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Our ref: DOC24/993692

Mr Cameron Ashe
Environmental Assessment Officer
Department of Planning, Housing and Infrastructure
4 Parramatta Square, 12 Darcy St
PARRAMATTA NSW 2150

By email: cameron.ashe@dpie.nsw.gov.au

Dear Mr Ashe

RE: Gundry Solar Farm EIS

Thank you for the opportunity to review the documents associated with the proposed Gundry Solar Farm. Biodiversity, Conservation and Science (BCS) have reviewed the Environmental Impact Statement (EIS), including the Biodiversity Development Assessment Report (BDAR) provided as Appendix 7 and have the following comments:

Overall, the design of the development has made an adequate effort in design to avoid the biodiversity values onsite. The project is mostly sited in areas of low biodiversity values. However, to ensure the long term protection and ongoing management of the avoided areas, a BMP will need to be in place. The BMP should be included in Appendix 2 of the EIS, as one of the Mitigation Measures for the project. The BMP has been committed to as part of a post approval package, and should include (but not be limited to):

- a plan for supplementary planting of trees and shrubs to PCT benchmark values, to replace the trees being removed, and restore connectivity (as suggested by Goulburn Mulwaree Council in the Secretary's Environmental Assessment Requirements, or SEARS)
- guidelines for managing the moderate to high condition Natural Temperate Grassland along the creekline
- a plan for rehabilitating degraded habitat around the population of *Keyacris scurra* identified onsite, including management of mowing/grazing to encourage appropriate species composition and cover
- the actions previously suggested by BCS to reduce the impact on White-fronted Chat discussed below and (in Attachment A).

There has been insufficient assessment of the impact to threatened White-fronted Chat, *Epthianura albigula* which was identified onsite in the Subject Land. This assessment needs to consider the removal of non-native vegetation which can be used by the species. During a meeting with the consultants, BCS made recommendations regarding the assessment of habitat for the White-fronted Chat, and also suggested management actions in the Biodiversity Management Plan (BMP). These are outlined in the email record of the meeting provided in Attachment A. The recommendations for assessment under Prescribed Impacts have not been followed. The BMP is discussed below.

The proposed Solar Farm is a critical utility located on a site which includes flood prone land. The proposal should therefore be supported by a flood impact and risk assessment (FIRA) that identifies the flood related risks and how they will be managed over the full range of design events up to and including the Probable Maximum Flood (PMF). This includes consideration of risks associated with inundation of flood sensitive elements, shutdown risks both during and post flood recovery. The flood assessment has not assessed these risks and discrepancies found on the flood maps raises doubt in the veracity of the model.

The proposed creek redesign also raises potential erosion issues and impacts to receiving waters which should also be addressed. Public safety risks associated with flood isolation risk (during construction and once in operation) should also be assessed including any emergency management advice from the NSW SES. Detailed flood risk management advice is provided in Attachment A to assist the approval authority to inform decisions on this proposal.

If you have any further questions about this issue, please contact Nat O'Rourke, acting Senior Team Leader Planning, South East, at rog.southeast@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Michael Saxon', with a stylized flourish at the end.

10/12/2024

Michael Saxon
Director South East
Regional Delivery



Gundry Solar Farm

DPE – Project introduction meeting
25 July 2023 at 9:00am
Teams Meeting

Attendees

Allison Treweek (BCD) – **AT**
Rebecca Widdows (BCD) – **RW**
Louis Cameron (BCD) – **LC**
Diana Mitchell (Lightsource bp) - **DM**
Mieka White (Lightsource bp) – **MW**
Sarah Hart (Umwelt) – **SH**
Marion O’Neil (Umwelt) – **MO**

Introduction and Purpose of the Meeting

- Attendee introductions
- Purpose of meeting is to introduce proponent and project, to discuss the biodiversity work completed and present draft results of the BDAR.

Key Discussion Points

- MO shares powerpoint presentation (attached to these notes).
- DM provides short introduction and overview of Lightsource bp as solar farm developer.
- MO provides an overview of the project and constraints analysis completed during the early design phase to avoid key environmental constraints on site i.e. avoidance of main watercourses, floodplains and high quality biodiversity value areas, resulting in no biodiversity credits being required.
- AT – Flooding freeboard to be considered in project design and layout, in particular for the placement of the battery. AT can provide constraints map and layout to flooding team for more detailed input. *Action: Umwelt/LSbp to provide final layout to BCD for review against flooding constraints.*
- MO provides overview of the assessment requirements in relation to DPE’s SEARs and input from BCD to the SEARs.
- SH gives an overview of the biodiversity work completed including targeted surveys for threatened species:
 - Biodiversity was surveyed in accordance with the BAM (DPE 2020) and all areas of high-quality threatened species or communities have been avoided by detailed project design.
 - Two threatened species found within the Project Area (not in Subject land) were one Key’s Matchstick Grasshopper (*Keyacris scurra*) and 19 planted Camden Woollybutt (*Eucalyptus macarthurii*).
- White-fronted Chat discussion -
 - SH explains that incidental records of White-fronted Chat’s were observed in Category 1 land during one survey event (i.e. 3 birds were spotted on a fence).
 - AT – options to address Chat’s in the prescribed impacts section of BDAR could be to:
 - Undertake an assessment of the thistle’s extent within the Project Area (by mapping thistle extent) and determine potential breeding habitat within the development footprint;

