Planning, Industry & Environment

Mr Chris Gosling
Senior Project Development Manager
RES Australia PTY LTD
Suite 6.01, Level 6
165 Walker Street
NORTH SYDNEY NSW 2060

26/11/2021

Dear Mr Gosling

Tallawang Solar Farm (SSD-23700028)
Planning Secretary's Environmental Assessment Requirements

Please find attached a copy of the Planning Secretary's environmental assessment requirements (SEARs) for the Tallawang Solar Farm.

The SEARs have been modified to ensure the environmental assessment of the project covers all relevant matters, by requiring a detailed assessment of the likely visual impacts of all components of the project on the Siding Spring Observatory in accordance with the *Dark Sky Planning Guideline* (2016).

The SEARs will expire two years from the date of issue (or the date they were last modified) unless the Planning Secretary has granted an extension. If you would like to seek an extension, you should contact the Department at least three months prior to the expiry date.

If your Development Application (DA) and EIS is not submitted within two years (or by the agreed extension date), you will need to make a new application for SEARs to progress your project.

Preparing your EIS
The Department wishes to emphasise the importance of effective and genuine community consultation. A comprehensive open and transparent community consultation engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is provided with a good understanding of what is proposed, description of any potential impacts and they are actively engaged in issues of concern to them.

If your environmental impact statement (EIS) is submitted after 1 April 2022, it must be prepared having regard to the Department's new *State Significant Development Guidelines – Preparing an Environmental Impact Statement*. These guidelines and other relevant guides, including the *Undertaking Engagement Guidelines for State Significant Projects* are available at www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework.

Lodging your development application (DA)
Once you submit your EIS, we will check it for completeness to confirm it addresses the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. If it fails to adequately address these requirements, you will be required to submit an amended EIS. We will also notify you of the DA fee for your project.

Please note that **your DA is not taken to be lodged until the DA fee has been paid**. To minimise lodgement delays, **please contact the Department at least two weeks before you submit your DA and EIS** to confirm DA fee payment arrangements. This will give us sufficient time to ensure your fees can be determined quickly.

Information needed to determine the DA fee
Your application will need to be accompanied by a Quantity Surveyor's Report supporting the estimated cost of works for your project. You must ensure that the information in the report is consistent with the information provided in your DA form.

Public exhibition requirements
When you contact us, regarding the applicable DA fee, we will also advise whether hard and/or electronic copies of the DA and EIS will be required for public exhibition.

Matters of National Environmental Significance
Any development likely to have a significant impact on matters of National Environmental Significance will require approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval is in addition to approvals required under NSW legislation.

It is your responsibility to contact the Commonwealth Department of Agriculture, Water and the Environment to determine if you need approval under the EPBC Act (http://www.environment.gov.au or 6274 1111).

Your assigned planning officer is Karl Okorn. If you have any questions, please contact Karl Okorn on 9995 5207 / at karl.okorn@planning.nsw.gov.au.

Yours sincerely,

Nicole Brewer
Director
Energy Assessments

as delegate for the Planning Secretary

Enclosed: Planning Secretary's Environmental Assessment Requirements

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD-23700028
Project Name	Tallawang Solar Farm which includes: • the construction, operation and decommissioning of a solar photovoltaic (PV) energy generating facility with an estimated capacity up to 500 MW; and • associated infrastructure, including battery storage of up to 500 MW / 1,000 MWh
Location	Castlereagh Highway, 8 km north-west of Gulgong in the Mid-Western Regional Council Local Government Area.
Applicant	RES Australia Pty Ltd
Date of Issue	26/11/2021
General Requirements	The environmental impact statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). In particular, the EIS must include: • a stand-alone executive summary; • a full description of the development, including: - details of construction, operation and decommissioning; - a high quality 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 high quality 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 and approved solar and major projects, Crown lands, rural residential developments and subdivision potential); • an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: - a description of the existing environment likely to be affected by the development using sufficient baseline data; - 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 in the region, taking into consideration any relevant legislation,

	environmental planning instruments, guidelines, policies, plans and industry codes of practice including the *Large-scale Solar Energy Guideline* (DPIE 2018) and the *Cumulative Impact Assessment Guideline* (DPIE, July 2021) (subject to transitional arrangements) including the approved Stubbo Solar Farm and Dunedoo Solar Farm, operational Beryl Solar Farm and the proposed Barneys Reef Wind Farm; - 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 • a detailed evaluation of the merits of project as a whole having regard to: - the requirements in Section 4.15 of the Environmental Planning and Assessment Act 1979, and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; - 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 (including opportunities for shared infrastructure with proposed developments in the region), and the consequences of not carrying out the development. • 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; • a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. The EIS must also be accompanied by a report from a suitably qualified person providing: • 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 • an estimate of jobs that will be created during the construction and operational phases of the proposed infrastructure; and • certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific issues: • **Biodiversity** – including: – an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the Biodiversity Conservation Act 2016 (NSW), the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR), unless BCD and DPIE determine the proposed development is not likely to have any significant impacts on biodiversity values; – 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;

- an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the Fisheries Management Act 1994, and a description of the measures to minimise and rehabilitate impacts; and
- if an offset is required, details of the measures proposed to address the offset obligation.

- **Heritage** – including
  - assessment of the impact to Aboriginal cultural heritage items (archaeological and cultural) in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011) and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010);
  - provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010); and
  - assess the impact to historic heritage having regard to the *NSW Heritage Manual*.
- **Land** – including:
  - a detailed justification of the suitability of the site and that the site can accommodate the proposed development having regard to its potential environmental impacts, permissibility, strategic context and existing site constraints;
  - an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including:
    - consideration of agricultural land (including Biophysical Strategic Agricultural Land and land and soil capability class 1,2 or 3), flood prone land, Crown lands, mining, quarries, mineral or petroleum rights;
    - a soil survey to determine the soil characteristics and confirm land capability class and consider the potential for erosion to occur; and
    - a cumulative impact assessment of nearby developments,
  - an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning including:
    - consideration of the zoning provisions applying to the land, including subdivision;
    - completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's *Land Use Conflict Risk Assessment Guide*; and
    - assessment of impact on agricultural resources and agricultural production on the site and region.
- **Visual** – including a detailed assessment of the likely visual impacts (including glare, reflectivity and night lighting) of all components of the project (including arrays, transmission lines, substations and any other ancillary infrastructure) on surrounding residences and key locations, scenic or significant vistas, air traffic and road corridors in the public domain, and on the Siding Spring Observatory in accordance with the *Dark Sky Planning Guideline* (2016), and provide details of measures to mitigate and/or manage potential impacts (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 *Interim Construction Noise Guideline* (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;
- **Transport** – including:
  - an assessment of the peak and average traffic generation, including over-dimensional vehicles and construction worker transportation;
  - an assessment of the likely transport impacts to the site access route, site access point(s), any Crown land, particularly in relation to the capacity and condition of the roads, road safety and intersection performance;
  - a cumulative impact assessment of traffic from nearby developments including Barney's Reef Wind Farm; and
  - provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades (including resulting from heavy vehicle and over mass / over dimensional traffic haulage routes), road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority;
- **Water** – including:
  - an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources traversing the site and surrounding watercourses, drainage channels, wetlands, riparian land, farm dams, 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 *Managing Urban Stormwater: Soils & Construction* (Landcom 2004);
- **Hazards and Risks – including:**
  - a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33* (DoP, 2011);
  - a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment (DoP, 2011). The PHA must consider all recent standards and codes and verify separation distances to on-site and off-site receptors to prevent fire propagation;
  - an assessment of potential hazards and risks including but not limited to bushfires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure against the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields.
- **Socio-Economic** – the EIS must include an assessment of the social and

