



Benjamin Hannig  
Managing Director  
Enerparc Australia Pty Ltd  
223 Liverpool Street  
Darlinghurst NSW 2010

Dear Mr Hannig

**Tilbuster Solar (SSD 9619)  
Environmental Assessment Requirements**

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

The requirements are based on the information you provided on 24 September 2018 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](http://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

12/10/18

Clay Preshaw  
**Director**  
**Resource Assessments**  
as nominee of the Secretary

# Environmental Assessment Requirements

## State Significant Development

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979* and  
Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

<b>Application Number</b>	SSD 9619
<b>Proposal</b>	<p>Tilbuster Solar Farm which includes:</p> <ul style="list-style-type: none"><li>• construction and operation of a photovoltaic (PV) generation facility with an estimated capacity of 300 MW;</li><li>• associated infrastructure, including a grid connection and energy storage facility; and</li><li>• construction of an access road off the New England Highway.</li></ul>
<b>Location</b>	New England Highway, Tilbuster NSW 2350
<b>Applicant</b>	Enerparc Australia Pty Ltd
<b>Date of Issue</b>	12 October 2018
<b>General Requirements</b>	<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"><li>• a stand-alone executive summary;</li><li>• a full description of the development, including:<ul style="list-style-type: none"><li>– details of construction, operation and decommissioning;</li><li>– 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);</li><li>– a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development;</li></ul></li><li>• 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 farms, rural residential development and subdivision potential);</li><li>• 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"><li>– a description of the existing environment likely to be affected by the development;</li><li>– an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice;</li><li>– 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</li><li>– a description of the measures that would be implemented to monitor and report on the environmental performance of the development;</li></ul></li><li>• a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and</li><li>• the reasons why the development should be approved having regard to:<ul style="list-style-type: none"><li>– relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act and how the principles of ecologically sustainable development have been</li></ul></li></ul>

	<p>incorporated in the design, construction and ongoing operations of the development;</p> <ul style="list-style-type: none"> <li>– the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and</li> <li>– feasible alternatives to the development (and its key components), including the consequences of not carrying out the development.</li> </ul> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>The EIS must also be accompanied by a report from a suitably qualified person providing:</p> <ul style="list-style-type: none"> <li>– 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</li> <li>– certification that the information provided is accurate at the date of preparation.</li> </ul> <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><b>Specific Issues</b></p>	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> <li>• <b>Biodiversity</b> – including: <ul style="list-style-type: none"> <li>– an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2016</i> (NSW), the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR), unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values;</li> <li>– 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; and</li> <li>– an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the <i>Fisheries Management Act 1994</i>, and a description of the measures to minimise and rehabilitate impacts;</li> </ul> </li> <li>• <b>Heritage</b> – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including consultation with the local Aboriginal community in accordance with the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i>;</li> <li>• <b>Land</b> – including: <ul style="list-style-type: none"> <li>- an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: <ul style="list-style-type: none"> <li>o a consideration of agricultural land, flood prone land, Crown lands (including Crown roads), mining, mineral or petroleum rights;</li> <li>o a soil survey to determine the soil characteristics and consider the potential for erosion to occur; and</li> <li>o a cumulative impact assessment of nearby developments;</li> </ul> </li> <li>- an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including: <ul style="list-style-type: none"> <li>o consideration of the zoning provisions applying to the land, including subdivision, and;</li> <li>o completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's <i>Land Use Conflict Risk Assessment Guide</i>; and</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- a description of measures that would be implemented to remediate the land following decommissioning in accordance with <i>State Environmental Planning Policy No 55 - Remediation of Land</i>.</li> <li>• <b>Visual</b> – 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;</li> <li>• <b>Noise</b> – including an assessment of the construction noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i> (ICNG), operational noise impacts in accordance with the NSW Noise Policy for Industry 2017, cumulative noise impacts (considering other developments in the area), and a draft noise management plan if the assessment shows construction noise is likely to exceed applicable criteria;</li> <li>• <b>Transport</b> – including: <ul style="list-style-type: none"> <li>- an assessment of the peak and average traffic generation, including any over-dimensional vehicles and construction worker transportation;</li> <li>- an assessment of the likely transport impacts to the site access route (including New England Highway), site access point, any Crown land, particularly in relation to the capacity and condition of the roads;</li> <li>- a cumulative impact assessment of traffic from nearby developments;</li> <li>- a description of any proposed road upgrades developed in consultation with the relevant road and rail authorities (if required); and</li> <li>- a description of the measures that would be implemented to mitigate any transport impacts during construction;</li> </ul> </li> <li>• <b>Water</b> – including: <ul style="list-style-type: none"> <li>- an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including drainage channels, wetlands, riparian land, farm dams, groundwater dependent ecosystems), related infrastructure, adjacent licensed water users and basic landholder rights, and measures proposed to monitor, reduce and mitigate these impacts;</li> <li>- details of water requirements and supply arrangements for construction and operation; and</li> <li>- 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 &amp; Construction</i> (Landcom 2004);</li> </ul> </li> <li>• <b>Hazards and Risks</b> – including: <ul style="list-style-type: none"> <li>- 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</li> <li>- an assessment of all potential hazards and risks including but not limited to bushfires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure; and</li> </ul> </li> <li>• <b>Socio-Economic</b> – including an assessment of the likely impacts on the local community, demands on Council infrastructure and a consideration of the construction workforce accommodation.</li> </ul>
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<b>Consultation</b>	<p>During the preparation of the EIS, you should consult with 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 Armidale Regional 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>
<b>Further consultation after 2 years</b>	<p>If you do not lodge a development application and EIS for the development within 2 years of the issue date of these EARs, you must consult further with the Secretary in relation to the preparation of the EIS.</p>
<b>References</b>	<p>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.</p>

