

APPENDIX **A**

**SECRETARY'S ENVIRONMENTAL
ASSESSMENT REQUIREMENTS
(SEARs)
(NSW DPE)**

Ref: 610.17428-R03-v3.0
August 2018



Planning & Environment

Planning Services

Resource and Energy Assessments

Contact: Iwan Davies

Phone: (02) 9274 6296

Email: Iwan.davies@planning.nsw.gov.au

Andy Biffen
Reach Solar Energy
Level 16, 461 Bourke Street
Melbourne VIC 3000

Dear Mr Biffen

Yarrabee Solar (SSD 9237) Environmental Assessment Requirements

I have attached the Environmental Assessment Requirements for the preparation of an Environmental Impact Statement (EIS) for the Yarrabee Solar project.

The requirements are based on the information you have provided to date, and have been prepared in consultation with the relevant government agencies. The agencies comments are attached for your information (see Attachment 2).

Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and EIS for the project within the next two years.

If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will also require approval under the Commonwealth's *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act).

This approval is in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Department of the Environment in Canberra (6274 1111 or www.environment.gov.au).

Please contact the Department at least two weeks before you plan to submit the development application and EIS for the project. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the required number of copies of the EIS.

It is important for you to recognise that the Department will review the EIS for the project before putting it on public exhibition. If it fails to adequately address these requirements, you will be required to submit an amended EIS.

Yours sincerely



19/4/18

Clay Preshaw

Director

Resource and Energy Assessments

as nominee of the Secretary

Secretary's Environmental Assessment Requirements

State Significant Development

Section 4.12(8A) of the *Environmental Planning and Assessment Act*

Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 9237
Proposal	<p>Yarrabee Solar Project which includes:</p> <ul style="list-style-type: none"> the construction and operation of a photovoltaic generation facility with an estimated capacity of up to 900 MW; and development of associated infrastructure, including a grid connection and battery storage facilities.
Location	Back Morundah Road, approximately 23 km southwest of Narrandera, within the Narrandera Shire local government area.
Applicant	Reach Solar energy
Date of Issue	20 April 2018
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"> a stand-alone executive summary; a full description of the development, including: <ul style="list-style-type: none"> details of construction, operation and decommissioning; a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development; a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved solar projects, rural residential development and subdivision potential); an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: <ul style="list-style-type: none"> a description of the existing environment likely to be affected by the development; an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed developments (including the Euroley Poultry Production Complex and the proposed Sandigo and Avonlie solar projects), taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice; a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development (including draft management plans for specific issues as identified below); and a description of the measures that would be implemented to monitor and report on the environmental performance of the development; a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and the reasons why the development should be approved having regard to: <ul style="list-style-type: none"> relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act and how the

	<p>principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development;</p> <ul style="list-style-type: none"> – the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and – feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. <ul style="list-style-type: none"> • a detailed consideration of the capability of the project to contribute to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department's guidance on the matter. <p>The EIS must also be accompanied by a report from a suitably qualified person providing:</p> <ul style="list-style-type: none"> • a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; and • certification that the information provided is accurate at the date of preparation. <p>The development application must be accompanied by the consent in writing of the owner/s of the land (as required in clause 49(1)(b) of the Regulation).</p>
<p>Specific issues</p>	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> • Biodiversity – including an assessment of the biodiversity values and the likely biodiversity impacts of the development in accordance with the <i>Biodiversity Conservation Act 2016</i> (NSW), a detailed description of the proposed regime for minimising, managing and reporting on the biodiversity impacts of the development over time, and a strategy to offset any residual impacts of the development in accordance with the <i>Biodiversity Conservation Act 2016</i> (NSW). • Heritage – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including adequate consultation with the local Aboriginal community; • Land – including: <ul style="list-style-type: none"> – an assessment of the impact of the development on agricultural land (including possible cumulative impacts on agricultural enterprises and landholders) and flood prone land, an assessment of any impacts to Crown lands, a soil survey to consider the potential for erosion to occur, and paying particular attention to the compatibility of the development with the existing land uses on the site and adjacent land (e.g. operating mines, extractive industries, mineral or petroleum resources, exploration activities, aerial spraying, dust generation, and biosecurity risk) during operation and after decommissioning, with reference to the zoning provisions applying to the land, including subdivision; and – measures to remediate the land following decommissioning in accordance with <i>State Environmental Planning Policy No 55 - Remediation of Land</i>. • Visual – including an assessment of the likely visual impacts of the development (including any glare, reflectivity and night lighting) on surrounding residences, scenic or significant vistas, air traffic and road corridors in the public domain, including a draft landscaping plan for on-site perimeter planting, with evidence it has been developed in consultation with affected landowners; • Noise – including an assessment of the construction noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i> (ICNG) and operational noise impacts in accordance with the <i>NSW Noise</i>