	economic impacts in accordance with *Social Impact Assessment Guideline* (DPIE, July 2021) (subject to transitional arrangements) and benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, assessment of impact on agricultural resources and agricultural production on the site and region. • **Waste** – identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
Plans and Documents	The EIS must include all relevant plans, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include high quality files of maps and figures of the subject site, proposal and proposed road upgrades.
Legislation, Policies & Guidelines	A list of some of the legislation, policies and guidelines relevant to the assessment of the project can be found at: • https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework/Improving-assessment-guidance • https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines, and • http://www.environment.gov.au/epbc/publications#assessments
Consultation	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 and mineral title holders. In particular, you must undertake detailed consultation with affected landowners surrounding the development, Mid-Western Regional Council, Crown lands and NSW Aboriginal Land Council. 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.
Expiry Date	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary 3 months prior to the expiry date.

Mr Chris Gosling
Senior Project Development Manager
RES Australia PTY LTD
via email: chris.gosling@res-group.com

20/06/2022

Subject: Tallawang Solar Farm (SSD-23700028)
Supplementary Planning Secretary's Environmental Assessment Requirements

Dear Mr Gosling,

The Commonwealth Minister for the Environment has determined that your proposed development, Tallawang Solar Farm, is likely to have a significant impact on matters of national environmental significance (MNES) and is a 'controlled action' under Part 7 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Please find enclosed the supplementary NSW Planning Secretary's environmental assessment requirements (supplementary SEARs) in relation to the MNES identified in the Commonwealth Minister's 'controlled action' decision.

The supplementary SEARs:

- have been prepared as your proposed development falls within the scope of a declared 'class of action(s)' under Schedule 1 to the Assessment Bilateral Agreement made between the Commonwealth Government and the New South Wales Government;
- outline requirements for assessing impacts on MNES that must be addressed in your environmental impact statement;
- do not replace any SEARs previously issued by the NSW Planning Secretary.

The Assessment Bilateral Agreement streamlines assessment of environmental impacts, such that NSW assesses impacts on MNES for proposed actions that fall within the scope of the Agreement. However, NSW does not determine whether approval should be granted with respect to impacts on MNES under the EPBC Act. The Commonwealth Minister remains responsible for determining whether approval should be granted with respect to MNES under the EPBC Act, and if so, any conditions to be imposed on an approval granted under the EPBC Act.

Your assigned planning officer is Nestor Tsambos. If you have any questions, please contact Nestor Tsambos on 9274 6348 or via email at Nestor.tsambos@dpie.nsw.gov.au

Yours sincerely,

Nicole Brewer
Director
Energy Assessments
as delegate for the Planning Secretary

Guidelines for preparing assessment documentation relevant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for proposals being assessed under the NSW Assessment Bilateral

Tallawang Solar Farm (EPBC 2022/9171)

Introduction

1. On 27 April 2022, a delegate of the Federal Minister for the Department of Agriculture, Water and the Environment determined Tallawang Solar Farm was a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act controlling provisions for the proposed actions are:

    i. listed threatened species and communities (sections 18 and 18A)

2. The proposed action will be assessed in accordance with the bilateral assessment agreement Amending Agreement No. 1, and as such, is required to be assessed in the manner specified in Schedule 1 to that Agreement, including, addressing the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* (EPBC Regulations).

3. The proponent must undertake an assessment of all protected matters that may be impacted by the development under the controlling provision identified in paragraph 1. The Commonwealth Department of Agriculture, Water and the Environment considers that the proposed action is likely to have a significant impact on threatened species and communities listed in **Appendix A**.

4. The proponent must consider each of the protected matters under the triggered controlling provisions that may be impacted by the action. Note that this may not be a complete list and it is the responsibility of the proponent to undertake an analysis of the relevant impacts and ensure all protected matters that are likely to be impacted are assessed for the Commonwealth Minister's consideration.

General Requirements

Relevant Regulations

5. The Environmental Impact Statement (EIS) must address all matters outlined in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth) and all matters outlined below in relation to the controlling provisions.

Project Description

6. The title of the action, background to the action and current status.

7. The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on matters of national environmental significance (MNES).

8. How the action relates to any other actions that have been, or are being taken in the region affected by the action.

9. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.

Impacts

10. The EIS must include an assessment of the relevant impacts of the action on the matters protected by the controlling provisions, including:

    i. a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;

    ii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;

    iii. analysis of the significance of the relevant impacts; and

    iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

Avoidance, mitigation and offsetting

11. For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action including:

    i. a description, and an assessment of the expected or predicted effectiveness of the mitigation measures,

    ii. any statutory policy basis for the mitigation measures;

    iii. the cost of the mitigation measures;

    iv. an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;

    v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.

12. Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.

13. For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any:

    i. conservation advice or recovery plan for the species or community;

    ii. relevant threat abatement plan for the species or community;

    iii. wildlife conservation plan for the species; and

    iv. any strategic assessment.

Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database.
http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl]

14. In addition to the general requirements described above, specific information is required with respect to each of the determined controlling provisions. These requirements are outlined in paragraphs 15-17.

Key Issues

Biodiversity (threatened species and communities)

Assessment Requirements

15. The EIS must identify each EPBC Act listed threatened species and community likely to be impacted by the action. For any species and communities that are likely to be impacted, the proponent must provide a description of the nature, quantum and consequences of the impacts. For species and communities potentially located in the project area or in the vicinity that are not likely to be impacted, provide evidence why they are not likely to be impacted.
16. For each of the EPBC Act listed threatened species and communities likely to be impacted by the action the EIS must provide a separate:

    i. description of the habitat (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans;

    ii. details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements;

    iii. description of the relevant impacts of the action having regard to the full national extent of the species or community's range; and

    iv. description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action;

    v. identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account;

    vi. a description of any offsets proposed to address residual adverse significant impacts and how these offsets will be established.

    vii. details of how the current published NSW Biodiversity Assessment Method (BAM) has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts; and

    viii. details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the action in accordance with the BAM and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites.