## 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)
	Land Use Conflict Risk Assessment Guide (DoI – L&W)
Noise	
	NSW Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (EPA)
	NSW Road Noise Policy (EPA)
Light	
	Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring (DPE)
Transport	
	Guide to Traffic Generating Developments (RTA)
	Austroads Guide to Road Design & relevant Australian Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
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	

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

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**Environmental Planning Instruments**

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State Environmental Planning Policy (State and Regional Development) 2011

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State Environmental Planning Policy (Infrastructure) 2007

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State Environmental Planning Policy (Rural Lands) 2008

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State Environmental Planning Policy No. 44 – Koala Habitat Protection

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State Environmental Planning Policy No. 55 – Remediation of Land

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Armidale Dumaresq Local Environmental Plan 2012

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**ATTACHMENT 2**  
**AGENCY CORRESPONDENCE**

## Anthony Barnes

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**From:** Easements&Development <Easements&Development@transgrid.com.au>  
**Sent:** Tuesday, 25 September 2018 11:46 AM  
**To:** Anthony Barnes  
**Subject:** 2018-469 SSD 9619 - Tilbuster Solar Farm project

Good morning,

**TransGrid Number:** 2018-469  
**Location:** Tilbuster Solar Farm project SSD 9619  
**Proposal:** Request for Input

Thank you for referring the above mentioned Development Application to TransGrid for review.

Please be advised after reviewing the proposed works at **Tilbuster Solar Farm project SSD 9619**

TransGrid has determined the proposed works acceptable subject to the following conditions of approval being met and comments expressed noted and as appropriate actioned:

- The project scope description should include all ancillary electricity transmission works (all works associated with connection to the National Electricity Market, such as ancillary substation works, transmission line works (direct and upstream), and telecommunications works) that would be necessary for the construction and operation of the Project.
  - The EIS should identify all land parcels affected by these works and include them within the project boundary.
- a) For all future communication please contact: Mr Shara Karamian Program Manager Infrastructure Services  
02 9284 3353 or Mobile 0403 685 838

Regards

Michael

**Michael Platt**

*Development Assessment and Control Officer | Network Planning and Operations*

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**TransGrid** | 200 Old Wallgrove Road, Wallgrove, NSW, 2766

**T:** (02) 9620 0161 **M:** 0427 529 997

**E:** [Michael.Platt@transgrid.com.au](mailto:Michael.Platt@transgrid.com.au) **W:** [www.transgrid.com.au](http://www.transgrid.com.au)

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File No: NTH18/00138  
Your Ref: SSD 9619

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

Attention: Anthony Barnes – Senior Environmental Assessment Officer

Dear Sir / Madam,

### **Secretary's Environmental Assessment Requirements for SSD 9619 – Tilbuster Solar Farm**

I refer to your email of 24 September 2018 requesting input to the Secretary's Environmental Assessment Requirements (SEARs) for the abovementioned development proposal.

#### **Roles and Responsibilities**

The key interests for Roads and Maritime Services are the safety and efficiency of the road network, traffic management, the integrity of infrastructure and the integration of land use and transport.

New England Highway is a classified (State) road. In accordance with Section 7 of the Roads Act 1993 (the Act) Armidale Regional Council is the Roads Authority for this road and all other public roads (other than freeways or Crown roads) in the local government area pursuant to Section 7 of the Roads Act. Roads and Maritime is the roads authority for freeways and can exercise roads authority functions for classified roads in accordance with the Roads Act. Any proposed works on a classified (State) road will require the consent of Roads and Maritime. Consent is provided under the terms of a Works Authorisation Deed (WAD).

#### **Roads and Maritime Response**

Roads and Maritime requests that the Environmental Assessment be supported by a Traffic Impact Assessment (TIA) prepared by a suitably qualified person in accordance with the Austroads Guide to Traffic Management Part 12, the complementary Roads and Maritime Supplement and RTA Guide to Traffic Generating Developments. The TIA is to address the following;

- The total impact of existing and proposed development on the road network with consideration for a 10 year horizon.
- The volume and distribution of traffic generated by the proposed development.
- Intersection sight distances at key intersections along the nominated access route/s to the site.
- Existing and proposed site access standards.
- Details of proposed improvements to affected intersections, in particular assessments of impacts on safety and efficiency of junctions with the classified road network.
- Details of servicing and parking arrangements.
- Impact on public transport (public and school bus routes) and consideration for alternative transport modes such as walking and cycling.
- Impacts of road traffic noise and dust generated along the primary access route/s.



- Consideration of potential glare/reflectivity generated from on-site infrastructure towards public roads.
- Details of a Transport Management Plan (TMP) to identify and manage impacts of construction and operational traffic on the safety and efficiency of the affected road network. The TMP may include temporary measures such as Traffic Control Plans to address construction related traffic at specific locations. The TMP should include a Driver Code of Conduct, which may include, but not be limited to the following;
  - A map of the primary haulage routes highlighting critical locations.
  - Safety initiatives for haulage through residential areas and/or school zones.
  - Code of Conduct and induction process for haulage vehicle operators and regular toolbox meetings.
  - A complaint resolution and disciplinary procedure.
  - Any community consultation measures for peak construction or haulage periods.