	<p><i>Policy for Industry 2017</i> and a draft noise management plan if the assessment shows construction noise is likely to exceed applicable criteria;</p> <ul style="list-style-type: none"> • Transport – including an assessment of the site access routes (including Newell Highway, Sturt Highway, Morundah Road, Back Morundah Road and Yamma Road), site access points, any potential rail safety issues and likely transport impacts (including peak and average traffic generation, over-dimensional vehicles and construction worker transportation) of the development on the capacity and condition of roads (including on any Crown land), a description of the measures that would be implemented to mitigate any impacts during construction (including cumulative impacts from nearby developments), and a description of any proposed road upgrades developed in consultation with the relevant road and rail authorities (if required); • Water – including: <ul style="list-style-type: none"> – an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including Washpen Creek, Yanco Creek, drainage channels, wetlands, riparian land, floodplains, key fish habitat, groundwater dependent ecosystems and acid sulfate soils), related infrastructure, adjacent licensed water users and basic landholder rights, and measures proposed to monitor, reduce and mitigate these impacts; – details of water requirements and supply arrangements for construction and operation; and – a description of the erosion and sediment control measures that would be implemented to mitigate any impacts in accordance with <i>Managing Urban Stormwater: Soils & Construction</i> (Landcom 2004); • Hazards and Risks - including: <ul style="list-style-type: none"> – a preliminary risk screening in accordance with <i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33</i> (DoP, 2011), and if the preliminary risk screening indicates the development is “potentially hazardous”, a Preliminary Hazard Analysis (PHA) must be prepared in accordance with <i>Hazard Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis</i> (DoP, 2011) and <i>Multi-Level Risk Assessment</i> (DoP, 2011); and – an assessment of all potential hazards and risks including but not limited to bushfires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure (including the proposed transmission line and substation) against the International Commission on Non-Ionizing Radiation Protection (ICNIRP) <i>Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields</i>. • Socio-Economic – including an assessment of the likely impacts on the local community and a consideration of the construction workforce accommodation.
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, affected landowners, exploration licence holders, quarry operators and mineral title holders.</p> <p>In particular, you must undertake detailed consultation with affected landowners surrounding the development and Narrandera Shire Council.</p> <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>

Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Biodiversity

Biodiversity Assessment Method (OEH)
 Threatened Species Assessment Guidelines - Assessment of Significance (OEH)
 Biosecurity Act 2015
 Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)
 Policy and Guidelines for Fish Habitat Conservation and Management (DPI)
 Fisheries Management Act 1994

Heritage

Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
 Code of Practice for Archaeological Investigations of Objects in NSW (OEH)
 Guide to investigating, assessing and reporting on aboriginal cultural heritage in NSW (OEH)
 NSW Heritage Manual (OEH)

Land

Primefact 1063: Infrastructure proposals on rural land (DPI)
 Establishing the social licence to operate large scale solar facilities in Australia: insights from social research for industry (ARENA)
 Local Land Services Act 2013
 Australian Soil and Land Survey Handbook (CSIRO)
 Guidelines for Surveying Soil and Land Resources (CSIRO)
 The land and soil capability assessment scheme: second approximation (OEH)

Noise

NSW Noise Policy for Industry (EPA)
 Interim Construction Noise Guideline (EPA)
 NSW Road Noise Policy (EPA)