Note: For the purposes of approval under the EPBC Act, it is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action and deliver an overall conservation outcome that improves or maintains the viability of the MNES i.e. 'like for like'. In applying the BAM, residual impacts on EPBC Act listed threatened ecological communities must be offset with Plant Community Type(s) (PCT) that are ascribed to the specific EPBC listed ecological community. PCTs from a different vegetation class will not generally be acceptable as offsets for EPBC listed communities.

17. Any significant residual impacts not addressed by the BAM may need to be addressed in accordance with the EPBC Act 1999 Environmental Offset Policy. http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.

Other approvals and conditions

18. Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations.

Environmental Record of person proposing to take the action

19. Information in relation to the environmental record of a person proposing to take the action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations.

Information Sources

20. For information given in an EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.

REFERENCES

- *Environment Protection and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
- *Environment Protection and Biodiversity Conservation Regulations 2000* Schedule 4
- Amending Agreement No. 1 (2020) - Item 18.1, Item 18.5, Schedule 1
- *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
- *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012

Appendix A

Protected matters relevant to the Tallawang Solar Farm (EPBC 2022/9171) project

Specific Risks

Key risks associated with the proposed action from the Commonwealth perspective include:

- Potential significant impacts to EPBC listed threatened species and an ecological community resulting from the clearing of native vegetation in the project footprint. The Department of Agriculture, Water and the Environment believes the proposed action will clear suitable foraging habitat that is critical for the survival of the threatened species mentioned below and reduce the extent of the ecological community present on the proposed action area.

Threatened species and communities

Based on the information in the referral documentation, the location of the action, species records and likely habitat present in the area, there are likely to be significant impacts to:

- White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and derived native grassland – Critically Endangered
- Koala (combined populations of QLD, NSW and the ACT) (Phascolarctos cinereus) – Endangered
- Spotted-tail Quoll (south-east mainland population) (Dasyurus maculatus maculatus) – Endangered

Additionally, there is some risk that there may be significant impacts on the following matters and further assessment to determine if the communities and species listed below are present in the proposed action area and, if so, the extent to which they may be impacted by the proposed action, is required:

- Regent Honeyeater (Anthocaera phrygia) – Critically Endangered
- Large-eared Pied Bat (Chalinobilus dwyeri) – Vulnerable
- Corben's Long-eared Bat (Nyctophilus corbeni) – Vulnerable
- Grey Box Grassy Woodland and Derived Native Grassland of south-east Australia – Endangered;

Further assessment to determine if the communities and species listed above are present in the proposed action area, and if so, the extent to which they may be impacted by the proposed action is required.

Note: uncertainty around the extent and number of protected matters that may be impacted will need to be resolved through the assessment process once final alignment and construction plans have been completed.

Note: this may not be a complete list and it is the responsibility of the proponent to ensure any protected matters under these controlling provisions are assessed for the Commonwealth decision-maker's consideration.

Our ref: DOC21/620485
Senders ref: SSD-23700028

Karl Okorn
Team Leader Environmental Assessments
Department of Planning Industry and Environment
karl.okorn@planning.nsw.gov.au

Dear Mr Okorn,

Secretary's Environmental Assessment Requirements – Tallawang Solar Farm

I refer to your email dated 14 July 2021 seeking input into the Department of Planning, Industry and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Assessment (EIS) for the Tallawang Solar Farm (SSD-23700028).

The Biodiversity, Conservation and Science Directorate (BCS) has considered your request and provides SEARs for the proposed development in **Attachment A and Attachment B.**

BCS recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Water and soils
3. Flooding

Please note:

The *Biodiversity Assessment Method 2020* came into effect on 22 October 2020. There are transitional arrangements in place to minimise the impacts that amendments to the BAM may have on proponents and landholders. **Attachment A** provides details of the transitional arrangements.

If you have any questions about this advice, please do not hesitate to contact Erica Baigent, Conservation Planning Officer, via erica.baigent@environment.nsw.gov.au or (02) 6883 5311.

Yours sincerely,

Ben Ellis
A/Senior Team Leader Planning North West
Biodiversity, Conservation and Science Directorate

26 July 2021

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

Standard Environmental Assessment Requirements

BCS	Biodiversity, Conservation and Science Directorate of the NSW Department of Planning, Industry and Environment, formerly OEH
The Department	NSW Department of Planning, Industry and Environment
NPWS	National Parks and Wildlife Service

Category 1- Exempt Land

Clearing of native vegetation on land that meets the definition of Category 1 - exempt land (as defined under the *Local Land Services Act 2013* (LLS Act)) does not require assessment or offsetting under the *Biodiversity Conservation Act 2016*. Prescribed impacts as outlined in chapter 6 of the Biodiversity Assessment Method (2020) must still be considered on Category 1 - exempt land. In addition, potential impacts to Matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act 1999* on Category 1 – exempt land must be considered.

Where an assessor identifies land as Category 1 – exempt land it must be adequately demonstrated that the identified land meets the criteria as set out in section 60H of the LLS Act. Multiple pieces of evidence should be used to demonstrate a Category 1 – exempt land designation. This might include:

- Publicly available data sets on the NSW Government SEED data portal, such as:
  - Land use mapping – used to identify and map existing and historical agricultural land use in NSW – see the *NSW Landuse 2017.*
  - Woody vegetation extent – used to identify and map native vegetation extent – see *2008 Woody Extent* and *2011 Woody Extent.*
  - State-wide Landcover and Tree Survey (SLATS) woody clearing for NSW – used to identify detectable clearing events since January 1990 – see *SLATS- Woody Vegetation Change - NSW 2008-2014*.
- Published information on the Native Vegetation Regulatory Map, including Category 2-sensitive regulated, Category 2-vulnerable regulated, and excluded land - see *Native Vegetation Regulatory Map Viewer*.
- Site-based information and records, including:
  - current and historical high-resolution aerial photography
  - current and historical photographs of the subject land
  - historical land management records maintained by the landowner
  - vegetation survey data collected on the subject land
  - documentation demonstrating history of authorised clearing and/or development.

The published *Native Vegetation regulatory map: method statement* should be reviewed to determine how the datasets can be best interrogated to support any identification of Category 1 – exempt land.

Where datasets/information provide contradictory information, a precautionary approach should be applied and the land should be categorised as Category 2 – regulated land.

Where Category 1 – exempt land is likely to be present on a development site, early engagement with BCS is encouraged. Prior to the Biodiversity Development Assessment Report being

submitted to the consent authority, the accredited assessor should submit a proposed land categorisation method to the BCS North West Planning team at *rog.nw@environment.nsw.gov.au* for endorsement.

Transitional arrangements for the *Biodiversity Assessment Method 2020*

Clause 6.31 of the *Biodiversity Conservation Regulation 2017* provides that when the BAM is amended, a BAR may be prepared based on the prior version of the BAM for the following designated periods;

- 12 months for a BDAR in respect of SSD/SSI or standard biocertification,
- 12 months or longer if approved by the Minister for a BDAR in respect of strategic biocertification,
- 6 months for BARs in respect of all other development or stewardship applications

A BAR prepared under these arrangements must state that it has been prepared based on the prior version.

