



Office of
Environment
& Heritage

Your reference: SSD 9237
Our reference: DOC18/612586
Contact: Miranda Kerr
Ph 02 6022 0607
Date: 20 September 2018

Mandana Mazaheri
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Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Via email: mandana.mazaheri@planning.nsw.gov.au

Dear Ms Mazaheri

RE: Yarrabee Solar (SSD 9237) – Exhibition of Environmental Impact Statement

I refer to your email dated 22 August 2018 seeking comment from the Office of Environment and Heritage (OEH) about the Environmental Impact Statement (EIS) for the Yarrabee Solar project located approximately 23 km south-west of Narrandera, in the Narrandera local government area.

We have reviewed the exhibited EIS against the Secretary's Environmental Assessment Requirements (SEARs) provided by the Department of Planning and Environment (DPE) to the proponent on 20 April 2018.

OEH considers that the EIS **does** meet the Secretary's requirements for flooding.

The EIS **does not** meet the Secretary's requirements for biodiversity and Aboriginal cultural heritage assessment (ACH).

A summary of our assessment, advice and recommended conditions of approval is provided in **Attachment A**. Detailed comments are in **Attachment B**.

All plans required as a Condition of Approval that relate to flooding, biodiversity or ACH should be developed in consultation and to the satisfaction of OEH, to ensure that issues identified in this submission are adequately addressed.

If you have any questions regarding this matter, please contact Miranda Kerr on (02) 6022 0607 or email miranda.kerr@environment.nsw.gov.au.

Yours sincerely

ANDREW FISHER
Senior Team Leader Planning
South West Branch
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Office of Environment & Heritage

ATTACHMENT A – OEH Assessment Summary for Yarrabee Solar Environmental Impact Statement (SSD 9237)

ATTACHMENT B – Detailed comments for Yarrabee Solar Environmental Impact Statement (SSD 9237)

ATTACHMENT A OEH Assessment Summary for Yarrabee Solar Environmental Impact Statement (SSD 9237)

Key Issues

1	Issue	<u>Clarification of ACH survey methods and details</u> Recommended action: - Amend figures in table 5-2 for flat plain to reflect actual survey coverage of this landform. Further discussion and clarification is required in the text to reflect the survey methodology used. - Update tables 5-6, 5-7 and 6-1 in the ACHAR to include AHIMS site numbers.
	Extent and Timing	Pre-determination
2	Issue	<u>Consultation for long-term artefact disposition</u> Long term artefact disposition must be either under a care agreement or reburial in accordance with requirement 26 of the 'Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales' (DECCW 2010). Recommended actions: - Further consultation needs to occur with the RAPs regarding their preference for long term artefact disposition. - Results of the consultation are to be detailed in an ACH Management Plan.
	Extent and Timing	Post-determination
3	Issue	<u>Aboriginal site impact recording forms</u> Recommended actions: An Aboriginal Site Impact Recording Form must be completed and submitted to AHIMS for each site harmed or destroyed from salvage or construction works.
	Extent and Timing	Post-determination
4	Issue	<u>Chance or unexpected finds</u> The ACHAR has not detailed a chance find protocol as required by the SEARs. An unexpected finds protocol for Aboriginal cultural heritage, including human remains, must be developed and implemented before construction begins. A recommended condition of approval is provided.
	Extent and Timing	Pre-construction

	<i>Recommended Conditions of Approval</i>	<i>An appropriate unexpected finds protocol is developed prior to the commencement of construction, and to the satisfaction of OEH, that includes the following:</i> <i>If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:</i> <i>1. Not further harm the object</i> <i>2. Immediately cease all work at the particular location</i> <i>3. Secure the area to avoid further harm to the Aboriginal object</i> <i>4. Notify OEH as soon as practical on 131555, providing any details of the Aboriginal object and its location</i> <i>5. Not recommence any work at the particular location unless authorised in writing by OEH.</i> <i>If human skeletal remains are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and contact made with NSW Police and OEH.</i>
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5	<i>Issue</i>	<u>Incomplete application of Section 6 of the BAM</u> The BDAR does not provide a completed assessment for Section 6 of the BAM. Specifically: • Minimum information requirements and results of applying BAM Sections 6.3 to 6.7 (threatened species sensitivity classes, biodiversity risk weightings and threatened species polygons) have not been provided. • From Section 3.5.2 onwards, assessment does not cover the full development site. • If the survey timing requirements for predicted threatened species in the BAM Credit Calculator do not coincide with the field survey period, the assessor must either provide an expert report or assume the species is present. While we understand that the current proposal has avoided impacts to native vegetation and threatened species habitat, Section 6 of the BAM must be completed before impacts are identified and assessed in Sections 7 to 11. Recommended actions: • <i>Section 6 of the BAM must be completed for the development site.</i>
	<i>Extent and Timing</i>	Pre-determination