Transport

Guide to Traffic Generating Developments (RTA)
 Austroads Guide to Road Design & relevant Australian Standards
 Austroads Guide to Traffic Management

Water

Managing Urban Stormwater: Soils & Construction (Landcom)
 Floodplain Development Manual (OEH)
 Guidelines for Controlled Activities on Waterfront Land (DPI Water)
 Water Sharing Plans (DPI Water)
 Floodplain Management Plan (DPI Water)
 Guidelines for Watercourse Crossings on Waterfront Land (DPI Water)

Hazards and Risks

Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DPE)
 Multi-Level Risk Assessment (DPE)

Waste

Waste Classification Guidelines (EPA)

Electromagnetic Interference

ICNIRP Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields

Environmental Planning Instruments

State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Rural Lands) 2008

State Environmental Planning Policy No. 44 – Koala Habitat Protection

State Environmental Planning Policy No. 55 – Remediation of Land

Narrandera Local Environmental Plan 2013

18 April 2018



Iwan Davies
Senior Environmental Assessment Officer
Resource and Energy Assessments - Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Email: iwan.davies@planning.nsw.gov.au

Dear Iwan

**RE: YARRABEE SOLAR FARM PROJECT (SSD 9237) - REQUEST FOR INPUT INTO
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS**

Thank you for the opportunity to comment on this exciting development for the Narrandera Shire.

Based on the information currently available, key areas we wish the final SEARS to consider are:

- Traffic movements of heavy vehicles and their impact upon road safety, local traffic movement and the condition of local roads
- Accommodation for workers during the expected six to nine month construction phase
- Management of large quantities of unsorted waste generated, and the processing capability of local landfill facilities, during the construction phase

Council looks forward to providing a more detailed response during the next stage of consultation as discussed.

Please contact Council's Development and Environment section by telephone 02 6959 5510 or via email council@narrandera.nsw.gov.au if you have any further enquiries regarding these matters.

Yours sincerely

A handwritten signature in black ink, appearing to be "Helen Ryan".

Helen Ryan
Manager Development and Environment



Iwan Davies
Senior Environmental Assessment Officer
Resource and Energy Assessments, Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001
Via email: iwan.davies@planning.nsw.gov.au

Dear Mr Davies

RE: Yarrabee Solar Park (SSD 9237) – request for input to Secretary’s Environmental Assessment Requirements

I refer to your email dated 4 April 2018 to the Office of Environment and Heritage (OEH) seeking input into the Department of Planning and Environment (DPE) Secretary’s Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the proposed Yarrabee Solar Park (SSD 9237).

OEH has reviewed the available documentation and provides SEARs for the proposed development in **Attachment A**. Guidance material is listed in **Attachment B**. Project specific issues and those related to the supplied preliminary environmental assessment (PEA) are provided below.

OEH recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Aboriginal cultural heritage
3. Flooding

The assessment must include all ancillary infrastructure associated with the project, including, but not limited to:

- items listed in section 3 of the Preliminary Environmental Assessment (PEA)
- activities associated with landscaping (screen plantings) and vegetation management during operation, such as herbicide use for maintaining vegetation under panels
- Rural Fire Service requirements for asset protection.

Please note that for projects not defined as pending or interim planning applications under Part 7 of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* the Biodiversity Assessment Methodology (BAM) must be used to assess impacts to biodiversity in accordance with the *Biodiversity Conservation Act 2016* (BC Act), unless the Planning Agency Head and the Environment Agency Head determine that the project is not likely to have any significant impact on biodiversity values. **For this project the BAM must be used.**

Project specific issues:

1. Biodiversity

1.1 Threatened species (page 20):

- a. The list of predicted threatened species should be generated through a BioNet search by IBRA sub-region (Riverina – Murrumbidgee).
- b. *Diuris pedunculata* (small snake orchid) is not included in BioNet as recorded in central-southern NSW and should be removed from the predicted species list (Appendix D, page ii).