The current Austroads Guidelines, Australian Standards and Roads and Maritime Supplements are to be adopted for any proposed works on the classified road network.

The Developer would be required to enter into a Works Authorisation Deed (WAD) with Roads and Maritime for any works deemed necessary on the classified (State) road network. The developer would be responsible for all costs associated with the works and administration for the WAD.

Further information on undertaking private developments adjacent to classified roads can be accessed at:

<http://www.rms.nsw.gov.au/projects/planning-principles/index.html>

If you have any further enquiries regarding the above comments please contact Liz Smith, Manager Land Use Assessment on (02) 6640 1362 or via email at: [development.northern@rms.nsw.gov.au](mailto:development.northern@rms.nsw.gov.au)

Yours faithfully



for Monica Sirol  
Network & Safety Manager, Northern Region

Date: 12 October 2018



## NSW RURAL FIRE SERVICE



The Secretary  
NSW Planning & Environment  
GPO Box 39  
SYDNEY NSW 2001

Your Ref: SSD 9619  
Our Ref: D18/7424  
DA18092615271 PC

**ATTENTION:** Anthony Barnes

10 October 2018

Dear Mr Barnes,

### **Agency Comment - SEARs for Tilbuster Solar Farm Project (SSD 9619)**

I refer to your correspondence dated 24 September 2018 seeking NSW Rural Fire Service (NSW RFS) input to the SEARs for the above State Significant Development proposal.

The subject land is partly mapped as bush fire prone land by Armidale Regional Council. The NSW RFS is the primary response agency for fighting fires within the site and surrounding locality.

The NSW RFS recommends that the SEARs for the project include a requirement to address the follow, having regard to the requirements of 'Planning for Bush Fire Protection 2006':

- potential bush fire threats to the facility;
- potential hazards to fire fighters;
- management of bush fire (including grass fire) impacting on, and structural fire emanating from, the proposed solar farm and its associated infrastructure;
- fire fighting water supplies;
- vehicle access and defendable space around the solar farm;
- land and vegetation management opportunities;
- proposed emergency management procedures; and
- the extent to which the proposed subdivision conforms with, or deviates from the standards, specific objectives and performance criteria of 'Planning for Bush Fire Protection 2006'.

As part of any consent issued for the project, the NSW RFS will require the proponent to develop a Fire Management Plan, in consultation with the local NSW RFS District Fire Control Centre.

#### **Postal address**

Records  
NSW Rural Fire Service  
Locked Bag 17  
GRANVILLE NSW 2142

#### **Street address**

NSW Rural Fire Service  
Planning and Environment Services (North)  
Suite 1, 129 West High Street  
COFFS HARBOUR NSW 2450

T (02) 6691 0400  
F (02) 6691 0499  
[www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)  
Email: [pes@rfs.nsw.gov.au](mailto:pes@rfs.nsw.gov.au)

For any queries regarding this correspondence, please contact Paul Creenaune on 6691 0400.

Yours sincerely,



Alan Bawden

**Team Leader – Development Assessment & Planning**

*The RFS has made getting information easier. For general information on 'Planning for Bush Fire Protection, 2006', visit the RFS web page at [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au) and search under 'Planning for Bush Fire Protection, 2006'.*



## Office of Environment & Heritage

Our Ref: DOC18/711816

Your Ref: SSD 9619

Mr Colin Phillips  
Team Leader, Planning Services  
Resources Assessments  
Department of Planning and Environment  
PO Box 39  
Sydney NSW 2001

Attention: Anthony Barnes. Senior Environmental Assessment Officer

Dear Mr Phillips

**Re: Request for OEH Environmental Assessment Requirements – Tilbuster Solar Farm, Armidale Regional local government area (SSD 9619)**

Thank you for your email dated 24 September 2018 about the Tilbuster Solar Farm (SSD 9619) near Armidale seeking Secretary's Environmental Assessment Requirements (SEARs) from the Office of Environment and Heritage (OEH). I appreciate the opportunity to provide input.

The OEH notes that the proposal will be assessed as State Significant Development in accordance with Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Environmental Impact Statement (EIS) SEARs provided by OEH are limited to Aboriginal cultural heritage, biodiversity, OEH estate, historic heritage, acid sulphate soils, flooding, stormwater and coastal erosion.

The OEH advises that these OEH SEARs, as they relate to biodiversity, have been issued with respect to the *Biodiversity Conservation Act 2016*.

The proposal involves:

- construction and operation of a large-scale photovoltaic solar farm with an estimated capacity of 300 MW;
- installation of a battery storage system;
- grid connection; and
- ancillary infrastructure (including access road off the New England Highway).

The proponent should ensure that the EIS will be sufficiently comprehensive to enable unambiguous assessment of all direct and indirect impacts of the proposal. The EIS should include an assessment of the potential impacts on biodiversity, including threatened species, populations, ecological communities, or their habitats likely to occur on or near the subject site, as well as Aboriginal cultural heritage values and flooding. We consider that this information is necessary for a comprehensive EIS for the proposal.



The full lists of OEH's standard requirements that may need to be addressed in the EIS are provided in **Attachment A**. In preparing the EIS, the proponent should refer to the relevant guidance material listed in **Attachment B**.