This means that from 22 October 2020 until the end of the relevant designated transition period a BAR may be prepared using **either** the BAM 2017 **or** the BAM 2020, but not a combination of both.

If an Accredited Assessor has commenced preparing a BAR in accordance with the BAM 2017, it is recommended that they discuss the transition options with the proponent/landholder. If opting to continue using the BAM 2017, the BAR must be prepared within the relevant designated period and must include a statement that it has been prepared based on the BAM 2017. In addition, because BOAMs has been updated to reflect the BAM 2020 settings, an assessor continuing to prepare a BAR under the BAM 2017 should consult the *Release Notes* to ensure the correct BAM-C settings are applied.

Where an assessor proposes to apply BAM 2017 to a scattered tree (formerly paddock tree) or small area streamlined assessment, the assessor must contact BAM Support for guidance on how to use the BAM Calculator to apply the transitional arrangements. However, if the applicant or assessor proposes to apply BAM 2017 to a BSSAR, the applicant or assessor must contact the Biodiversity Conservation Trust to discuss use of this option.

A guidance document which lists the revisions made from BAM 2017 to BAM 2020 can be found *here*.

Biodiversity

1. Biodiversity impacts related to the proposed [development/project] are to be assessed in accordance with *Section 7.9 of the Biodiversity Conservation Act 2016* 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 the Department determines 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:
   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 conduct ecological rehabilitation (if a mining project);
   f. 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*.

Water and soils

6. The EIS must map the following features relevant to water and soils including:
   a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map);
   b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method*);*
   c. Wetlands as described in s4.2 of the Biodiversity Assessment Method;
   d. Groundwater;
   e. Groundwater dependent ecosystems;
   f. Proposed intake and discharge locations.
7. The EIS must describe background conditions for any water resource likely to be affected by the project, including:
   a. Existing surface and groundwater;
   b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations;
   c. Water Quality Objectives (*as endorsed by the NSW Government*) including groundwater as appropriate that represent the community's uses and values for the receiving waters;
   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;
   e. *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions.*
8. The EIS must assess the impacts of the project on water quality, including:
   a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the project 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;
   b. Identification of proposed monitoring of water quality.

9. The EIS must assess the impact of the project on hydrology, including:
    a. Water balance including quantity, quality and source;
    b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas;
    c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems;
    d. 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);
    e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water;
    f. 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;
    g. Identification of proposed monitoring of hydrological attributes.

Flooding

10. The EIS must map the following features relevant to flooding as described in the *Floodplain Development Manual 2005* including:
    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.

11. 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.

12. The EIS must model the effect of the proposed project (including fill) on the flood behaviour under the following scenarios:
    a. 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.

13. Modelling in the EIS must consider and document:
    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, or an equivalent extreme 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, hazard categories and hydraulic categories;
    d. Relevant provisions of the NSW *Floodplain Development Manual 2005*.

14. The EIS must assess the impacts on the proposed project on flood behaviour, including:
    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 riverbanks 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 NSW 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 NSW SES and Council;

j. Emergency management, evacuation and access, and contingency measures for the development considering the full range or 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;

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

Guidance Material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2016-063*
Environment Protection and Biodiversity Conservation Act 1999	*https://www.legislation.gov.au/Details/C2014C00140/Download*
Environmental Planning and Assessment Act 1979	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1979-203*
Fisheries Management Act 1994	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1994-038*
National Parks and Wildlife Act 1974	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1974-080*
Protection of the Environment Operations Act 1997	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1997-156*
Water Management Act 2000	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2000-092*
Wilderness Act 1987	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1987-196*
Biodiversity	
Biodiversity Assessment Method (OEH, 2020)	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-2020*
Changes to the Biodiversity Assessment Method from 2017 to 2020	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/changes-to-the-biodiversity-assessment-method-from-2017-to-2020*
BAM 2020 Operational Manual Stage 1	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-manual-2020-operational-manual-stage-1*
BAM Operational Manual Stage 2	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-2*
BAM 2020 Operational Manual Stage 3	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-3*
BAM Calculator User Guide	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-user-guide*
Serious and irreversible impacts of development on biodiversity	*https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/biodiversity-offsets-scheme/serious-and-irreversible-impacts*
Practice Note - Guidance for assessors and decision makers in applying modified benchmarks to assessments of vegetation integrity: Biodiversity Assessment Method	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-assessors-decision-makers-applying-modified-benchmarks-to-assessments-vegetation-integrity*

Title	Web address
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf*
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	*https://www.legislation.nsw.gov.au/view/pdf/asmade/sl-2017-471*
Ancillary rules: Biodiversity conservation actions	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-biodiversity-conservation-actions-170496.pdf*
Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-reasonable-steps-like-for-like-biodiversity-credits-170498.pdf*
Ancillary rules: Impacts on threatened species and ecological communities excluded from application of variation rules	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-impacts-on-threatened-entities-excluded-from-variation-170497.pdf?la=en&hash=C38840BFF49F012433532DF72E3D90C741E4DAC1*
The Department's Threatened Species Website	*https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species*
NSW BioNet (Atlas of NSW Wildlife)	*www.bionet.nsw.gov.au/*
Surveying Threatened Plants and their Habitats - NSW Survey Guide For The Biodiversity Assessment Method (DPIE 2020).	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method*
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - November 2004	*https://www.environment.nsw.gov.au/surveys/BiodiversitySurveyGuidelinesDraft.htm*
Threatened species survey and assessment guidelines: field survey methods for fauna – amphibians	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/threatened-species-field-survey-methods-for-fauna-amphibians*
NSW Survey Guide for Threatened Frogs	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs*
Surveying 'species credit' threatened bats and their habitats – NSW survey guide for the Biodiversity Assessment Method	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method*
Bat calls of NSW - region-based guide to the echolocation calls of Microchiropteran bats	*https://www.environment.nsw.gov.au/surveys/Batcalls.htm*
Community Biodiversity Survey Manual	*https://www.environment.nsw.gov.au/surveys/CommunityBiodiversitySurveyManual.htm*
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	*www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm*

Title	Web address
The Departments Data Portal (access to online spatial data)	*http://data.environment.nsw.gov.au/*
Fisheries NSW policies and guidelines	*https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation*
List of national parks	*https://www.nationalparks.nsw.gov.au/conservation-and-heritage/national-parks*
Revocation, recategorisation and road adjustment policy (OEH, 2012)	*https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-policies/revocation-recategorisation-and-road-adjustment*
Guidelines for consent and planning authorities for Developments adjacent to National Parks and Wildlife Service Land (NPWS, 2020)	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Development-guidelines/developments-adjacent-npws-lands-200362.pdf*
Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	*https://data.nsw.gov.au/data/dataset/acid-sulphate-soils-ass-planning-maps*
Acid Sulfate Soils Manual (Stone et al. 1998)	*https://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf*
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	*http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf* This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding	
Floodplain development manual	*https://www.environment.nsw.gov.au/topics/water/floodplains/floodplain-manual*
Floodplain Risk Management Guidelines	*http://www.environment.nsw.gov.au/topics/water/coasts-and-floodplains/floodplains/floodplain-guidelines*
NSW Climate Impact Profile	*http://climatechange.environment.nsw.gov.au/*
Climate Change Impacts and Risk Management	*https://www.environment.gov.au/climate-change/adaptation/publications/climate-change-impact-risk-management*
Water	
Water Quality Objectives	*http://www.environment.nsw.gov.au/ieo/index.htm*
ANZECC & ARMCANZ (2000) Water Quality Guidelines	*https://www.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000*
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	*http://deccnet/water/resources/AWQGuidance7.pdf*
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	*http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf*

Planning Number: SSD-2370028

Tallawang Solar Farm

The Department of Planning, Industry and Environment – Crown Lands (the Department) have reviewed the proposal.