- c. Southern bell frog (*Litoria raniformis*) have been recorded within six kilometres of the proposal site and remnant vegetation within and surrounding drainage depressions could provide habitat. The likelihood of occurrence for southern bell frog should be revisited.

1.2 Further assessment (page 21):

- d. All native vegetation on the site that will be impacted by the proposal must be identified and included in the assessment.
- e. Paddock trees occur across the site that may provide habitat for threatened species that have been recorded locally, including the Superb Parrot (*Polytelis swainsonii*). If paddock trees are to be impacted, the EIS should detail the value of paddock tree habitat to all threatened species known or likely to occur in the area and an assessment of the impacts of clearing those trees.
- f. The native vegetation present may also be a threatened ecological community or habitat for a threatened species listed on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

1.3 Threatened species survey techniques (Table 4, page 22):

- g. Habitat mapping for the threatened Plains-wanderer (*Pedionomus torquatus*) produced in 2001 (Roberts and Roberts) includes parts of the proposal site as secondary habitat. This habitat may no longer be available due to past land use practices. However, if the site is found to contain suitable habitat for Plains-wanderer then the importance of the site would need to be determined and impacts on Plains-wanderer assessed.
 - Surveys for Plains-wanderer must be conducted in potential habitat on the site (Forb-rich Speargrass – Windmill Grass – White Top grassland of the Riverina Bioregion) when this grassland has suitable structure, i.e. has not been grazed for at least six months
 - While Plains-wanderer may be detected at any time of the year, surveys are best conducted in Spring when birds have paired for breeding.
 - There may be additional survey requirements for this species under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

2. Aboriginal Heritage

- 2.1 An Aboriginal Cultural Heritage Assessment Report (ACHAR) will be required as part of the EIS. The ACHAR will include consultation in accordance with the 'Aboriginal cultural heritage consultation requirements for proponents 2010' (DECCW). Aboriginal cultural heritage values that exist across the whole area that will be affected by the development must be identified and documented in the ACHAR.
- 2.2 We note in the PEA that Aboriginal community consultation has commenced and registration has been completed. Appendix F of the PEA contains a preliminary heritage review prepared by OzArk E&HM Pty Ltd (February 2018). This review identified two previously recorded sites registered on the Aboriginal Heritage Information Management System (AHIMS) and two stone artefact sites identified during a reconnaissance trip. The report states that the two newly identified sites will be recorded in detail as part of archaeological surveys in March 2018 (OzArk 2018:8). Further documentation and recording of these sites should be undertaken and reported to the OEH through registration on AHIMS.
- 2.3 All Aboriginal objects identified must be reported to the OEH through registration on AHIMS in accordance with the mandatory notification requirements of section 89A of the National Parks and Wildlife Act 1974.

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

Yours sincerely

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

ANDREW FISHER
A/Senior Team Leader Planning
South West Branch
Regional Operations
Office of Environment and Heritage

ATTACHMENT A – Standard Environmental Assessment Requirements for Yarrabee Solar Park (SSD 9237)
ATTACHMENT B – Guidance material

Attachment A – Standard Environmental Assessment Requirements for Yarrabee Solar Park (SSD 9237)

Sources of guidance material for terms in [blue](#) are in Attachment B

Biodiversity
<p>1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2016 using the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and the BAM, unless OEH and DPE determine that the proposed development is not likely to have any significant impact on biodiversity values.</p>
<p>2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM.</p>
<p>3. The BDAR must include details of the measures proposed to address the offset obligation as follows;</p> <ul style="list-style-type: none"> a. The total number and classes of biodiversity credits required to be retired for the development/project; b. The number and classes of like-for-like biodiversity credits proposed to be retired; c. The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; d. Any proposal to fund a biodiversity conservation action; e. Any proposal to make a payment to the Biodiversity Conservation Fund. <p>If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</p>
<p>4. The BDAR must be submitted with all digital spatial data associated with the survey and assessment as per Appendix 11 of the BAM.</p>
<p>5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.</p>
Aboriginal cultural heritage
<p>6. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers.</p>
<p>7. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.</p>

8. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
9. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist in areas with potential for subsurface Aboriginal deposits. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the ACHAR
10. 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.
11. 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.