The Preliminary Environmental Assessment identifies that the site may contain White Box – Yellow Box– Blakely's Red Gum Grassy Woodland and Derived native grassland which is listed as an endangered ecological community under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Also, it identifies threatened species listed under the EPBC Act that may occur on the site.

Therefore, the project may require referral to the Commonwealth Department of the Environment and Energy for determination of whether it is a controlled action. Please ensure that you advise the OEH whether the proposal is determined to be a controlled action under the EPBC Act. If it has been determined to be a controlled action the OEH requests a copy of any additional SEARs that are issued. We also recommend the referral process happen concurrently with the SSD assessment process as the OEH will be required to provide comment on both the NSW and Commonwealth threatened entities.

If you have any further questions about this issue, Ms Rachel Lonie, Senior Conservation Planning Officer, Conservation and Regional Delivery, OEH, can be contacted on 6650 7130 or at [rachel.lonie@environment.nsw.gov.au](mailto:rachel.lonie@environment.nsw.gov.au).

Yours sincerely



5 October 2018

**DIMITRI YOUNG**

**Senior Team Leader Planning, North East Branch**

**Conservation and Regional Delivery**

Contact officer: RACHEL LONIE 6650 7130

Enclosures: Attachment A - OEH Standard Environmental Assessment Requirements for the Tilbuster Solar Farm SSD 9619 (SSD 9619); Attachment B - Guidance Material

## Attachment A – OEH Environmental Assessment Requirements- Tilbuster Solar Farm (SSD 9619)

### Biodiversity

1. Biodiversity impacts related to the proposed development are to be assessed in accordance with [Section 7.9 of the Biodiversity Conservation Act 2017](#) the [Biodiversity Assessment Method](#) 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 [Biodiversity Assessment Method](#), unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values.
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 [Biodiversity Assessment Method](#).
3. The BDAR must include details of the measures proposed to address the offset obligation as follows;
  - The total number and classes of biodiversity credits required to be retired for the development/project;
  - The number and classes of like-for-like biodiversity credits proposed to be retired;
  - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
  - Any proposal to fund a [biodiversity conservation action](#);
  - Any proposal to conduct ecological rehabilitation (if a mining project);
  - Any proposal to make a payment to the Biodiversity Conservation Fund.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.
4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.
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 *Biodiversity Conservation Act 2016*.

### Aboriginal cultural heritage

6. The EA 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 guided by the [Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW \(DECCW, 2011\)](#) and consultation with OEH regional branch officers.
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.



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 ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

#### **Historic heritage**

9. The EA 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:
- 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),
  - 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),
  - include a statement of heritage impact for all heritage items (including significance assessment),
  - 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
  - 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.

#### **Water and soils**

10. The EA must map the following features relevant to water and soils including:
- Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
  - Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
  - Wetlands as described in s4.2 of the Biodiversity Assessment Method.
  - Groundwater.
  - Groundwater dependent ecosystems.
  - Proposed intake and discharge locations.
11. The EA must describe background conditions for any water resource likely to be affected by the development, including:
- Existing surface and groundwater.
  - Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
  - Water Quality Objectives (as endorsed by the NSW Government <http://www.environment.nsw.gov.au/ieo/index.htm>) including groundwater as appropriate that represent the community's uses and values for the receiving waters.



<p>d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.</p> <p>e. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions <a href="http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning">http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning</a></p>
<p>a. The EA must assess the impacts of the development on water quality, including:</p> <p>b. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.</p> <p>c. Identification of proposed monitoring of water quality.</p> <p>d. Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan)</p>
<p>e. The EA must assess the impact of the development on hydrology, including:</p> <p>f. Water balance including quantity, quality and source.</p> <p>g. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.</p> <p>h. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.</p> <p>i. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).</p> <p>j. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</p> <p>k. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.</p> <p>l. Identification of proposed monitoring of hydrological attributes.</p> <p>m.</p>
<p><b>Flooding and coastal hazards</b></p>
<p>12. The EA must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:</p> <p>a. Flood prone land.</p> <p>b. Flood planning area, the area below the flood planning level.</p> <p>c. Hydraulic categorisation (floodways and flood storage areas).</p> <p>d. Flood hazard</p>
<p>e. The EA 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>f. The EA must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:</p>

<p>g. Current flood behaviour for a range of design events as identified in 14 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>
<p>13. Modelling in the EA must consider and document:</p> <p>14. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.</p> <p>15. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.</p> <p>16. 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, hazard categories and hydraulic categories.</p> <p>17. Relevant provisions of the NSW Floodplain Development Manual 2005.</p>
<p>18. The EA must assess the impacts on the proposed development on flood behaviour, including:</p> <ul style="list-style-type: none"> <li>a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.</li> <li>b. Consistency with Council floodplain risk management plans.</li> <li>c. Consistency with any Rural Floodplain Management Plans.</li> <li>d. Compatibility with the flood hazard of the land.</li> <li>e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.</li> <li>f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.</li> <li>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.</li> <li>h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.</li> <li>i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.</li> <li>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 NSW SES.</li> <li>k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.</li> </ul>