As per section 2.2 of the Scoping Report, Crown Lands notes that there are a number of Crown roads within the project area. These roads may provide legal access to the development but may not provide practical access. The Department advises that these roads should not be relied upon for practical access to the project site. It is also proposed, in section 1.1 and Figures 2.1 and 2.2, that transmission lines may also be placed on or over Crown roads or land.

The Department will need to be referenced, prior to any use or occupation of any Crown roads or land, during the assessment phase.

Authority to use and access Crown land and roads is required under the *Crown Land Management Act 2016.* In order for transmission lines to traverse Crown land and/or roads, the proponent will need to apply for easements.

Information regarding the easement process is available at the below link.
https://www.industry.nsw.gov.au/lands/use/easements

It is recommended that the proponent contact Crown Lands as early as possible to discuss and initiate the easement process. Please email cl.acquisitions@crownland.nsw.gov.au to discuss the required easements.

As the easement process may be lengthy, it is also recommended that the proponent apply for a licence for each road and land lot as soon as possible. A licence will temporarily allow for the infrastructure to traverse Crown roads and land whilst the easement applications are being processed.

Details on how to apply for a licence are available at the below link.
https://www.industry.nsw.gov.au/lands/use/licences

The Department may also need to consider the transfer of the affected Crown roads to the local Council.

It is important to note that licences or easements must be in place before infrastructure can traverse Crown land or roads.

If the proponent requires further information, or has any questions, please contact Kirstyn Goulding, Administration Customer Liaison Officer in Crown Lands, on 4920 5058 or at lands.ministerials@dpie.nsw.gov.au.

Yours sincerely

Kirstyn Goulding
Administration Customer Liaison Officer
26/07/2021

6 Stewart Avenue Newcastle West NSW 2302
PO Box 2185 Dangar NSW 2309
Tel: 1300 886 235 www.industry.nsw.gov.au/lands ABN: 20 770 707 468

NSW GOVERNMENT | Department of Primary Industries

OUT21/9060

Mr Karl Okorn
Department of Planning industry and Environment

C/o Major Projects Portal

Dear Mr Okorn

Environmental Assessment Requirements– Tallawang Solar Farm (SSD-23700028) (Mid-Western Regional)

Thank you for your correspondence dated 14 July 2021 requesting Environmental Assessment Requirements (EARs) for the above proposal.

The NSW Department of Primary Industries (NSW DPI) Agriculture is committed to the protection and growth of agricultural industries, and the land and resources upon which these industries depend. Important issues are the potential impact on limited agricultural resources and the ability to rehabilitate the land to enable continued agricultural investment.

Impact on Prime and Biophysical Strategic Agricultural Land

The proposed solar farm is partially located on Biophysical Strategic Agricultural Land (BSAL), as well as lands with predominantly a Land and Soil Capability of 3 and 5. BSAL is highly productive land and it limited to 3.5% of the state. The NSW Government's Large Scale Solar Guideline (December 2018) states that solar developments should carefully consider their location and avoid high quality agricultural lands where possible.

DPI does not generally support the use of high quality agricultural land for non-agricultural purposes. We therefore request that that the final solar farm layout consider avoiding this land where possible. The final application could be informed by a soil survey to verify the extent of BSAL and class 3 lands on site.

The loss of high quality agricultural land will also heighten the importance of rehabilitation when the proposal is decommissioned.

General requirements

Attachment 1 includes recommended EARs, while Attachment 2 includes and a range of publications to assist consent authorities, proponents and the community in addressing the recommended EARs.

I am pleased to see the scoping report's attention to land use conflict, and the commitment to undertaken a Land Use Conflict Risk Assessment. The social impact scoping assessment identifies the concerns of the local community in relation to the impacts on agricultural land, productivity and disruption to agricultural businesses. The commitment to look at multifunctional uses including agricultural activities during the solar farm's operation is an important agricultural impact consideration.

Locked Bag 21, Orange NSW 2800, Australia
105 Prince Street, Orange NSW 2800
Tel: 02 9338 6666 www.dpi.nsw.gov.au ABN: 19 948 325 463

Should you require clarification on any of the information contained in this response, please contact Mary Kovac, Agricultural Land Use Planning Officer, on 0427949987 or by email at landuse.ag@dpi.nsw.gov.au

Yours sincerely

T Prentice.

22/7/21

Tamara Prentice
Manager Agricultural Land Use Planning

Attachment 1: Environmental Assessment Requirements

Issue	Environmental Assessment Requirement for Environmental Impact Statement
Site Suitability	• Include a Land Use Conflict Risk Assessment (LUCRA) to identify potential land use conflict with sensitive receptors including surrounding agricultural land uses. The LUCRA is to address separation distances and management practices to minimise odour, dust and noise impacts. A LUCRA is described in the DPI Land Use Conflict Risk Assessment Guide.
Consideration of impacts on agricultural resources and land	**Characteristics of Agricultural Land** • Describe the soil, slope, land capability, agricultural productivity, land characteristics and the history of agricultural land uses on the proposed development site. • Describe the current and historical agricultural land uses on surrounding land in the locality including the land capability and agricultural productivity of the surrounding land. **Impacts on Agricultural Land, Resources and Land Uses** • Detail the potential impacts from the proposed development on agricultural land and agricultural land uses on the site and in the locality. • Detail the location and areas of land to be temporarily removed from agricultural use, and those areas which are to be returned to agricultural use on completion of the development. • Consider possible cumulative impacts on surrounding agricultural enterprises and landholders. • Assess impacts on agricultural support services, processing and value adding industries. **Measures to mitigate impacts on Agricultural land** • Demonstrate that hail stones will not result in contamination of the land. • Detail the proposed strategies to manage impacts on agricultural aerial spraying in the area. • Detail considerations for potential land sharing with agriculture.
Traffic movements	• Detail the volume and route of traffic movements for the proposed development and how potential impacts on surrounding agricultural land uses are proposed to be mitigated (eg noise, dust, volume of traffic). This should include consideration of Travelling Stock Reserves (TSR) and the movement of livestock or farm vehicles along / across the affected roads.
Land stewardship	• Demonstrate that the rehabilitation measures will include, but not be limited to removal of all above and below ground infrastructure and will be in accordance with State Environmental Planning Policy No 55 - Remediation of Land. • Detail the cropping history or capability for cropping of the land and how the proposed rehabilitation works will enable this land to be used for cropping in the future. This detail is expected to require that for land with a cropping history or soil capability of category 1 to 3 in accordance with *The land and soil capability assessment scheme:*

