



Office of Environment & Heritage

Your reference:
Our reference:
Contact:

SSD 8208
DOC17/261230
Andrew Fisher
Ph: (02) 6022 0623

Ms Elle Donnelley
Resource Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Donnelley

RE: Coleambally Solar Farm, Murrumbidgee LGA – Environmental Impact Statement (SSD 8208)

I refer to your email dated 4 May 2017 seeking comment from the Office of Environment and Heritage (OEH) on the Environmental Impact Statement (EIS) for the Coleambally Solar Farm (SSD 8208). We have reviewed exhibited EIS. The OEH review takes into account Secretary's Environmental Assessment Requirements (SEARs) provided by the Department of Planning and Environment to the proponent on 2 February 2017. Full details are provided in **Attachment A** but the key matters are discussed further below.

OEH considers that the EIS **does not** meet the Secretary's requirements, because a Biodiversity Offset Strategy (BOS) has not been submitted with the Biodiversity Assessment Report (BAR) as is a requirement of the Framework for Biodiversity Assessment. There is some discussion about offset requirements under the NSW Biodiversity Offsets Policy for Major Projects but the BOS should be included to identify whether the impacts of the proposal are likely to be offset by the available mechanisms. As the credit profile has yet to be finalised, we recommend that the final BAR be updated to incorporate a BOS in order to be certain that impacts associated with the approval will be adequately offset.

There are a number of inconsistencies within the EIS, the BAR and the Credit Calculator. We recommend that documentation be updated to clarify these inconsistencies as detailed in **Attachment A** before approval. Most of these inconsistencies are relatively minor, but they have complicated our assessment of the final impacts of the proposal. Two specific matters that may need immediate address are as follows:

- We believe that areas of vegetation on the property may have been cleared prior to assessment without appropriate approvals under the *Native Vegetation Act 2003*. We have passed this on to our Compliance and Regulation Team, but it is unclear to us how this should be considered in the context of the current application. As a minimum, we recommend that the proponent provide details of the vegetation clearance approvals obtained for the proposal site.
- There are a number of species credit species that have been assumed to occur on the site, but the intention is to survey these species in spring to determine if they are to be impacted. We are assuming that this survey will be proposed to occur post approval, but prior to construction commencing. While we are generally supportive of this approach, it is unclear how the credit requirement for these species can be incorporated into the conditions of approval, particularly if the species are found to not occur. We have included a recommended condition of approval, but recognise that consistency with past approvals where species have been assumed to occur on a development site should be implemented if approval is granted.

We consider that the Aboriginal cultural heritage assessment (ACH) is appropriate but include a recommendation to update the Unexpected Finds Management Procedure provided in Appendix C to be consistent with legislation in place to protect ACH in NSW. There are a number of European survey marker trees identified and recommend that the EIS be referred to OEH's Heritage Division at heritage@heritage.nsw.gov.au for their consideration.

We have also included a number of recommended conditions of approval in **Attachment A**. In the past many of these recommendations have been included within various management plans including Construction Environmental (CEMP), Biodiversity (BMP) and Heritage (HMP) Management Plans. All plans required as a Condition of Approval that relate to biodiversity or ACH should be developed in consultation with OEH, to ensure that issues identified in this submission are adequately addressed.

We have also reviewed the Community Consultation Plan and we encourage the proponent to "involve" key stakeholders beyond "inform" and "consult" as currently referenced. The OEH Regional Clean Energy Coordinator/Community Engagement Team Leader can provide further information regarding community consultation, employment, education and local energy benefit opportunities.

If you have any questions regarding this matter please contact Andrew Fisher on 6022 0623 or email andrew.fisher@environment.nsw.gov.au.

Yours sincerely

 2/6/17

PETER EWIN
Senior Team Leader Planning
South West Region
Regional Operations Group
Office of Environment & Heritage

ATTACHMENT A – Detailed comments for the Coleambally Solar Farm Environmental Impact Statement (SSD 8208)

ATTACHMENT B – OEH response to request for Secretary's Environmental Assessment Requirements (SEARs) 2
February 2017

ATTACHMENT A – Detailed comments for Coleambally Solar Farm Environmental Impact Statement (SSD 8208)

Aboriginal cultural heritage

Based on information provided the Coleambally Solar Farm Aboriginal Cultural Heritage Assessment (ACHA) is consistent with the requirements identified by the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH2010a). OEH support the recommendations outlined in Section 9 (Recommendations) however consider amendment to the Heritage Unexpected Finds Protocol (Appendix C) is required to ensure compliance with legislation in place to protect ACH in NSW and that no additional harm occurs to any ACH should it be encountered during works associated with this proposal.