Historic heritage

12. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to *State and local heritage* including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:
 - a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996),
 - b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),
 - c. include a statement of heritage impact for all heritage items (including significance assessment),
 - d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and
 - e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.

Flooding
<p>13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:</p> <ul style="list-style-type: none"> a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas). d. Flood hazard.
<p>14. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.</p>
<p>15. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:</p> <ul style="list-style-type: none"> a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
<p>16. Modelling in the EIS must consider and document:</p> <ul style="list-style-type: none"> a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies. b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood. c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories. d. Relevant provisions of the NSW Floodplain Development Manual 2005.
<p>17. The EIS must assess the impacts on the proposed development on flood behaviour, including:</p> <ul style="list-style-type: none"> a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. b. Consistency with Council Floodplain Risk Management Plans. c. Consistency with any Rural Floodplain Management Plans. d. Compatibility with the flood hazard of the land. e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses. h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council. i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council. j. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum

flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.

- k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B – Guidance material

Title	Web address
<u>Relevant Legislation</u>	
<i>Biodiversity Conservation Act 2016</i>	www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Fisheries Management Act 1994</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Water Management Act 2000</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
<u>Biodiversity</u>	
Biodiversity Assessment Method (OEH 2017)	www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf
Threatened species - assessment of significance	www.environment.nsw.gov.au/research-and-publications/publications-search/threatened-species-assessment-guidelines
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH 2017)	www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
Ancillary rules: biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Ancillary rules: reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf
OEH Threatened Species Website	www.environment.nsw.gov.au/threatenedspecies/
NSW BioNet (Atlas of NSW Wildlife)	www.bionet.nsw.gov.au/
NSW guide to surveying threatened plants (OEH 2016)	www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
OEH threatened species survey and assessment guideline information	www.environment.nsw.gov.au/threatenedspecies/surveyassessmentguidelines.htm
BioNet Vegetation Classification – see NSW Plant Community Type (PCT) classification link for PCT database login page.	www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm
OEH Data Portal (access to online spatial data)	http://data.environment.nsw.gov.au/
Fisheries NSW policies and guidelines	www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm

Title	Web address
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	www.environment.nsw.gov.au/protectedareas/developmntadjoinin_gdecc.htm
<u>Aboriginal Cultural Heritage</u>	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
<u>Heritage</u>	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	www.environment.nsw.gov.au/Heritage/publications/
<u>Water and Soils</u>	
Flooding	
Floodplain development manual	www.environment.nsw.gov.au/floodplains/manual.htm
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation



10 April 2018

SWT18/00052
SF2018/130114
MM

The Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Iwan Davies

SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS SSD-9237 – PROPOSED SOLAR FARM - YARRABEE SOLAR PARK, BACK MORUNDAH ROAD, MORUNDAH.

I refer to correspondence forwarded to Roads and Maritime Services requesting the provision of Environmental Assessment Requirements to be addressed in the supporting documentation to be submitted for the subject development.

From review of the information provided including the scoping report prepared by SLR Consulting Australia dated March 2018 it is understood that the development proposal represents the establishment of a Solar Farm with an intended capacity of up to 900 MW on the subject site. The subject site is located southwest of Narrandera to the south of the Sturt Highway and west of the Newell Highway. Access to the development site is proposed to be gained from Back Morundah or Yamma Roads which are classed as local roads within a 100 km/h speed zone. Access to the site particularly for the delivery of components will rely on access via the Sturt Highway or Newell Highway depending on whether the components are to be transported from Sydney or Melbourne.

Given the scale and operational characteristics of the proposed development Roads and Maritime Services considers that the traffic related issues relevant to the development should be considered and addressed in 2 distinct stages as follows;

- Construction & Decommission phase – the transport of materials and equipment/components for the establishment of the facility and ancillary infrastructure, the movement and parking of construction related vehicles, including personal vehicles, during the construction of the facility,
- Operational phase – the ongoing traffic generation due to the operation, maintenance and servicing of the various elements of the project.