	second approximation (OEH), all above and below ground infrastructure is to be removed to allow agricultural activities to continue once restoration is complete. • Where the land contains sodic soils detail the proposed management practices which should ensure than any trenching through sodic soils during construction is to include soil amendment with Gypsum at a minimum rate of 10t/ha (actual rates to be determined following soil testing (Clay content, ECEC and EC)).
Community Consultation	• Consult with the owners / managers of affected and adjoining neighbours and agricultural operations in a timely and appropriate manner about: - the proposal, the likely impacts and suitable mitigation measures or compensation.
Emergency Management	• The proposal is to detail contingency plans to enable the operation to deal with emergency situations. The proposal is to detail Emergency Management procedures and responsibilities for responding to bushfire threats and other hazardous events that may impact adjacent agricultural land and enterprises.

Attachment 2: Recommended Guidelines and Resources

Title	Location
Land Use Conflict Risk Assessment Guide	https://www.dpi.nsw.gov.au/agriculture/lup/development-assessment2/lucra
Agricultural Issues for Extractive Industry Development	https://www.dpi.nsw.gov.au/agriculture/lup/development-assessment2/extractive-industries
Infrastructure Proposals on Rural Land	https://www.dpi.nsw.gov.au/agriculture/lup/development-assessment2/infrastructure-proposals
The land and soil capability assessment scheme: second approximation 2012 (OEH)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Land-and-soil/land-soil-capability-assessment-scheme-120394.pdf
Australian Soil and Land Survey Handbook (CSIRO)	https://www.researchgate.net/publication/263102808_Australian_Soil_and_Land_Survey_Field_Handbook_3rd_edition
Guidelines for Surveying Soil and Land Resources (CSIRO)	https://www.researchgate.net/publication/237621641_Guidelines_for_Surveying_Soil_and_Land_Resources
Large Scale Solar Energy Guideline (DPE)	https://www.planning.nsw.gov.au/Policy-and-Legislation/Renewable-Energy/Large-scale-Solar-Energy-Guideline

OUT21/9451

Karl Okorn
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

karl.okorn@planning.nsw.gov.au

Dear Mr Okorn

Tallawang Solar Farm (SSD-23700028)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 14 July 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following advice for you to consider is from DPIE Water and NRAR.

The SEARs should include:

- A description of the watercourses located within the vicinity of the development, including Strahler Stream Order as mapped by Spatial Services NS, and appropriate riparian setbacks in accordance with the *Guidelines for riparian corridors on waterfront land.* (https://www.dpie.nsw.gov.au/__data/assets/pdf_file/0008/386207/licensing_approvals_controlled_activities_riparian_corridors.pdf).
- Details of water supply requirements and arrangements for the life of the project (both construction and operation);
- An assessment of the likely impacts (including flooding) on surface water and groundwater resources* and measures proposed to monitor, reduce and mitigate these impacts;
- A description of erosion and sediment control measures to mitigate any impacts in accordance with *Managing Urban Stormwater: Soils & Construction* (Landcom 2004);
- The proponent documents and addresses any sedimentation issues, through the development of an Erosion and Sediment Control Plan, in consultation with DPIE Water.
- Consideration of any 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).

* These water resources may include local streams/creeks, drainage channels, wetlands, riparian land, farm dams, floodplains, key fish habitat, groundwater dependent ecosystems and acid sulfate soils), related infrastructure, adjacent licensed water users and basic landholder rights.

Any further referrals to DPIE Water and NRAR can be sent by email to landuse.enquiries@dpie.nsw.gov.au. or to the following coordinating officer within DPIE Water:

Alistair Drew, Project Officer
E: Alistair.drew@dpie.nsw.gov.au
M: 0417 626 567

Yours sincerely

Alistair Drew
Project Officer, Assessments
DPIE Water – Knowledge Office
21 July 2021

PAC Details | Engagement Details | Audit

Response History

Public Authority Response

Thursday, 15 July 2021 12:52:55 PM AEST

Notes:

There is no Key Fish Habitat within the footprint of this project. The draft SEARs are considered adequate to address DPI Fisheries issues.

Public Authority Response **Tuesday, 3 August 2021 4:24:34 PM AEST**

Notes:
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 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 (Fire and Rescue 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 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.

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 hazard 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 in order 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) are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.

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 virtue of 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 particular local government area. The contact details of members of the LEMC can be obtained from the relevant local

Our reference: DOC21/585491-3
Date: 26 July 2021

HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: Tallawang Solar Farm
SSD/I #: SSD-23700028

1. 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 Investigation in NSW (DECCW 2010), and be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011).
2. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
3. 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 Heritage NSW.
4. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. 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.
5. 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.
6. 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.

NOTE: The process described in the *Due Diligence Code of Practice for the protection of Aboriginal objects in NSW* (DECCW 2010) is not sufficient to assess the impacts on Aboriginal cultural heritage of Major Projects.

Level 6, 10 Valentine Ave Parramatta NSW 2150 ■ Locked Bag 5020 Parramatta NSW 2124
P: 02 9873 8500 ■ E: heritagemailbox@environment.nsw.gov.au

3564 HAZARDs Input SEARs, Tallawang Solar Farm, (SSD-23700028)

JM
John Marks
To Karl Okorn
Cc Doris Yau

Reply | Reply All | Forward | ...

Mon 26/07/2021 2:40 PM

Dear Karl,

In reviewing the request for *Secretary's Environmental Assessment Requirements* (SEARs) for the Tallawang Solar Farm, (SSD-23700028). We have reviewed the proposed SSD location at Puggoon Road, Beryl, NSW, 2852 and found that it is not affected by any existing high-pressure dangerous goods pipelines. The application is for the construction of a solar farm using photovoltaic cells with a decentralised and centralised Battery energy Storage System (BESS) of discharge capacity of 500 MW. To the north of the proposed SSD is the proposed Barneys Reef Wind Farm Project.

We recommend the following be included in the SEARs.

Hazards and Risks

1. If the SSD includes a battery energy storage system (BESS) exceeding a peak delivery capacity of 30 MW, prepare a Preliminary Hazard Analysis (PHA) in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'* (HIPAP 6) and *Multi-Level Risk Assessment* (MLRA). The PHA must also:
    - Consider the most recent standards and codes such as, but not limited to, NFPA 855, AS 5139, IEC 62897, UL 9540, FM Global DS 5-33, and UL9540A test reports when establishing separation distances;
    - Verify sufficient separation to other on-site or off-site receptors; and
    - Verify that the BESS would be accommodated within the area designated for the BESS, accounting for separation between BESS sub-units (containers, modules etc) to prevent fire propagation.