## Attachment B – Guidance material (SSD 9619)

Title	Web address
<b><u>Relevant Legislation</u></b>	
<i>Biodiversity Conservation Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/63/full">https://www.legislation.nsw.gov.au/#/view/act/2016/63/full</a>
<i>Coastal Management Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/20/full">https://www.legislation.nsw.gov.au/#/view/act/2016/20/full</a>
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	<a href="http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/">http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N</a>
<i>Fisheries Management Act 1994</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N</a>
<i>Marine Parks Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N</a>
<i>National Parks and Wildlife Act 1974</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N</a>
<i>Wilderness Act 1987</i>	<a href="http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N">http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N</a>
<b><u>Biodiversity</u></b>	
Biodiversity Assessment Method (OEH, 2017)	<a href="http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf">http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf</a>
Biodiversity Development Assessment Report	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12">https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12</a>
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	<a href="http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf">http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf</a>
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	<a href="https://www.legislation.nsw.gov.au/regulations/2017-471.pdf">https://www.legislation.nsw.gov.au/regulations/2017-471.pdf</a>
Biodiversity conservation actions	<a href="http://www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf">www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf</a>
Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	<a href="http://www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf">www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf</a>
OEH Threatened Species Website	<a href="http://www.environment.nsw.gov.au/threatenedspecies/">www.environment.nsw.gov.au/threatenedspecies/</a>
NSW BioNet (Atlas of NSW Wildlife)	<a href="http://www.bionet.nsw.gov.au/">www.bionet.nsw.gov.au/</a>

Title	Web address
NSW guide to surveying threatened plants (OEH 2016)	<a href="http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf">www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf</a>
OEH threatened species survey and assessment guideline information	<a href="http://www.environment.nsw.gov.au/threatenedspecies/surveyassessmentguidelines.htm">www.environment.nsw.gov.au/threatenedspecies/surveyassessmentguidelines.htm</a>
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	<a href="http://www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm">www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm</a>
OEH Data Portal (access to online spatial data)	<a href="http://data.environment.nsw.gov.au/">http://data.environment.nsw.gov.au/</a>
Fisheries NSW policies and guidelines	<a href="http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation">http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation</a>
List of national parks	<a href="http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx">http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx</a>
Revocation, recategorisation and road adjustment policy (OEH, 2012)	<a href="http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm">http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm</a>
Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH 2013)	<a href="http://www.environment.nsw.gov.au/resources/protectedareas/development-land-adjoining-130122.pdf">http://www.environment.nsw.gov.au/resources/protectedareas/development-land-adjoining-130122.pdf</a>
<b><u>Aboriginal Cultural Heritage</u></b>	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/consultation/09781ACHconsultreq.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/consultation/09781ACHconsultreq.pdf</a>
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf</a>
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf</a>
Aboriginal Site Recording Form	<a href="http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf">http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf</a>
Aboriginal Site Impact Recording Form	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf</a>
Aboriginal Heritage Information Management System (AHIMS) Registrar	<a href="http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm">http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm</a>
Care Agreement Application form	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf</a>
<b><u>Heritage</u></b>	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	<a href="http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf">http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf</a>
Statements of Heritage Impact 2002 (HO & DUAP)	<a href="http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf">http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf</a>
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	<a href="http://www.environment.nsw.gov.au/Heritage/publications/">http://www.environment.nsw.gov.au/Heritage/publications/</a>



Title	Web address
<b><u>Water and Soils</u></b>	
<b>Acid sulphate soils</b>	
Acid Sulfate Soils Planning Maps via Data.NSW	<a href="http://data.nsw.gov.au/data/">http://data.nsw.gov.au/data/</a>
Acid Sulfate Soils Manual (Stone et al. 1998)	<a href="http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf">http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf</a>
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	<a href="http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf">http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf</a> This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
<b>Flooding and Coastal Erosion</b>	
Reforms to coastal erosion management	<a href="http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm">http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm</a>
Floodplain development manual	<a href="http://www.environment.nsw.gov.au/floodplains/manual.htm">http://www.environment.nsw.gov.au/floodplains/manual.htm</a>
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans <a href="http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf">http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf</a>
NSW Climate Impact Profile	<a href="http://climatechange.environment.nsw.gov.au/">http://climatechange.environment.nsw.gov.au/</a>
Climate Change Impacts and Risk Management	<a href="#">Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation</a>
<b>Water</b>	
Water Quality Objectives	<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	<a href="http://www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1">www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	<a href="http://deccnet/water/resources/AWQGuidance7.pdf">http://deccnet/water/resources/AWQGuidance7.pdf</a>
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	<a href="http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf">http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf</a>



File No: EF14/9695  
Ref No: DOC18/716630  
Your ref: SSD 9619

Mr Anthony Barnes  
Senior Environmental Assessment Officer  
Resource Assessments - Planning Services  
Department of Planning & Environment  
GPO Box 39  
SYDNEY NSW 2001

Sent by e-mail to: [anthony.barnes@planning.nsw.gov.au](mailto:anthony.barnes@planning.nsw.gov.au)

Dear Mr Barnes

**Request for input into Secretary's Environmental Assessment Requirements (SEARs) for Tilbuster Solar Farm, located approximately 13 km northwest of Armidale (6 km northwest of Tilbuster), within the Armidale Regional Council LGA - (SSD 9619).**

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Reference is made to your email and supporting documentation received on 24 September 2018, requesting input into SEARs from the Heritage Council of NSW, for the above development.

The Preliminary Environmental Assessment (PEA), prepared by ngh Environmental and Draft SEARs have been reviewed and the following comments are provided:

There are no State Heritage Register (SHR) items within the site. Black Mountain Railway Station (SHR 001087) is the nearest SHR item to the site and is approximately 6km north of the site. However, it is noted that local heritage registers were not searched as part of the PEA analysis and there is no information if any local heritage items would be impacted by the proposed development.