Based on consideration of the above, we recommend the following conditions of development consent:

- *Develop or amend the Heritage Unexpected Finds Protocol to include the following process. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:*
 1. *Not further harm the object;*
 2. *Immediately cease all work at the particular location;*
 3. *Secure the area so as to avoid further harm to the Aboriginal object;*
 4. *Notify OEH as soon as practical on 131555, providing any details of the Aboriginal object and its location; and*
 5. *Not recommence any work at the particular location unless authorised in writing by OEH.*

In the event that skeletal remains are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and OEH contacted.

Historic Heritage

The Coleambally Solar Farm ACHA identified 3 European survey marker trees within areas of remnant vegetation across the subject area however provides insufficient detail relating to consultation with the relevant authority, consideration of potential impacts and appropriate management measures.

Based on consideration of the above, we request that the following be implemented:

- Forward the EIS and provide supporting information (including ACHA) to OEH's Heritage Division directly at heritage@heritage.nsw.gov.au and seek formal comment in regards to the European culturally modified trees.

Biodiversity

The EIS does not meet the Secretary's requirements for biodiversity assessment. We have reviewed the Biodiversity Assessment Report (BAR) against minimum information requirements for each document as listed in Appendix 7 of the Framework for Biodiversity Assessment (FBA).

A Biodiversity Offset Strategy (BOS) has not been provided. A BOS should be submitted with the BAR, and include assessment of the number and type of credits that may be created at the offset site (FBA Section 12, page 47). The BAR does not state when the BOS will be developed for this project, however it is noted in the BAR that retirement of credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects, and will be achieved by acquiring or retiring credits under the BioBanking Scheme, making payments into an offset fund intended to be established by the NSW Government, or providing suitable supplementary measures.

As the credit profile has yet to be finalised (see below) we recommend that the final BAR be updated to incorporate a BOS in order to be certain that impacts associated with the approval will be adequately offset.

Based on consideration of the above, we recommend the following be finalised before approval is granted:

- *The BAR be finalised to include a BOS. The BOS to be provided to OEH for review.*

Data provision

Spatial data requirements for the FBA have not been fully met. Appendix 7 of the FBA lists the information, maps and data that are expected to be submitted with the BAR. Our EIS review would have been greatly assisted by having a spatial representation of the construction and operational footprint, and vegetation mapping.

Floristic plot and transect field data has been provided in the BAR (Table 3-4) and Appendix A.1. While not stipulated in the FBA, OEH prefer that all floristic data is entered by the surveyor into the VIS Flora Survey module of BioNET. The FBA reporting requirements (page 100) specify that plot and transect field data be provided as copies of field data sheets (to assist with checking of potential data entry errors in the future) and MS Excel spreadsheets.

Based on consideration of the above, we request that the following be provided:

- The proponent provide scanned copies of plot and transect field data sheets to OEH via email at planning.matters@environment.nsw.gov.au.
- If floristic data are not intended to be entered directly into the VIS Flora Survey module of the Atlas of NSW Wildlife, copies of plot and transect field data are to be provided in MS Excel spreadsheet format to OEH via email at planning.matters@environment.nsw.gov.au.

Previous vegetation clearance

Figure 3-7 (page 17) shows a number of areas that are labelled as 'vegetation previously cleared by landholder through different approval process' and a 'landholder set aside area'. Details of this previously approved native vegetation clearance have not been provided. It is in the interest of the proponent to ensure that this is clarified. Although vegetation clearance may be permitted under the *Native Vegetation Act 2003* it appears that in this case at least some of the areas cleared were not covered by approvals obtained from Riverina Local Land Services. This matter has been referred to OEH Compliance and Regulation for investigation.

The EIS needs to demonstrate that any offsets or set aside areas required under the *Native Vegetation Act 2003* will not be impacted by the proposed development.

Based on consideration of the above, we request that the following be provided:

- The proponent provide details of the vegetation clearance approvals obtained for the proposal site.

Hollow bearing trees

The BAR section 4.2.4 (page 30) states that five hollow bearing trees will be impacted by the proposal (in Zone 3). This is consistent with EIS section 6.2.2 (page 67). However BAR Table 4-3 and text on page 31 refers to six hollow bearing trees to be removed in Zone 3 (possible Squirrel Glider habitat). BAR section 7.3.3 (page 51) refers to five hollow bearing trees to be removed. It is not clear from BAR Figure 4-1 or Appendix B Hollow bearing tree data whether five or six hollow bearing trees are to be removed and this needs to be clarified.