Please contact me if there are any queries.

Regional NSW

Our ref: DOC21/596413

Your ref: SSD 23700028

Karl Okorn

Team Leader Environmental Assessments

Energy Resource Assessment

4 Parramatta Square

12 Darcy Street

Parramatta NSW 2150

Emailed: via Planning portal

28 July 2021

Dear Mr Okorn

Subject: Tallawang Solar Farm (SSD-23700028) – Request for Secretary's Environmental Assessment Requirements

Thank you for the opportunity to provide advice on the above matter. This is a response from the NSW Department of Regional NSW – Mining, Exploration and Geoscience (MEG) – Geological Survey of NSW (GSNSW).

MEG has no additional requirements to those in the draft SEARs. We 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 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.

Yours sincerely,

Steven Palmer

Manager, Land Use Assessment

Geological Survey of NSW – Mining, Exploration & Geoscience

PAC Details | Engagement Details | Audit

Response History

Public Authority Response

Tuesday, 3 August 2021 11:34:30 AM AEST

Notes:

Council has reviewed the documentation, and has no further comments. The Draft SEARs provided is adequate, and covers those issues of concern to Council.

DOC21/585844

Karl Okorn
Planning and Assessment Division
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124
Email: karl.okorn@planning.nsw.gov.au

Attention: Karl Okorn

No Comment to Scoping Report and draft SEARS– Tallawang Solar Farm

Dear Sir

Thank you for the request for advice from Public Authority Consultation (PAE-24185898), requesting input from the NSW Environment Protection Authority (EPA) on the scoping report and draft SEARS for the proposed Tallawang Solar Farm, near Gulgong, NSW (Application SSD-23700028).

The proposal is for:

The construction and operation of a solar farm and associated access and infrastructure.

The EPA has no comments on the proposal and consider that all relevant matters have been addressed.

If you have any questions about this request, please contact Dr Sandie Jones on 6333800 or via email at EPA.Southopsregional@epa.nsw.gov.au.

Yours sincerely

Dr Sandie Jones
Manager – Regional South Operations
Regulatory Operations Regional

30/07/2021

The Manager
Resource and Energy Assessments
Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Karl Okorn

Dear Mr Okorn

SSD- 23700028: Secretary's Environmental Assessment Requirements (SEARs) for the Tallawang Solar Farm

Thank you for the referral to TfNSW to provide input into the Tallwang Solar Farm for Secretary Environmental Assessment Requirements (SEARs).

TfNSW have reviewed the scoping documentation and have identified that the proposed development will comprise of the following:

- Approximately 1,238,500 bifacial solar PV modules in an east-west single-axis tracking arrangement with a maximum height of 5 metres (m) above ground level.
- Approximately 1,000 MWh of DC-coupled battery storage units distributed throughout the solar farm site, adjacent to the inverters.
- Primary solar farm site access point from the Castlereagh Highway and access points to the proposed Barneys Reef substation and overhead transmission line from Gingers Lane, north of the Project Area.
- Three secondary access points along Puggoon Road are proposed to allow for emergency vehicles and stock movements.
- Approximately 11 km of overhead 330 kV line connecting the proposed Tallawang Solar Farm substation to the grid via the proposed Barneys Reef substation.
- A 330 kV substation located in the Barneys Reed Wind Farm project area which will provide a shared connection point for the wind farm and the Tallawang Solar Farm, with a footprint of approximately 2.3 ha.

TfNSW requests that the a Traffic Impact Assessment is prepared by a suitably qualified person in accordance with the *Austroads Guide to Traffic Management Part 12*, the Roads and Maritime *Supplements to Austroads* and the *RTA Guide to Traffic Generating Developments*, to support the Environmental Impact Statement and Development Application. The Traffic Impact Assessment is to address the following:

- Consideration of the cumulative traffic volumes from the proposed Tallawang Solar Farm and the Barney's Reef Wind Farm, in this respect the following matters should be addressed:
    - Will both projects have overlap in terms of the scheduling of commencement and completion?
    - If this is the case the Traffic Impact Assessments should be prepared in a manner that addresses the overlapping timeframes and how the cumulative traffic impacts

will be managed and should be assessed collectively in relation to traffic volumes for construction workforce, light vehicles, heavy vehicles and the relationship with the OSOM movements for the Barenys Reef Wind Farm.

- Will the workforce be shared between the two developments?
- Will the workforce have coinciding hours of operation? What will the cumulative implications be for the traffic generation?
- The peak traffic generation should be assessed collectively for both projects in relation to the AM and PM peaks for the construction workforce and heavy vehicles. How will this be managed? Will the hours of operation and shifts be staged for each project?
- Consideration should be given within the TIA if the projects will be overlapping to the key access points with the classified road and the traffic volumes that will be accessing those intersections.
- The TIA should also address the haulage routes and the construction workforce routes collectively and the timeframes for the movements of heavy vehicles, light vehicles and OSOMs for both projects.
- Austroads warrant assessment as per *Part 6 of Austroads Guide to Road Design* should be based on the cumulative peak traffic generation if both projects are to have coinciding timeframes and workforces. In this regard, the concept design for any intersection treatments with the classified road network are to form part of the documentation referred to TfNSW.

Other matters to be addressed:

- Project schedule:
  - Hours and days of work, number of shifts and start and end times
  - Phases and stages of the project, including construction, operation and decommissioning,
- Traffic volumes:
  - Existing background traffic,
  - Project-related traffic for each phase or stage of the project,
  - Projected cumulative traffic at commencement of operation, and a 10-year horizon post-commencement,
- Traffic characteristics:
  - Number and ratio of heavy vehicles to light vehicles,
  - Peak times for existing traffic,
  - Peak times for project-related traffic including commuter periods,
  - Proposed hours for transportation and haulage,
  - Interactions between existing and project-related traffic,
- A description of all over size and over mass vehicles and the materials to be transported
- The origins, destinations and routes for:
  - Commuter (employee and contractor) light vehicles and pool vehicles,
  - Heavy (haulage) vehicles,
  - Over size and over mass vehicles,

- Road safety assessment of key haulage route/s,
- The impact of traffic generation on the public road network and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning of the project,
- The need for improvements to the road network, and the improvements proposed such as road widening and intersection treatments, to cater for and mitigate the impact of project related traffic,
- Proposed road facilities, access and intersection treatments are to be identified and be in accordance with Austroads Guide to Road Design including provision of Safe Intersection Sight Distance (SISD),
- Local climate conditions that may affect road safety during the life of the project (e.g. fog, wet and dry weather, icy road conditions),
- The layout of the internal road network, parking facilities and infrastructure,
- Impact on rail corridors and level crossings detailing any proposed interface treatments,
- Impact on public transport (public and school bus routes) and consideration for alternative transport modes such as walking and cycling,
- Identification and assessment of potential impacts of the project, such as blasting, lighting, visual, noise, dust and drainage on the function and integrity of all affected public roads,
- Controls for transport and use of any dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, the *Australian Dangerous Goods Code* and *Australian Standard 4452 Storage and Handling of Toxic Substances,*
- It is noted that there are a significant number of renewable energy projects occurring within the locality and consideration of the traffic implications from coinciding timeframes for the construction of these projects should form part of the TIA.
- The TIA is to consider the timing of TfNSW projects that are likely to be coinciding with the development in relation to the proposed haulage routes to be utilised for the development.
- Inclusion of the traffic generation from the construction of ancillary aspects such as the transmission line will need to form part of the TIA. It is noted the transmission line will be an overhead line and will cross the railway line to the north of the project.
- Consultation with ARTC as the rail authority should occur regarding the proposed overhead transmission line.

