



Office of
Environment
& Heritage

DOC16/155408
SSD 6784

Ms Diana Charteris
Senior Planning Officer
Department of Planning and Environment
diana.charteris@planning.nsw.gov.au

Dear Ms Charteris

Parkes Solar Farm Project (SSD 6784)

I refer to your email dated 22 March 2016 requesting that the Office of Environment and Heritage (OEH) provide comments on the Environmental Impact Statement (EIS) for the proposed Parkes Solar Farm Project.

OEH understands that the project includes the construction, operation and eventual decommissioning of a photovoltaic 57 megavolt ampere or 65 Megawatt solar farm. It is understood that details of some components, such as the location of the transmission line that would connect the solar arrays to the power station to the north, are still being considered. It is also understood that the Department of Planning and Environment (DP&E) has requested further information from the proponent (including feedback regarding Aboriginal cultural heritage assessment), and that this is not yet available.

I recognise that the proposal has been located and designed to avoid clearing of native vegetation where possible, and that the proposal would potentially result in the clearing of 0.37 ha of Inland Grey Box Woodland Endangered Ecological Community, although it is possible that this may be avoided depending on the final design of the project.

Detailed comments and OEH's recommendations are provided in Attachment A.

If you have any questions regarding this matter, please contact Liz Mazzer on 02 6883 5325 or email liz.mazzer@environment.nsw.gov.au

Yours sincerely

DEBBIE LOVE
A/Senior Manager, Regional Operations
North West

28 April 2016

Attachment A

PO Box 2111 Dubbo NSW 2830
Level 1, 48-52 Wingewarra Street Dubbo NSW 2830
Tel: (02) 6883 5330 Fax: (02) 6884 8675
ABN 30 841 387 271
www.environment.nsw.gov.au

OEH Review of EIS: Parkes Solar Farm

Acronyms

ACH	Aboriginal Cultural Heritage
BAR	Biodiversity Assessment Report
CEEC	Commonwealth Endangered Ecological Community
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
FBA	Framework for Biodiversity Assessment
OEH	Office of Environment and Heritage
PCT	Plant Community Type
TSC Act	Threatened Species Conservation Act 1995

1 Inland Grey Box Endangered Ecological Community (EEC)

The Biodiversity Assessment Report (BAR) has identified two distinct Plant Community Types (PCTs) in the study area that would potentially be impacted by the above ground transmission line proposed to connect the solar arrays to the power station to the north:

1. Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (PCT 76), of which 0.16 ha will be potentially impacted, and
2. Western Grey Box – Poplar Box – White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (PCT 82) of which approximately 0.21 ha would be potentially impacted.

Both of these PCTs are part of the *Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions* EEC under the TSC Act, and *Grey Box (Eucalyptus macrocarpa) grassy woodland and derived native grasslands of south-eastern Australia* CEEC.

The BAR has calculated that, if clearing is necessary, a total of 13 credits would be required to offset the impact.

Section 5.1 of the BAR states,

The only areas where an EEC would be impacted are the areas where the 'above ground transmission line' has been proposed to connect the solar arrays to the power station to the north. The proposed above ground transmission line has been designed so that it would only require the minimal amount of clearing or pruning of the EECs for construction and operation. Where the overhead power line requires offsets, then the option for boring underground, or an alternative overhead route should be considered to avoid removal or pruning of EECs. In the case that impacts can be avoided, offsetting would not be required.

There is an option to offset impacts to the Box Gum woodland EEC by retaining the Grey Box woodland EEC located within the central part of the site of the solar array, and further enhancing this

community by planting smaller trees (such as Kurrajongs) within and adjacent to this remnant vegetation. This would be subject to a Biodiversity Offset Strategy (BOS) if required.

At the site visit on 4 March 2016 and a subsequent email to Jenny Walsh of NGH Environmental on 9 March 2016, OEH staff suggested that impacts on Grey Box woodland EEC from the overhead power line could potentially be offset through enhancement of the area of Grey Box Woodland located in the north-west corner of the development site, an area which is currently proposed for a car park and site buildings for the project. At the site visit, alternative locations for the car park and site buildings were discussed (eg possibly locating these in the south-west part of the development site), however this has not been discussed in the EIS.