6	Issue	<u>Inconsistent assessment of native grassland in the BAR</u> Evidence of Plains-wanderer (<i>Pedionomus torquatus</i>) habitat assessment within native grassland habitat has not been provided. Recommended actions: • <i>Demonstrate that open areas of pasture do not meet the definition of native vegetation or do not require further assessment according to the BAM section 3.1.1.3. Pasture that is part of a regular cropping rotation can be evidenced by aerial imagery with cultivation marks.</i> • <i>Provide evidence (comparative photographs or field data) that the native grassland habitat is not consistent with Plains-wanderer habitat, as shown in the Plains-wanderer habitat guide (Parker and Oliver 2006).</i>
	Extent and Timing	Pre-determination

7	Issue	<u>Impact Assessment</u> The EIS and appendices describe construction and operation actions that either potentially impact or mitigate impacts to native vegetation or habitat. These do not appear to have been addressed in the BDAR. Impacts of the proposal on Inland Forest Bat (<i>Vespadelus baverstocki</i>) have not been fully considered, including: • Whether Inland Forest Bats are likely to be flying between dams and woodland • If so, whether the proposed security fence be built between these habitats and artificial water • Is the security fence likely to be topped with barbed or razor wire, and what impact will that have on mortality of individuals and movement of threatened bat populations? Recommended actions: • <i>Confirm whether potential direct and indirect impact of site management actions detailed in the EIS have been considered in the BDAR, including road upgrades and vegetation management for the solar array and battery storage facility.</i> • <i>Assess the potential impact of security fencing on Inland Forest Bat</i>
	Extent and Timing	Pre-determination

8	<i>Issue</i>	<u>Indirect impacts on native vegetation and habitat</u> Any revegetation or seeding for ground stabilisation within the development site or planting/landscaping for risk mitigation must not be with exotic species likely to establish in adjoining native vegetation. Plantings adjoining the <i>Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions</i> TEC should be with species native to that plant community type. Recommended actions: • <i>Include measures in construction and operation management plans to mitigate the introduction and spread of exotic plant species (particularly during mitigation or landscaping works), in areas adjacent or uphill of the 'Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions' TEC</i>
	<i>Extent and Timing</i>	Post-determination

9	<i>Issue</i>	<u>Mitigation measures</u> Mitigation measures identified in the EIS (Table 41, pages 189-192) for impacts to biodiversity do not all relate to the assessment in Section 4 of the BDAR. Recommended actions: • <i>Ensure mitigation measures in the statement of commitments in the EIS align with the BDAR.</i> • <i>Remove mitigation measures in the statement of commitments (EIS, page 187) that do not relate to the Yarrabee Solar Project.</i>
	<i>Extent and Timing</i>	Pre-determination

OEH Advice

1.1 Is the 'baseline' for impact assessment reasonable? Incomplete

The basement impact assessment for Aboriginal cultural heritage has in most cases been completed to the requirements of OEH, except for chance finds protocols. The biodiversity assessment has not been completed for the full development site.

1.2 Are predictions of impact robust (and conservative) with suitable sensitivity testing? Incomplete

Predictions for Aboriginal cultural heritage are articulated in the ACHAR and are generally robust. The BDAR is incomplete.

1.3 Has the assessment considered how to avoid and minimise impacts? Largely

It is stated that the proponent has designed the development footprint to avoid a large number of Aboriginal sites, particular those sites of higher archaeological significance (OzArk, 2018:75). Of the 25 archaeological sites identified in the project area, 19 sites are proposed to be avoided.

While the proposed development footprint is in cropped agricultural land, the biodiversity assessment has not identified all of the direct and indirect impacts.

1.4 Does the proposal include all reasonably feasible mitigation options? Largely

An Aboriginal Cultural Heritage Management Plan has been recommended in the ACHAR to cover measures for site conservation and management of sites to be impacted. The ACHAR has not detailed a chance find protocol to respond to the SEARS request, so OEH has recommended conditions of development consent.

Further assessment of potential impacts to threatened fauna due to installation of security fencing may require additional mitigation measures.