The supporting scoping report acknowledges the need for an Environmental Impact Statement and a detailed traffic and transport assessment. A Traffic Management Plan to manage the traffic generation during the construction period will also be required to be provided but may be post consent when a haulage contractor is appointed. Traffic should also be considered and addressed during operation of the facility. The Traffic Management Plan shall detail the potential impacts associated with the phases of the development, the measures to be implemented to maintain the standard and safety of the road network, and procedures to monitor and ensure compliance.

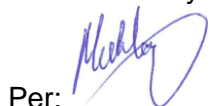
Roads and Maritime Services emphasises the need to minimise the impacts of any development on the existing road network and maintain the level of safety, efficiency and maintenance along the road network. Given the scale of the proposal a Traffic Impact Assessment (TIA) should be submitted with the Development Application. Any Traffic Impact Assessment needs to address the impacts of traffic generated due to this development upon the nearby road network, particularly during the construction and decommissioning phases.

For guidance in the preparation of the TIA the applicant is referred to section 2 of the “Guide to Traffic Generating Developments” prepared by the RTA and the Austroads publications, particularly the Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development and Part 13: Traffic Studies and Analysis. The TIA should contain information such as the expected traffic generation, vehicle numbers and types of vehicles, and travel routes for vehicles accessing the development site.

The proposed solar farms will not be visible from either the Sturt or Newell Highway. However given the type and scale of the proposed development and its proximity to a public road it is considered appropriate that issues relating to potential for distraction of, and for glare impacts on, passing motorist be addressed in the development submission. Consideration should be given to the establishment and maintenance of a visual buffer, such as a vegetated buffer, within the subject site along its frontage to any public road.

Any enquiries regarding this correspondence may be referred to the Manager, Land Use for Roads and Maritime Services (South West Region), Maurice Morgan, phone (02) 6923 6611.

Yours faithfully



Per:
Jonathan Tasker
Acting Director
South West NSW

I refer to your electronic mail of 17 January 2018 to the Environment Protection Authority (EPA) requesting our comments on the draft Secretary's Environmental Assessment Requirements (SEARs) for the proposed Yarrabee Solar Park.

The EPA has responsibilities for pollution control and environmental management for scheduled activities under the *Protection of the Environment Operations Act 1997*. Based on the information provided the proposed activity is not a scheduled activity under the *Protection of the Environment Operations Act 1997* and the solar park project does not require an Environment Protection Licence. Under the *Protection of the Environment Operations Act 1997* Narrandera Shire Council will be the Appropriate Regulatory Authority for pollution control and environmental management issues for this proposal should it be approved.

On this basis the EPA has no further comments to make in relation to this proposal or the draft SEARs, and requires no further consultation in relation to this application.

If you have any further enquiries about this matter please contact me by telephoning 02 6969 0700.

Thanks

Craig Bretherton

Manager Regional Operations

Riverina Far West Region

South & West Branch, NSW Environment Protection Authority

☎ 02 6969 0700 Mobile ☎ 0427 223 516

craig.bretherton@epa.nsw.gov.au www.epa.nsw.gov.au [@EPA_NSW](https://twitter.com/EPA_NSW)

Report pollution and environmental incidents 131 555 (NSW only) or +61 2 9995 5555



Please send all official electronic correspondence to riverina.farwest@epa.nsw.gov.au



File Ref. No: BFS18/888 (8000003180)
 TRIM Doc. No: D18/24133
 Contact: Station Officer Graeme Turnbull

17 April 2018

The NSW Department of Planning & Environment
 C/- Iwan Davies
 GPO Box 39
 SYDNEY NSW 2001

E: iwan.davies@planning.nsw.gov.au

Dear Mr Davies,

**Secretary's Environmental Assessment Requirements (SEARs)
 Yarrabee Solar Project (SSD9237), Back Morundah Road, Morundah**

I refer to the above development proposal and the Department of Planning & Environment's (the Department) invitation for agencies to provide input for consideration in development of the SEARs. Fire & Rescue NSW (FRNSW) have reviewed aspects of the proponent's scoping report and the following comments and recommendations are submitted for consideration.

