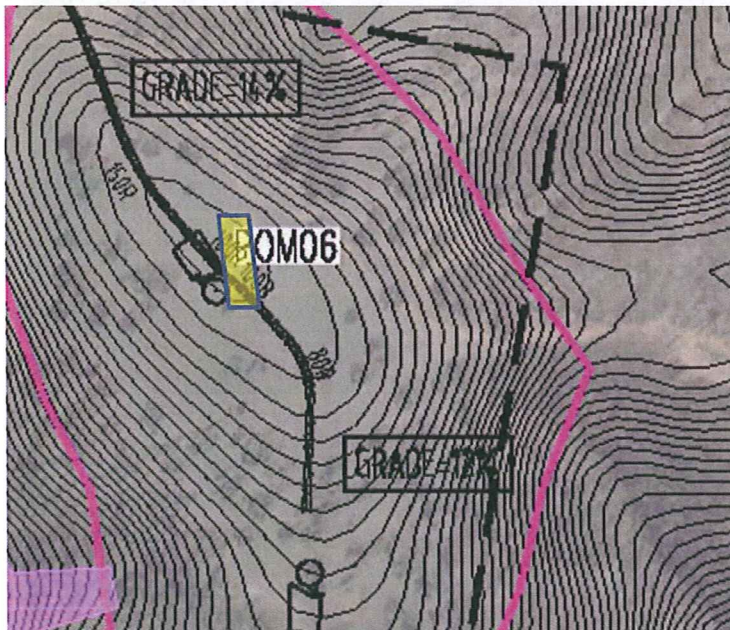


Figure 6-8 Pom 6 location showing EEC adjacent to turbine site
 (Gullen Range Wind Farm - Modification Application - Environmental Assessment - March 2014)

Powerful Owl habitat

Of particular interest to OEH is the mapping of vegetation and Powerful Owl records in and around the offset area, and in the vicinity of turbines POM_03, POM_04, POM_06 and POM_07. These four turbines, restricted in operation by Condition of Approval (CoA) 2.33, have been relocated between 23 and 102m from their approved locations. There is very little discussion of this in the MOD 1 document, except to say that there will be no impact from the changes since these turbines are switched off during the Powerful Owl dispersion period (Section 6.4.7). OEH strongly recommends that greater analysis be provided, given the importance of this area as an offset and use by the Powerful Owl. Information and maps from the Powerful Owl Management Strategy and Bird and Bat Management Plan contain records, habitat and buffer zones relevant to the consideration of turbine placement and the impacts of their relocation as per MOD 1. OEH requests this information be provided.

Native Temperate Grassland EEC

The MOD 1 report asserts that construction of BAN_05 in its approved location would have impacted on 900 m² of Commonwealth listed Native Temperate Grassland (NTG). However, the Environmental Assessment (EA) (2008) stated that this EEC was not mapped in, and would not be impacted by, the development footprint. The fact that this EEC was missed in the vegetation surveys is of concern to OEH, as it seems likely that NTG occurs elsewhere in the development footprint.