2. Is the assessed impact acceptable within OEH's policy context? No

The ACH assessment will meet OEH requirements if all recommended actions are undertaken. The biodiversity assessment does not follow the BAM in its entirety, so does not meet requirements of the *Biodiversity Conservation Act 2016*.

3. Confirmation of statements of fact

The statutory section of the ACHAR and ACH components of the EIS appears correct. Completed components of the BDAR include statements that are not consistent with the BAM.

4. Elements of the project design that could be improved

The design is appropriately sited in cleared, agricultural land. More details about security fencing are needed to assess if mitigation is needed for threatened bats.

ATTACHMENT B Detailed comments for Yarrabee Solar Environmental Impact Statement (SSD 9237)

Flooding

The assessment of flooding in Appendix does address the SEARs.

In summary, OEH understands that:

- A comprehensive flooding assessment has been completed utilising new and existing data and referencing previous flood studies completed in the region under the Floodplain Management Program.
- Both riverine (from the Washpen Creek/Yanco Creek floodplain) and local overland flow (from local rainfall) flooding has been considered and modelled according to best practise methods in compliance with the new Australian Rainfall & Runoff (2016) guidelines.
- Consideration of coincident flooding scenarios due to local rainfall and riverine events has also been completed based on an enveloping approach.
- The flood modelling shows that the project site is impacted by both overland flow and riverine flooding with an ephemeral flow path that traverses the site experiencing the greatest level of inundation.

OEH considers that the risks due to flooding would be minor due to the proposed design, which consists of solar panel arrays elevated on piles approximately 3 metres above ground level, and location of other major flood sensitive infrastructure (such as the substation and energy storage facility) outside overland flow paths and above or protected from major flood levels.

Flood impacts external to the project site have also been assessed. OEH supports the finding that the development poses no significant flooding impact outside the project site.

The flood flows during the 1% Annual Exceedence Probability (AEP) riverine and local rainfall events are shown to be generally of a low hazard nature. Some localised areas of deeper, more hazardous flows are evident, particularly in the ephemeral flow path. The detailed design phase needs to consider areas of deeper flooding to ensure that proposed infrastructure is commensurate with the flood risks.

The deepest Flood Depth category in the legends (shown in red) within the Figures in Attachment B of Appendix H should be >1m, not >4m.

OEH consider the assessment to provide a basis for the appropriate design of the solar farm to minimise flood risks.

Aboriginal cultural heritage

The Aboriginal Cultural Heritage Assessment Report (ACHAR) does not meet the Secretary's requirements. At this stage, the ACHAR is not consistent with requirements identified by the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) ("the Code").

OEH has reviewed the EIS and the *Aboriginal Cultural Heritage Assessment Report (ACHAR) Yarrabee Solar Project* prepared by OzArk Environmental & Heritage Management Pty Ltd (Ozark) for SLR Consulting on behalf of Reach Solar Energy Pty Ltd, August 2018 (EIS, Appendix C), and provide the following comments.

- 1 Table 5-2 shows the percentage of landform effectively surveyed for flat plains as 48% (page 29). OEH consider this figure to be misleading. Section 5.1.1 states that the field assessment (comprised targeted pedestrian survey in the flat, ploughed plain and the 18 survey areas, each measuring 600 by 500 metres) were randomly selected (page 24). Therefore, the area effectively surveyed and % of landform effectively surveyed for flat plain would be a smaller figure than presented in Table 5-2.

Recommended action:

- *Amend figures in table 5-2 for flat plain to reflect actual survey coverage of this landform. Further discussion and clarification is required in the text to reflect the survey methodology used.*

- 2 The ACHAR needs to demonstrate that all sites recorded during field surveys have been registered on AHIMS and give reporting consistency

Recommended action:

- *Update tables 5-6, 5-7 and 6-1 in the ACHAR to include AHIMS site numbers.*

- 3 **Management recommendations:** Long term artefact disposition and storage must be either under a care agreement or reburial in accordance with requirement 26 of the Code. The sites are unlikely to meet the significance threshold to be deposited at the Australian Museum (see 'Archaeological Collection Deposition Policy' <https://australianmuseum.net.au/document/archaeological-collection-deposition-policy>). Further consultation should occur with the Registered Aboriginal Parties (RAPs) regarding their preference for long term artefact disposition and the result detailed in the ACHMP.