Recommendations

- 1.1 OEH recommends consideration of the avoidance of impacts to Grey Box EEC through alternative location and/or design of the power line connecting the solar arrays to the power station.
- 1.2 If clearing of Grey Box EEC cannot be avoided, consideration of an alternative location for the car park and site office, and enhancement of the Grey Box community in this area, is recommended.

2 Paddock Trees

Figure 5-1 of the BAR indicates that the proposal will avoid clearing of the north-south and east-west planted vegetation, and the patch of trees near the east-west planted vegetation in the south-east area of the site. OEH supports the retention of this native vegetation.

The EIS proposes to clear scattered paddock trees (Kurrajongs) and a smaller line of planted trees running north-south in the south-west portion of the solar array area.

In an email to Jenny Walsh of NGH Environmental on 26 February 2016 OEH recommended assessing the paddock trees using the BioBanking Paddock Tree Calculator. This would enable quantification of the impact on paddock trees. OEH has also recommended, both at the site visit and via email, that the loss of the paddock trees be offset through expansion of the north-south running line of planted vegetation, with the minimum quantity of trees to be added to this area determined by the Paddock Tree Calculator. These assessments have not been included in the EIS.

Recommendations

- 2.1 That the BioBanking Paddock Tree Calculator be used to quantify the impact on paddock trees and inform offset requirements
- 2.2 That retained areas of planted native vegetation be expanded accordingly.

3 Pine Donkey Orchid

The BAR notes (below Table 4-6) that the survey period was unsuitable for detecting the Pine Donkey Orchid (*Diuris tricolor*) which flowers in spring (surveys were conducted in summer). Section 6.2 of the BAR states that,

...the Pine Donkey Orchid is presumed to occur on occasion while the presence of individuals of the species is unknown. While the works would be unlikely to impact on a population of Pine Donkey Orchid the BCC requires that further targeted surveys are necessary to determine if any offsets are

required for this species. Targeted surveys are recommended to occur within the next flowering season which will be between August and September 2016.

OEH advises that the Framework for Biodiversity Assessment (FBA) does not necessarily require targeted survey. Section 6.5.1.9 of the FBA states,

An assessor must establish whether any species that remains a candidate is present on a development site, or is likely to use the potential habitat on the development site, by either:

- (a) assuming it is present (development sites only), or*
- (b) undertaking a threatened species survey in accordance with Section 6.6, or*
- (c) obtaining an expert report in accordance with Subsection 6.6.2.*

It is up to the assessor to select the method of assessment.

It is noted that Table 3-1 of the EIS indicates that construction would commence in January 2017, enabling adequate time to conduct a targeted survey in spring for this species. If the Pine Donkey Orchid was found not to be present, then no further assessment is required. If the orchid was found to be present and all impacts on Pine Donkey Orchid habitat are avoided (eg through locating the power line underground along the centre of Pat Meredith Drive as discussed at the site visit) further assessment will not be required.

Recommendation

- 3.1 That further consideration of the Pine Donkey Orchid, following one of the options presented in section 6.5.1.9 of the FBA, is conducted unless impacts on Pine Donkey Orchid habitat can be avoided.

4 Aboriginal Cultural Heritage

It is understood that the Department of Planning and Environment has requested that the proponent provide the Binjang Wellington Wiradjuri Heritage Surveys and Wiradjuri Council of Elders feedback on the Aboriginal Cultural Heritage Assessment Report, but that this is not yet available.

OEH has reviewed the Aboriginal Cultural Heritage (ACH) assessment (Appendix G of the EIS) against the Secretary's Environmental Assessment Requirements for the project, including the Aboriginal consultation requirements of Section 80C of the *National Parks and Wildlife Regulation 2009*, and consider it has adequately addressed all requirements.

The project results show that the location for the proposed solar farm has an extensive land use disturbance history and does not contain landforms commonly associated with culturally sensitive areas. This is borne out from the results of the ACH field surveys, involving local Aboriginal participation, which observed only seven stone artefacts scattered in isolation to each other across the proposed easement and peripheral to it.

OEH accept the ACH assessment findings and interpretation of the scientific values for the Aboriginal objects as low. Consequently OEH support all of the ACH assessment report recommendations which include no further need for archaeological investigations, development of an appropriate heritage management plan, continued involvement of the RAPs for guiding appropriate mitigation for the Aboriginal objects and development of an expectant finds protocol.

Recommendation

- 4.1 That all of the recommendations presented in the ACH assessment report (Appendix G of the EIS) be implemented.