In addition, it is noted that excavation is generally limited to discrete footings for inverters, switch station and office buildings, however no details are provided and reference to archaeology is not included in the documents received.

Based on this, it is recommended that the following SEARs be included:

- The EIS must include a Heritage Impact Statement (HIS), prepared in accordance with Heritage Division, Office of Environment and Heritage, guidelines. The HIS should identify any places of heritage significance within the State Significant Development (SSD) site or in the vicinity and assess their significance and the impacts of the proposal on these and provide mitigation recommendations where appropriate. The HIS should also include a baseline Historical Archaeological Assessment prepared by a suitably qualified and experienced Historical Archaeologist. The Baseline assessment should identify what relics, if any, are likely to be present within the SSD site or in the vicinity, assess their significance and consider the impacts from the proposal on this potential resource.

If you have any questions regarding Tilbuster Solar Farm, please contact James Quoyale, Senior Heritage Assessment Officer, at the Heritage Division, Office of Environment and Heritage on telephone 9873 8612 or by e-mail: [james.quoyale@environment.nsw.gov.au](mailto:james.quoyale@environment.nsw.gov.au).

Yours sincerely

27/09/2018

**Katrina Stankowski**  
A/Manager, Northern Region  
Heritage Division  
Office of Environment & Heritage  
**As Delegate of the Heritage Council of NSW**



File ref. no: BFS18/2733 (4902)  
 Doc. ref. no: D18/72057  
 Contact: Qualified Firefighter Nathan Everett

9 October 2018

Department of Planning and Environment  
 C/- Anthony Barnes  
 GPO Box 39  
 Sydney NSW 2001

E: [Anthony.Barnes@planning.nsw.gov.au](mailto:Anthony.Barnes@planning.nsw.gov.au)

Dear Ms Bandaruk,

**Secretary's Environmental Assessment Requirements (SEARs)  
 Tilbuster Solar Farm (SSD 9619)  
 New England Highway, Tilbuster (Armidale Regional Council)**

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

Large scale solar farm developments are usually located within NSW Rural Fire Services' (RFS) fire districts. Notwithstanding, in the event of either a significant fire event or hazardous material incident (hazmat), FRNSW will be responded to either assist the RFS or to fulfill the role of the designated hazmat 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 duties. It is highlighted that the Fire Brigades Act 1989 (the Act) imposes specific statutory functions and duties upon the Commissioner of FRNSW. Section 6 of the Act requires the Commissioner to take all practicable measures for preventing and extinguishing fires and protecting and saving life and property within a FRNSW fire district. Section 6 of the Act also requires the Commissioner to protect and save life and property endangered by hazmat incidents and for confining a hazmat incident and for rendering the hazmat site safe.

In addition, the Work Health and Safety (WHS) Act 2011 (and its subordinate Regulation) classify FRNSW as a person (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. A site involved in fire or hazmat incident is deemed to be a FRNSW place of work.





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.

### **Recommendations**

In the event of a fire or hazardous material incident, it is important that first responders have ready access to information which enables effective hazard control measures to be quickly implemented. Without limiting the scope of the emergency response plan (ERP) requirements of Clause 43 of the Work Health and Safety Regulation 2000 (the Regulation), 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 (such as fires involving solar panel arrays, bushfires in the immediate vicinity) or potential hazmat incidents.
3. That the ERP details 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 will include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures to be instigated, 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 and non-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 the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS18/2733. Please ensure that all correspondence in relation to this matter is submitted electronically to [firesafety@fire.nsw.gov.au](mailto:firesafety@fire.nsw.gov.au).

Yours sincerely



Superintendent Mick Henly  
Manager  
Infrastructure Liaison Unit



5 October 2018

Anthony Barnes  
Senior Environmental Assessment Officer  
Planning Services - Resource Assessments  
Department of Planning & Environment  
GPO BOX 39  
SYDNEY NSW 2001

Your Ref: SSD 9619  
Our Ref: DOC18/733180

Emailed: [anthony.barnes@planning.nsw.gov.au](mailto:anthony.barnes@planning.nsw.gov.au)

Dear Mr Barnes

**Re: Proposal – Tilbuster Solar Farm (SSD9619) – Request for SEARs**

Thank you for the opportunity to provide advice on the request for Secretary's Environmental Assessment Requirements for the Tilbuster Solar Farm (SSD9619). This is a response from the Department of Planning & Environment – Division of Resources & Geoscience (the Division).

The Division is responsible for providing strategic advice relating to the current and potential future uses of land in NSW pursuant to State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 and the *Environmental Planning & Assessment Act 1979*. The Division's role is to ensure that proposals, including associated electricity transmission infrastructure do not unnecessarily preclude access to known resources or exploration for future resource discovery and extraction. The Division will also assess the application with respect to biodiversity offset considerations.

The Division has reviewed the Draft SEARs and Preliminary Environmental Assessment for the Tilbuster Solar Farm (SSD9619). The Draft SEARs require the proponent to assess the project's potential impacts on existing land uses including mining, mineral and petroleum rights. The Draft SEARS also includes the requirement for consultation during the preparation of the Environmental Impact Statement (EIS) with exploration licence holders, quarry operators and mineral title holders.