Recommended action:

- *Further consultation needs to occur with the RAPs regarding their preference for long term artefact disposition.*
- *Results of the consultation are to be detailed in an ACH Management Plan.*

- 4 An Aboriginal Site Impact Recording Form (ASIRF) must be completed and submitted to AHIMS for each site subject to salvage or harm from construction works. This may only occur after project determination, and should be included into the management recommendations of the ACHAR and Table 41 of the EIS mitigation measures.

ASIRF: www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf

Recommended action:

- *An Aboriginal Site Impact Recording Form must be completed and submitted to AHIMS for each site harmed or destroyed from salvage or construction works.*

- 5 OEH SEARs required that "The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts." This has not been addressed in the ACHAR.

Our SEARs also required that "The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material." This is briefly mentioned on page 78 of the ACHAR but it is not detailed in the management recommendations.

Recommended action:

- *An unexpected finds protocol for Aboriginal cultural heritage (ACH), including human remains, must be developed and implemented before construction begins.*

Historic heritage

We are unable to comment on the Historic Heritage Assessment provided within the EIS. OEH's Heritage Division are the appropriate contact for historic cultural heritage. Please forward the relevant sections to heritage@heritage.nsw.gov.au if a copy of the assessment has not already been provided.

Biodiversity

The Biodiversity Development Assessment Report (BDAR) at Appendix E **does not** meet the Secretary's requirements for biodiversity.

Specific comments on the BDAR and related sections in the EIS are as follows.

OEH expects the accredited assessors to consider this feedback when preparing a BDAR for major projects in the future.

Biodiversity Development Assessment Report

Stage 1 – Biodiversity Assessment

The Yarrabee BDAR does not provide a completed assessment for Section 6 of the BAM. While we understand that the current proposal has avoided impacts to native vegetation and threatened species habitat, Section 6 of the BAM must be completed before impacts are identified and assessed in Sections 7 to 11.

The BDAR does not provide all the information detailed in BAM Appendix 10: Table 25 '*Minimum information requirements for the Biodiversity Development Assessment report... Stage 1 – Biodiversity Assessment*'. Specifically, missing information includes the results of applying BAM Sections 6.3 to 6.7 as listed under the heading 'Threatened Species' in Table 25 (sensitivity classes, biodiversity risk weightings and threatened species polygons).

Extent of assessment

Extent of the area being assessed changes from the "development site" in Sections 1 and 2 of the BDAR (site boundary shown in red on Figure 3) to the "development footprint" after Section 3.5.2. We assume the development footprint is restricted to the outline of the proposed PV array, energy storage, substation and laydown areas shown on Figure 3.

Stage 1 of the BAM assessment applies to the whole development site or "subject land" to ensure adequate identification of mobile species or biodiversity values that may be subject to indirect impacts. This biota may not be evident by assessing just to the boundary of the proposed development footprint. Full assessment of biodiversity values on a proposal site before project determination is also intended to guide site layout and ensure that impacts due to design changes or future modifications can be adequately offset.

2.5.2 Ecosystem Credit Species and Candidate Threatened Species (page 28)

The BAM does not support the justification in this section for presentation of an incomplete assessment and lack of targeted surveys for candidate threatened species during the optimum survey period.

If the survey timing requirements for predicted threatened species in the BAM Credit Calculator do not coincide with the field survey period, the assessor must either provide an expert report or assume the species is present (see BAM section 6.5.1.1).

Recommended action:

- *Section 6 of the BAM must be completed for the development site.*

3.2.3 Plant Community Types (page 32)

The three vegetation types identified for the development site (page 33) do not include native grassland. The list of fauna habitats present on the site includes a native grassland.

Native grassland habitat is shown on Figure 8 'Habitat Features' (page 42). This area is mapped as non-native vegetation on the plant community type (PCT) mapping on Figure 7 (page 35).

This area is also mapped as native grassland on the existing regional vegetation mapping. OEH accept that regional-scale maps may be less accurate at a site scale. The BAM Section 5.1.1.6 requires that inconsistencies between regional vegetation mapping (as shown on Figure 6) and results of the vegetation survey for the Yarrabee Solar development site (section 2.3.1 and Figure 7) should be demonstrated through field survey results.

In regions where grasslands occur naturally, such as the Riverina, assessment needs to be undertaken in pasture areas to demonstrate whether they meet the definition of native vegetation or not. If sufficient native species richness and cover are present, the pasture is then assigned to a PCT and assessed according to the BAM. Photographic evidence is to be provided for land under cropping, including aerial imagery and site photos. ADS40 aerial imagery available to OEH for the Yanco mapsheet (dated 2008) shows cultivation marks for most of the paddocks on the proposal site.