Section 1. Introduction

Perimeter security fencing is listed as part of the proposal (page 1). Construction and maintenance of the security fence should be contained within the proposal site. Storage of fencing materials and associated machinery must also be within the proposal site and not within patches of native vegetation.

1.4 Sources of information used

Keith (2006) is listed in the Reference section but the correct citation is Keith (2006). This publication describes the NSW vegetation formations and classes.

Section 4.2 refers to biometric vegetation plots being assigned to a PCT “as per the OEH database”. It is assumed that this is referring to the VIS Classification database, which describes PCTs. VIS Classification should be referenced with the following or similar details:

OEH (2017). *NSW Vegetation Information System (VIS) Classification Database*, Office of Environment and Heritage, date accessed, www.environment.nsw.gov.au/NSWVCA20PRapp/default.aspx

Section 2. Landscape features

2.8.6 Landscape value score

It is stated that the Landscape Value Score is zero (page 9) but in the submitted Credit Calculator the value of 12 is shown.

Section 3. Native vegetation

3.1.3 Site values (plot data entered into BCC)

On page 21, Zones 1, 2 & 3 list PCT#16 as BVT MR514 but in the submitted Credit Calculator MR518 is shown.

For Zone 2, under Management zone details in the Credit Calculator, ‘Native over-storey cover’ = 2.00 but it is understood that this will be cleared so the value of zero should be used.

Section 4. Threatened species

4.2.4 Survey results

It is stated (page 30) that none of the flora or fauna species that were detected during site surveys are listed as threatened species. This is inconsistent with Appendix A.2 Fauna Species List which lists Black Falcon as having been observed on site in Black Box woodland. No further detail is provided but it is assumed that this bird was foraging or moving through/over the site.

As there are no stick nests present on the site this species is not considered to use the site for breeding. We would still expect this observation to be referred to in section 7.3.3 of the BAR where the impacts on threatened species are addressed.

Section 6. Avoid and minimise impacts

6.1 Direct impacts, 6.1.2 Construction phase

Table 6-1 (page 38) states that “where possible trees to be removed will be mulched on-site”. It is recommended that instead of mulching that cleared trees should be used to provide additional as habitat on site by placing them within existing remnant vegetation.

Table 6-1 (page 39) states that when programming works, breeding periods of fauna that may be impacted will be ‘considered’. OEH recommends that no removal of trees with hollows is to occur during spring to early summer to avoid the main breeding period for hollow-dependent fauna. The pre-clearance inspections referred to in this table should be done but these should not be considered as a substitute for restricting the removal of trees with hollows to outside the main breeding period.

It is stated on page 39 that EECs will be delineated as “environmentally sensitive areas” by a physical clearing boundary, but some Myall woodland EEC (0.08 ha) is proposed to be cleared. This needs to be clarified.

The intention to develop a Weed Management Plan is supported (Table 6-1, page 40).

6.1 Direct impacts, 6.1.3 Operational phase

Collision risk to birds and microbats of exterior barbed-wire fencing is identified (page 41). It is not clear why barbed-wire fencing required. No measures are given to avoid and minimise these impacts. It is recommended that plain wire fencing be used, in particular near screen plantings and remnant vegetation.

OEH supports the use of local species in landscape plantings to address visual impacts (Table 6-2, page 42). A landscaping strategy should be included with the Flora and Fauna Management Plan referred to in the main EIS document (section 6.2.5, page 73)

6.2 Indirect impacts, 6.2.2 Construction phase

No responsibility has been assigned for training/enforcement of site speed limits to minimise fauna strikes (Table 6-3, page 44). This should apply to perimeter/access roads as they will be carrying additional traffic.

6.2 Indirect impacts, 6.2.3 Operational phase

Perimeter fencing is identified as potentially altering the movements of fauna through the landscape by channelling onto roads (Table 6-4, page 45). No measures are given to avoid and minimise these impacts.

6.3 Cumulative impacts

It is stated on page 47 that “0.74 ha of ‘common native vegetation’ is to be removed”. Myall woodland as an endangered ecological community cannot be considered ‘common’.

Section 7. Impact summary

7. Impacts requiring further consideration, 7.3.3 Impacts on threatened species

In the SEARs advice that we provided to DPE on 2 February 2017 we specified species and communities that required further consideration if impacted by the proposal. This included consideration of the habitat requirements of species that are identified as not being able to withstand further loss in the catchment, such as nest trees for some threatened birds. The Superb Parrot has been recorded within one kilometre of the proposal site and while we specified in our SEARs response that nest trees were to be considered for this species on the site, the hollow-bearing trees on the site have not been surveyed for breeding use by this species (page 51).