According to Departmental records there are no current mineral, coal or petroleum titles, or operating quarries or mines over, or adjacent the site. The subject site is wholly within exploration license application (ELA) 5706 applied by Australian precious Metals Corporation Pty Ltd for group 1 (metallic) minerals on 10 July 2018. The PEA has identified the exploration license application and referenced the Department's Minview map viewer.

In fulfilling the Secretary's Requirements relating to the State's mineral resources and rights to assess and extract those resources, the Division requires the following project specific requirements to be addressed in the EIS:

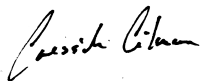
- The proponent should undertake an updated and referenced search of current mining and exploration titles and applications. Evidence of the search should be provided in the form of a date referenced map. It should also be noted in the EIS there are no operating quarries or mines in the vicinity. The search referenced in the PEA should be updated for the EIS. Current mining and exploration titles and applications can be viewed through the Division's Minview map viewer at:

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

- Should exploration license application (ELA) 5706 be granted prior to submission of the EIS, the proponent must make contact with the titleholder to determine their level of interest and provide authentic consultation to the Division. This should include a letter of notification of the proposal to the title holder including a map indicating the solar farm proposal area (including associated electricity transmission infrastructure) in relation to the exploration title boundaries, and a letter of response from the title holder to the proponent. If responses are not received from the titleholder, the Proponent is to contact the Division.
- The Division recommends the proponent register a Minview account profile where users can set an alert to be notified by email when a title changes or is due to expire. An alert may be set up to notify the proponent when changes to the status of ELA 5706 occur. Details regarding registration are provided on the webpage via the above link. The Division can provide contact details for the titleholder if required.
- Consultation with the Division in relation to the proposed location of any offsite biodiversity offset areas or any supplementary biodiversity measures to ensure there is 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 should be directed to the GSNSW Land Use team at [landuse.minerals@geoscience.nsw.gov.au](mailto:landuse.minerals@geoscience.nsw.gov.au).

Yours sincerely

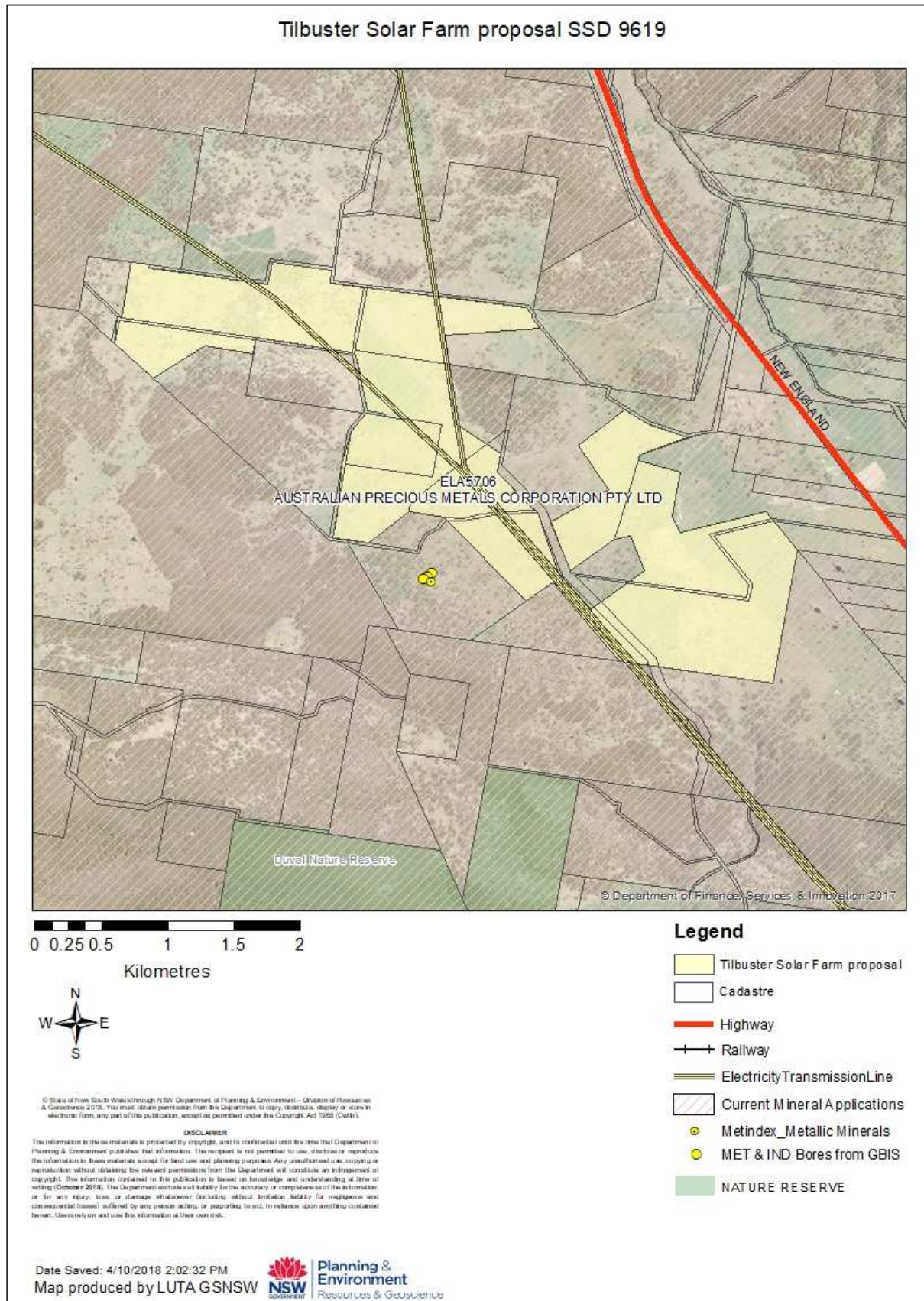


Cressida Gilmore  
Manager – Land Use

for Paul Dale  
Director – Land Use & Titles Advice



**Figure 1: Tilbuster Solar Farm Proposal (SSD 9619)**



OUT18/14968

Anthony Barnes  
Senior Environmental Assessment Officer  
Resource Assessments  
NSW Department of Planning and Environment