While the assessment is incomplete, and this area of native grassland was excluded from PCT mapping and threatened flora predictions and assessment, potential for threatened fauna habitat was identified and surveys completed.

The proposed development footprint avoids this area, so, in this case, OEH consider the consequence of inadequate assessment to have a low likelihood of impact to threatened entities.

Please note that our feedback for this BDAR is not applicable to any other major project, development site or BAM assessment.

Recommended actions:

- *Demonstrate that open areas of pasture do not meet the definition of native vegetation or do not require further assessment according to the BAM section 3.1.1.3. Pasture that is part of a regular cropping rotation can be evidenced by aerial imagery with cultivation marks.*

3.3.5 Fauna habitat (page 41)

This section states that photographs for fauna habitats are in Appendix E. Not all fauna habitats are included in Appendix E. We would expect images of native grassland habitat, given that existing mapping indicates potential for Plains-wanderer habitat on the proposal site, and assessment of this species is specified in the OEH SEARs.

Plains wanderer habitat assessment

The characteristics of Plains-wanderer (*Pedionomus torquatus*) habitat are listed in the description of fauna survey methods (Section 2.3.5, page 18). Fauna survey results in Section 3.3.5 mention that native grassland on the proposal site was considerably dense and approximately 50 cm in height, so was not suitable for Plains-wanderer. No evidence of habitat assessment for the native grassland has been provided, such as field data or photographs of 1 m² quadrats for comparison with the Plains-wanderer fauna habitat guide.

According to Figure 4 (page 15), two BAM flora plots were undertaken in the area mapped as 'native grassland habitat' – quadrats 12 and 20. The cover of native grasses recorded for both quadrats was approximately 40% (Appendix F), which approximates the preferred grass/herb cover requirement for Plains-wanderer habitat listed on page 18.

Recommended actions:

- *Provide evidence (comparative photographs or field data) that the native grassland habitat is not consistent with Plains-wanderer habitat, as shown in the Plains-wanderer habitat guide (Parker and Oliver 2006)*

3.5 Threatened Species (page 46)

Contrary to the statement on page 46, this section of the BDAR is not consistent with Section 6 of the BAM.

3.5.2 Threatened Flora

Native grassland mapped in Figure 8 may provide habitat for threatened flora species, either as an understorey to PCT 13 *Black Box - Lignum woodland wetland of the inner floodplains in the semi-arid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)*, or as a grassland community (e.g. PCT 44 *Forb-rich Speargrass - Windmill Grass - White Top grassland of the Riverina Bioregion*, or PCT 45 *Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion*).

Native grassland habitat should be assigned to a PCT and included in the Credit Calculator. It is possible that additional threatened flora species would have been predicted to occur.

The proposed development footprint avoids this area, so, in this case, OEH consider the consequence of inadequate assessment to have a low likelihood of impact to threatened entities.

3.5.5 Species Credit Species

Flora Species Credit Species

If the survey timing requirements for predicted threatened flora species in the BAM Credit Calculator does not coincide with the field survey period, the assessor must either provide an expert report or assume the species is present (see BAM section 6.5.1.1).

Fauna Species Credit Species

Where the survey confirms that a species credit species is present or likely to use the suitable habitat on the subject land, OR the species is assumed to be present, it must be assessed further under Step 5 in Section 6.4.1.26 of the BAM.

Stage 2 – Impact Assessment

OEH commend the proponent for selecting a site in cultivated land and proposing a development footprint that aims to avoid impacts to biodiversity values.

4.2 Impacts on Native Vegetation and Habitat

The EIS and appendices describe construction and operation actions that either potentially impact or mitigate impacts to native vegetation or habitat. These do not appear to have been addressed in the BDAR.

1. *Site access*

Section 4.2 states that existing roads and tracks will be used for access during construction and operation of the project. This information is inconsistent with the EIS and appendices.

The EIS (section 3.4.8, page 34) states that construction of sealed roads will be required - access tracks will be upgraded to sealed roads, including setbacks for access routes (EIS Appendix G Hazards and Risk, Section 9.6), and construction of a carpark for 100 vehicles.

Table 36 *Summary of Required Road Upgrades (Should the Western Access Route be Utilised)* (page 177) includes “trimming vegetation along the northern approach”.