In its consideration of species credit species, the BAR states that the Superb Parrot was not recorded on the proposal site, however it is “presumed to occur on occasion” and “habitat elements that occur on site are common in the local area” (Table 4-4, page 36). The BAR concludes that the Superb Parrot is considered “unlikely” to be affected by the proposal.

Consistent with our comments on section 6 above, we recommend that no removal of trees with hollows should occur during spring to early summer to avoid the main breeding period for hollow-dependent fauna, which will include Superb Parrots. The pre-clearance process described in Table 6-1 (page 39) should followed to ensure that Superb Parrots, if present, do not have their breeding disrupted.

7.4 Ecosystem and species credits

The BAR (page 51) states that 23 credits are generated for PCT26 Black Box grassy open woodland wetland of rarely flooded depressions in south western NSW. This differs from the figure of 25 credits in the proposal submitted to Credit Calculator. This needs to be finalised to allow the inclusion of the final credit requirement in the conditions of approval.

The BAR assumes that four threatened species (three plants; *Calotis moorei*, *Convolvulus tedmoorei* and *Leptorhynchus orientalis* and the Squirrel Glider) occur on the proposal site, with credits generated for these species (page 52). The Executive Summary of the EIS indicates that targeted surveys will be conducted in spring to determine whether the three herbaceous plant species are present in the proposal area. No additional surveys are to be done for the Squirrel Glider.

The results of these surveys are likely to change the credit profile and therefore the offsetting requirements for this proposal. If it is assumed that these threatened species are present, the required species credits must be offset with a species credit created for the same species (FBA, s10.5.6.2), meaning that the proponent will need to find offsets in which these species occur. Our preference is that these surveys and the final credit requirements (if any) be undertaken before approval. However, it is unclear if this will occur so we are supportive of a process that allows approval to proceed, with a requirements to undertake survey before construction commences. If any of the species are identified on site, then the final credit requirement will need to be agreed

Based on consideration of the above, we recommend the following be finalised before approval is granted:

- There are a number of inconsistencies within the EIS, the BAR and the Credit Calculator. We recommend that documentation be updated to clarify these inconsistencies including:
 - The correct landscape value score to be stated in the BAR.
 - The correct PCTs be submitted to the Credit Calculator and referred to in the BAR.
 - The number of hollow bearing trees to be removed to be confirmed and reported consistently in the revised BAR.
 - Native over-storey cover to be correctly entered in the Credit Calculator for Management zone details for Zone 2.
 - The BAR correctly state that the threatened Black Falcon was recorded on the proposal site.
 - The BAR to be updated to correctly represent how EEC will be delineated on the site.
 - The BAR provide details of the measures taken to avoid and mitigate the risk of collision by birds and microbats to barbed-wire fencing.
 - The BAR to assign responsibility for training/enforcement of site speed limits.
 - The BAR provide details of the measures taken to avoid and mitigate the effects of the perimeter fencing on fauna movement.
 - Section 7 of the BAR be revised to provide credit calculations that are consistent with the proposal submitted to the Credit Calculator.

Based on consideration of the above, we recommend the following conditions of development consent:

- *Construction activities and storage of materials for boundary fencing should be wholly contained within the proposal site. Disturbance to road reserves other than access points identified in the EIS must not occur.*
- *All trees to be removed should be placed in areas of retained native vegetation to provide additional fauna habitat.*
- *Trees with hollows should not be removed during spring to early summer, in order to mitigate direct impacts to threatened fauna during the breeding season.*
- *Prior to construction, surveys must be conducted for Calotis moorei, Convolvulus tedmoorei and Leptorhynchos orientalis to determine presence or absence on the site. If a species credit is required for any of these species, then this must be incorporated into the final credit profile and offset strategy before construction commences.*

Community Consultation Plan

The proponent is encouraged to “involve” key stakeholders beyond “inform” and “consult” as referenced in the Community Consultation Plan.

It is recommended:

- That all stakeholders are made aware of employment opportunities, including local training providers.
- That local energy benefits for the community including access to affordable renewable energy and energy efficiency information are considered.
- That the proponent liaise with the Office of Environment and Heritage’s Regional Clean Energy Coordinator/Community Engagement Team Leader regarding community consultation, employment, education and local energy benefit opportunities.
- That the Community Consultation Plan incorporates a social impact assessment framework to measure resultant impacts of the development