[anthony.barnes@planning.nsw.gov.au](mailto:anthony.barnes@planning.nsw.gov.au)

Dear Mr Barnes

**Tilbuster Solar Farm (SSD 9619)**  
**Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 24 September 2018 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries (DPI), and the following requirements for the proposal are provided:

**DoI - Water**

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at <https://www.industry.nsw.gov.au/water>).

**DoI - Lands**

- The authorised use and/or disposal of Crown roads and land affected by the proposal should be addressed within the EIS.

**DPI - Fisheries**

The EA should specifically address impacts on the aquatic ecology of waterways or any Key Fish Habitats (defined as Third order streams or larger (Strahler Stream Ordering System)) such as Duval Creek and some of its tributaries and controls to be established for tracks, cabling, transmission lines or road upgrades within these Key Fish Habitats. To achieve this, an aquatic ecological environmental assessment should be prepared in accordance with the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)*. Further details are provided in **Attachment A**.

### **DPI - Agriculture**

The proposed solar farm is to be developed adjacent a small area of agricultural land that is mapped as Biophysical Strategic Agricultural Land (BSAL). The proposed development is stated to cover a reasonable area (150ha) of productive agricultural land. The EIS should include the following in accordance with the details provided in **Attachment A**:

- Assessment of impacts to agriculture;
- A Land Use Conflict Risk Assessment;
- Rehabilitation and Decommissioning/Closure Management Plans; and
- A biosecurity risk assessment.

Any further referrals to Department of Industry can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

Yours sincerely



Alison Collaros  
**A/Manager, Assessment Advice**  
11 October 2018



## **DPI - Fisheries**

### **AQUATIC ECOLOGICAL ASSESSMENT**

The aquatic ecological environmental assessment should include the following information;

- A recent aerial photograph (preferably colour) of the locality (or reproduction of such a photograph) should be provided.
- Area which may be affected either by the development or activity should be identified and shown on an appropriately scaled map (and aerial photographs).
- Waterways within the area of development are to be identified.
- The extent of aquatic habitat removal and riparian vegetation removal or modification which may result from the proposed development.
- Details of the location and design of proposed tracks or road upgrades crossing Key Fish Habitats.
- Details of the methodology (e.g trenching, boring) for any underground cabling, transmission lines or services that pass through Key Fish Habitats.

### **WATERWAY CROSSINGS**

The project is likely to involve tracks, cabling, transmission line construction, roads and services upgrades across *Key Fish Habitat*. Construction of waterway crossings or services through waterways should be undertaken in accordance with DPI Fisheries Policy & Guideline document: *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)*.

### **LOSS OF RIPARIAN VEGETATION**

There is also the likelihood of a loss of riparian vegetation associated with the proposed solar development footprint. The “*degradation of native riparian vegetation*” has been listed as a Key Threatening Process under the provisions of the *Fisheries Management Act 1994*. Terrestrial buffer zones should be incorporated as per the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)* available on the Department’s website at [www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation](http://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation).

## **DPI – Agriculture**

The EIS is required to address or provide the following:

- Describe the current and potential Important Agriculture Land on the proposed development site and surrounding locality including the land capability and agricultural productivity.
- Consideration of impacts to agricultural landuses and industries for both the proposal site and surrounding ones, including impacts resulting in a temporary or a permanent loss to land capability or agricultural productivity. This would include demonstration that all significant impacts on current and potential agricultural developments and resources can be reasonably avoided or adequately mitigated.
- Complete a Land Use Conflict Risk Assessment (see link below), including:
  - Identification of potential land use conflict, in particular relating to separation distances and management practices to minimise dust, noise and visual impacts from sensitive receptors. For example, this may include outlining strategies to avoid land use conflict around agricultural aerial spraying and fertilising in the area.
  - Consultation and negotiation with owners/managers of affected adjoining agricultural operations.
- Rehabilitation and Decommissioning/Closure Management Plans should be developed to identify rehabilitation objectives and strategies including, but not limited to:
  - Describing the design criteria of the final land use and landform;
  - Indicators to guide the return of the land back to agricultural production (that also includes soil survey information that provides a basis to final land restoration outcomes);
  - Monitoring and mitigation measures to be adopted for rehabilitation remedial actions, and

- Commitment to the removal of all infrastructure on any land with a cropping history or land with a capability for cropping.
- Include a biosecurity risk assessment outlining the likely plant (e.g. weeds), animal (e.g. pests and livestock disease) and community risks (as per the Infrastructure Proposal guideline – see link below) including monitoring and mitigation measures.

**Guidelines for assessment:**

- Land Use Conflict Risk Assessment Guide
  - [www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/lucra](http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/lucra)
- Infrastructure Proposals on Rural Land
  - <http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/infrastructure-proposals>