2. *Vegetation management and asset protection*

The implications of risk mitigation for the proposal, as detailed in other parts of the EIS, has not been considered. The BDAR should state whether the site management actions impact biodiversity and identify the location, extent and mitigation measures of those that do.

For example:

- *Vegetation management associated with solar array area (described in EIS Appendix G Hazards and Risk, Section 4.2), including asset protection zones.*
- *Mitigation measures for battery storage system hazard identification are provided in Table 21 (Section 7.3.1.2, page 127). Listed as ‘external influences’ is a control measure to ‘protect against influence of flora and fauna (e.g. surrounding vegetation management to minimise and eliminate where possible ignition sources)’. This measure is also in the statement of commitments (page 195) under ‘potential impacts to energy storage system’.*

3. *Installation of security fencing*

Section 3.13 (page 42) of the EIS describes installation of a security fence around the perimeter of construction areas and indicates that the fence will remain during operation of the solar farm. The location and specifications of the security fence have not been identified.

Inland Forest Bat (*Vespadelus baverstocki*) has been recorded in all patches of woodland habitat on the development site (Figure 9, page 47). Table 18 (page 44) states that “dams are an important source of water for many native fauna residing within vegetation patches”.

Impacts of the proposal on Inland Forest Bat have not been fully considered, including:

- Whether Inland Forest Bats are likely to be flying between dams and woodland
- If so, whether the proposed security fence be built between these habitats and artificial water
- Is the security fence likely to be topped with barbed or razor wire, and what impact will that have on mortality of individuals and movement of threatened bat populations?

4.3 Indirect impacts on native vegetation and habitat

Erosion and sedimentation due to inappropriate management of soil and runoff should be included as an indirect impact, particularly to the identified threatened ecological community (TEC).

Establishment of vegetation for ground cover is listed in the EIS Sections 7.1.4.9 and 7.1.4.10 (pages 109 and 111) as a measure for controlling erosion and sedimentation.

Any revegetation or seeding for ground stabilisation within the development site or planting/landscaping for risk mitigation must not be with exotic species likely to establish in adjoining native vegetation. Plantings adjoining the *Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions* TEC should be with species native to that plant community type.

Recommended actions:

- *Confirm whether potential direct and indirect impact of site management actions detailed in the EIS have been considered in the BDAR, including road upgrades and vegetation management for the solar array and battery storage facility.*
- *Assess the potential impact of security fencing on Inland Forest Bat*
- *Include measures in construction and operation management plans to mitigate the introduction and spread of exotic plant species (particularly during mitigation or landscaping works), in areas adjacent or uphill of the 'Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions' TEC.*

5.1 Mitigation measures – Construction Phase

Mitigation measures identified in the EIS (Table 41, pages 189-192) for impacts to biodiversity do not all relate to the assessment in Section 4.

Recommended actions:

- *Ensure mitigation measures in the statement of commitments in the EIS align with the BDAR.*
- *Include mitigation measures for weed introduction and spread into mapped TECs in the weed management strategy.*

5.2 Mitigation Measures – Operational Phase

5.2.1 Security Perimeter Fencing

Impacts to kangaroos and emus have not identified in the BDAR, so a mitigation measure is unnecessary. This section would more appropriately include monitoring and management of impacts to Inland Forest Bats, if identified in further assessment.

Monitoring for kangaroos and emus could be included in the EIS as an additional action rather than the BDAR. It is not a mitigation measure for any impact to threatened species or their habitat required under the *Biodiversity Conservation Act 2016*.

5.3 Impacts requiring an offset

A completed threatened species assessment for the development site (as per BAM Section 6) is needed to assess areas “without native vegetation” for threatened species.

Environmental Impact Statement

8.1 Statement of Commitments (page 187)

Recommended actions:

- *Remove mitigation measures in the statement of commitments (EIS, page 187) that do not relate to the Yarrabee Solar Project, such as mention of nest boxes in the Western Offset Area, induction materials containing Tetratheca juncea, and fuel management specification.*
- *Monitoring of kangaroos and emus (EIS, page 192) is not a mitigation measure for impacts to threatened species or their habitat as assessed by the BAM or required under the Biodiversity Conservation Act 2016.*

References

Parker DG & Oliver DL (2006) *Plains-wanderer habitat management guide. A photographic guide for visually assessing the grassland structure of Plains-wanderer habitat.* 2nd Edition. Department of Environment and Conservation, Sydney.