- Undertake targeted bird survey in September to assist in finding the breeding locations, should they occur within Project Area.
- AT - BCD would be happy to work with project team in this regard. The prescribed impact assessment section of the BDAR could also be provided to BCD beforehand for initial review and feedback to get agreement from BCD on the assessment approach and proposed mitigation.
- AT suggests looking at Blind Creek Solar Farm as an example as they had the same issue and had worked closely with BCD to resolve this matter in the BDAR.
- AT notes that the BMP will be targeted towards avoiding impacts to the breeding of the White-fronted Chats, such as avoiding construction works within their breeding season, graduated removal of thistle within the development footprint but keeping thistle next to (outside) development footprint, and replacing the thistles with native vegetation (e.g., Poa tussocks) near the water that they could move and utilise instead.

Meeting ends at 9:54am

Floodplain Risk Management Comments

The proposed Solar Farm is considered a critical utility and proposed in an area of approximately 702 hectares surrounded by watercourses and areas prone to flooding. As such the proposal should be considered by the planning authority in the context of the NSW Government's Flood Prone Land Policy as set out in the Flood Risk Management Manual, 2023. The policy aims to reduce the impact of flooding and flood liability on individual owners and occupiers, and to reduce private and public losses resulting from flooding utilising ecologically positive methods wherever possible.

An Environmental Impact Statement (EIS) dated July 2024 was provided to demonstrate compliance with the SEARs (DOC22/861501), which includes a Flood Impact & Risk Assessment (FIRA) that is incorporated into a broader Water Resource Impact Assessment.

The flood modelling completed for the FIRA shows that most of the infrastructure associated with the proposal is located outside the 1% AEP flood extent of the Gundry Creek and Bullamalito Creek. However, some solar panels appear to be located within the flood extent for events greater than the 1% AEP which should be addressed in the FIRA including operational risks during and after a large floods. Power supply during a flood is important for flood emergency response and telecommunications and it is also essential for community recovery just after large to extreme floods. As such, the risk assessment should consider the Solar Farm's operational functions over the full range of design events up to and including the Probable Maximum Flood (PMF) to establish an understanding of flood related shutdown risks and whether interruptions to the Solar Farm's operation by extreme floods can be avoided through design. Design elements of critical components may require using a higher design flood event such as the PMF level plus freeboard.

The information provided identified a substation to the west near Windellama Road which is proposed to be built over an unnamed ephemeral creek. The flood maps provided with the FIRA show that this creek carries flood water during all design events and the proposed substation will be affected by flooding and has the potential to influence flood behaviour. Comparison of pre- and post-development modelling results (Figures C.1-C.7 in Appendix C) show that flood water is re-directed east and west of the new substation. The re-direction of flood water around the eastern side of the substation raises questions around localised erosion and off-site flood impacts which the assessment does not address.

The discrepancies in flood maps between the flood impact (Figures C.1-C.7) and the developed case (Figures B.1-B.7) also creates doubt on the veracity of the model and the FIRA for assessing flood related risks from the proposal. In particular, the flood impact maps suggest that the footprint of the substation is dry post development, but the developed case flood maps show flood water is conveyed across the western end of the substation's footprint. The FIRA also notes that the solar panels will unlikely cause additional runoff, and that erosion and scour is expected to be minimal. However, the adequacy of how this has been demonstrated is unclear. This warrants further clarification to ensure the accuracy of the assessment and conclusions drawn.

The FIRA states that evacuation would be arranged in times of flood warning and that evacuation routes will be determined during the detailed design stage of the project. Given the potential risk to public safety associated with flood isolation, consultation should occur with the NSW SES on the adequacy of any proposed flood emergency response measures, emergency access requirements and alignment with local emergency response planning. The FIRA should address any issues raised by the SES to establish that public safety risks due to flooding will be effectively managed.

The FIRA presents an assessment of existing creek stability and condition, and refers to an Operational Environmental Management Plan (OEMP) to be developed to address potentially adverse impacts on the receiving environment during the operational phase. Consistent with previous advice, it is recommended that this OEMP includes measures to minimise erosion and demonstrate sustainable outcomes for the waterways. This will ensure the preservation of healthy waterways in terms of water quality and quantity across the project site including measures to manage erosion impacts.

Given the project's location in the Sydney drinking water catchment, the EIS utilised MUSIC modelling to demonstrate Neutral or Beneficial Effect (NorBE). It would be appropriate to consult with Water NSW on the adequacy of the water quality and quantity control measures presented in the Water Resource Impact Assessment.