FRNSW notes that the facility's proposed location is within a NSW Rural Fire Services' (RFS) Fire District. Notwithstanding, in the event of a significant fire event (either on or off-site in close proximity to the development) or hazardous material incident FRNSW will be responded to either assist the RFS or to fulfill the role of designated combat agency.

It is FRNSW experience that small and large scale photovoltaic installations present unique electrical hazard risks to our personnel when fulfilling their emergency first responder role (n.b. the Fire Brigades Act 1989 imposes specific statutory functions and duties upon the Commissioner of FRNSW).

In addition, the Work Health and Safety (WHS) Act 2011 (and its subordinate Regulation) classify FRNSW as an entity conducting a business or undertaking (PCBU). Clauses 34 and 35 of the WHS Regulation impose specific obligations upon a PCBU to identify hazards and manage risks at workplaces.

Due to the electrical hazards associated with large scale photovoltaic installations and the potential risk to the health and safety of firefighters, both FRNSW and the NSW Rural Fire Service must be able to implement effective and appropriate risk control measures when managing an emergency incident at the proposed site.



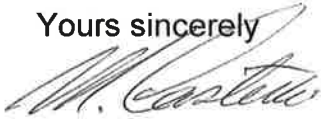
Recommendation/s

Should a fire or hazardous material incident occur, it is important that first responders have ready access to information which enables effective control measures to be quickly implemented. Without limiting the scope of the emergency response plan (ERP), the following matters are recommended to be addressed:

1. That a comprehensive ERP is developed for the site.
2. That the ERP specifically addresses foreseeable on-site and off-site fire events and other emergency incidents, (e.g. fires involving solar panel arrays, bushfires in the immediate vicinity or potential hazmat incidents).
3. That the ERP detail the appropriate risk control measures that would need to be implemented to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards). Such measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the photovoltaic system (either in its entirety or partially, as determined by risk assessment).
4. Other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site should also be included in the ERP.
5. That two copies of the ERP (detailed in recommendation 1 above) be stored in a prominent 'Emergency Information Cabinet' located in a position directly adjacent to the site's main entry point/s.
6. Once constructed and prior to operation, that the operator of the facility contacts the relevant local emergency management committee (LEMC). The LEMC is a committee established by Section 28 of the State Emergency and Rescue Management Act 1989. LEMCs are required to be established so that emergency services organisations and other government agencies can proactively develop comprehensive inter agency local emergency procedures for significant hazardous sites within their local government area. The contact details of members of the LEMC can be obtained from the relevant local council.

For further information please contact Fire Safety Assessment Unit, referencing FRNSW file number BFS18/888 (8000003180). Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M. Castelli', written over the words 'Yours sincerely'.

Station Officer Mark Castelli
Team Leader
Fire safety Assessment Unit

16 April 2018

Iwan Davies
Senior Environmental Assessment Officer – Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Emailed: Iwan.Davies@planning.nsw.gov.au

Your Reference: SSD9237
Our Reference: OUT18/5858

Dear Mr Davies

Re: Yarrabee Solar Project – SSD 9237 – Request for SEARs

Thank you for the opportunity to provide comment on the Secretary's Environmental Assessment Requirements (SEARs) for the state significant development application for Yarrabee Solar Project (SSD 9237). This is a response from the NSW Department of Planning & Environment – Division of Resources & Geoscience (DRG), Geological Survey of New South Wales (GSNSW).

GSNSW has reviewed the Scoping Report and Draft SEARs for the Yarrabee Solar Project and note that according to departmental databases, there are no current mineral, coal or petroleum titles or applications, or operating quarries or mines over the site or adjacent lands. Accordingly, GSNSW has no resource sterilisation concerns to raise regarding the proposed Yarrabee Solar Project at this stage.

GSNSW acknowledge Reach Solar Energy (the proponent) undertook a search of the departments MinView database as part of the Scoping Report for the project and identified that there were no mining or mineral exploration licences over or in the vicinity of the Project site (refer to page 49 of the Scoping Report).

However, the Draft SEARs for the Project requires an assessment of the impact of the development on existing land uses, including the compatibility of the development with the existing land uses on the site and adjacent land (e.g. operating mines, extractive industries, mineral or petroleum resources, exploration activities), during operation and after decommissioning.

In fulfilling these requirements, the Environmental Impact Statement (EIS) must include a dated mineral, coal and petroleum titles and applications search through the Divisions MinView application, with results shown on a map(s). Current mining and exploration titles and applications can be viewed at:

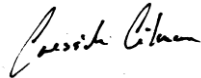
<http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/geoscience-information/services/online-services/minview>

GSNSW specifically requires the proponent to check for new mineral and energy titles that may be granted in the vicinity of the subject site during all decision-making stages of the project to ensure that other stakeholders (such as title holders) with interest in the area are aware of the solar farm project.

GSNSW request to be consulted in relation to the proposed location of any biodiversity offset areas (both on and off site) or any supplementary biodiversity measures to ensure there are no consequent reduction in access to prospective land for mineral exploration, or potential for sterilisation of mineral or extractive resources.

Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the GSNSW Land Use team at landuse.minerals@industry.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Cressida Gilmore', written in a cursive style.

Cressida Gilmore
Manager - Land Use

OUT18/5707

Iwan Davies
Senior Environmental Assessment Officer
Resource and Energy Assessments
Planning Services
NSW Department of Planning and Environment

iwan.davies@planning.nsw.gov.au

Dear Mr Davies

Yarrabee Solar Project (SSD 9237)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 4 April 2018 to the Department of Industry in respect to the above matter. Comment has been sought from relevant branches of Crown Lands & Water and Department of Primary Industries. Any further referrals to Department of Industry can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

The department has reviewed the Preliminary Environmental Assessment and recommends the EIS be required to address the following:

- Assessment of whether there are likely to be any significant impacts on listed aquatic threatened species, populations or ecological communities scheduled under the *Fisheries Management Act 1994*. Please note that the current mapping for all threatened species is located on the website: <http://www.dpi.nsw.gov.au/fishing/species-protection/threatened-species-distributions-in-nsw/freshwater-threatened-species-distribution-maps>.
- Update (changes in **bold**) of the first dot point of the Water section regarding the requirements for the assessment of impacts to water resources to:
 - an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including Washpen Creek, **Yanco Creek**, drainage channels, wetlands, riparian land, **floodplains**, key fish habitat, groundwater dependent ecosystems and acid sulfate soils), related infrastructure, adjacent licensed water users and basic landholder rights, and measures proposed to monitor, reduce and mitigate these impacts.

Yours sincerely



Alison Collaros
A/Manager, Assessment Advice
18 April 2018



NSW RURAL FIRE SERVICE



Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Your Ref: SSD 9237
Our Ref: D18/5137

ATTENTION: Iwan Davies

20 April 2018

Dear Iwan

Yarrabee Solar Park Request for Input into Secretary's Environmental Assessment Requirements

I refer to your email dated 4 April 2018 seeking the Secretary's Environmental Assessment Requirements for the preparation of an Environmental Impact Statement (EIS) in accordance with Schedule 2 of the *Environmental Planning and Assessment Act 1979*.

1. The NSW Rural Fire Service advises that the EIS will need to address any bush fire protection measures adopted to ensure compliance with Aims and Objectives identified in Clause 1.2 of "Planning for Bush Fire Protection 2006". The RFS acknowledges that the site is not mapped as Bush Fire Prone Land but does identify that a grassland and/or pasture hazard exists within and adjoining the site.
2. The RFS advises that the Environmental Impact Statement will need to address any fire mitigation measures adopted to ensure that a fire occurring within the site cannot escape the site.

For any enquiries regarding this correspondence please contact Deborah Dawson on (02) 4474 0600.

Yours faithfully

Martha Dotter
A/Team Leader Development Assessment & Planning
Planning & Environment Services - South

Postal address

Records
NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

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