TfNSW encourages early discussions with proponents and key stakeholders regarding the traffic and network matters associated with State Significant Developments. If you would like to arrange a meeting contact Alexandra Power via development.western@transport.nsw.gov.au or phone 6861 1428.

Yours faithfully

Alexandra Power

Team Leader Development Services West- Renewables
Development Services West
Regional and Outer Metropolitan

Karl Okorn

From: Easements&Development <Easements&Development@transgrid.com.au>
Sent: Tuesday, 3 August 2021 12:08 PM
To: Karl Okorn
Subject: 2021-352 State Significant Development (SSD-23700028) - Tallawang Solar Farm

Good Afternoon,

TransGrid Reference Number: 2021-352

Proposal: Tallawang Solar Farm

Please see TransGrid comments in regard to this matter below:

A. TransGrid request that the proponent:

i. Include details of how they would connect to the network (TransGrid's Central-West Orana REZ transmission line);

ii. Include the connection to TransGrid's CWO REZ transmission line in their development footprint, including new transmission line, substation, BESS and access roads, and provide TransGrid with shape files, where required;

iii. Undertake any necessary environmental assessments (Ecology, Heritage, Visual, EMF, Noise etc.) and obtain the required approval(s) for this connection;

iv. Ensure appropriate setbacks from TransGrid's transmission lines are included in the proposed EIS.

B. Tallawang Solar Farm is not a customer project yet. The proponent will need to engage TransGrid via executing a Connection Processes Agreement to finalise the connection to TransGrid's network.

i. The EIS will need to include all connection assets including the new transmission line cut in to the existing transmission line, a new transmission line/substation and access roads for the new infrastructure assets.

ii. The project needs to address in the EIS how it will connect into TransGrid's network and what land interests are to be established to the benefit of TransGrid in respect of same (substation, transmission line easement, access easements etc.).

iii. Given the proponent has not contacted TransGrid to establish themselves as a customer project as yet, this should also form part of the 'Consultation' part of the EIS and the SEARs should specify this as a requirement.

1. Please see link to TransGrid online guidelines : https://www.transgrid.com.au/being-responsible/public-safety/Living-and-working-with-electricity-transmission-lines/Pages/default.aspx

2. Please see link to the PDF version: https://www.transgrid.com.au/being-responsible/public-safety/Living-and-working-with-electricity-transmission-lines/Documents/Easement%20Guidelines.pdf

Regards

Michael

Michael Platt
Development Assessment & Control Officer | Network Planning and Operations

Transgrid | 200 Old Wallgrove Road, Wallgrove, NSW, 2766
T: (02) 9620 0161 **M:** 0427 529 997
E: Michael.Platt@transgrid.com.au **W:** www.transgrid.com.au

Appendix 1 – SEARs Checklist

Table A.1 - SEARS and where each requirement has been addressed in this EIS.

Requirement	Where addressed in EIS
General Requirements	
The environmental impact statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation).	Section 4.0 and Appendix 5
In particular, the EIS must include:	
• a stand-alone executive summary;	Executive Summary
• a full description of the development, including: o details of construction, operation and decommissioning; o a high quality 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); o a high quality detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development;	Section 3.0 Section 3.0 and Figure 3.1 Section 1.4 and Figure 1.2
• 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 and approved solar and major projects, Crown lands, rural residential developments and subdivision potential);	Sections 6.5 and 9.0
• an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: o a description of the existing environment likely to be affected by the development using sufficient baseline data; o 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 in the region, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice including the *Large-scale Solar Energy Guideline* (DPIE 2018) and the *Cumulative Impact Assessment Guideline* (DPIE, July 2021) (subject to transitional arrangements) including the approved Stubbo Solar Farm and Dunedoo Solar Farm, operational Beryl Solar Farm and the proposed Barneys Reef Wind Farm; o 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 o a description of the measures that would be implemented to monitor and report on the environmental performance of the development;	Section 2.2 and Section 6.0 Section 6.0 and Appendices 6 to 17 Sections 6.0 and 8.0, as well as Appendix 18 Sections 6.0 and 8.0, as well as Appendix 18
• a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and	Section 8.0 and Appendix 18

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
• a detailed evaluation of the merits of project as a whole having regard to: ○ the requirements in Section 4.15 of the *Environmental Planning and Assessment Act 1979*, and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; ○ 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 (including opportunities for shared infrastructure with proposed developments in the region), and the consequences of not carrying out the development.	Section 4.0 and Appendix 5 Section 6.5 and Section 9.2 Section 2.6
• 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;	Section 2.0
• a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading.	Appendix 3
The EIS must also be accompanied by a report from a suitably qualified person providing: • 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 • an estimate of jobs that will be created during the construction and operational phases of the proposed infrastructure; and • certification that the information provided is accurate at the date of preparation.	Provided to DPE separately
Key Issues	
The EIS must address the following specific matters:	
Biodiversity – including: • an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the *Biodiversity Conservation Act 2016 (NSW)*, the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR), unless BCD and DPIE determine the proposed development is not likely to have any significant impacts on biodiversity values; • 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; • an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the *Fisheries Management Act 1994*, and a description of the measures to minimise and rehabilitate impacts; and	Section 6.7 and Appendix 10

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
• if an offset is required, details of the measures proposed to address the offset obligation.	
Heritage – including • assessment of the impact to Aboriginal cultural heritage items (archaeological and cultural) in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011)* and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010); • provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)*; and • assess the impact to historic heritage having regard to the *NSW Heritage Manual*.	Section 6.9 and Appendix 12 for Aboriginal cultural heritage Section 6.10 and Appendix 13 for historic heritage
Land – including: • a detailed justification of the suitability of the site and that the site can accommodate the proposed development having regard to its potential environmental impacts, permissibility, strategic context and existing site constraints; • an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: ○ consideration of agricultural land (including Biophysical Strategic Agricultural Land and land and soil capability class 1,2 or 3), flood prone land, Crown lands, mining, quarries, mineral or petroleum rights; ○ a soil survey to determine the soil characteristics and confirm land capability class and consider the potential for erosion to occur; and ○ a cumulative impact assessment of nearby developments,	Sections 6.5 and Section 9.2, Appendix 8 Section 6.5 and Appendix 8 Section 6.5 and Appendix 8 Section 6.16 and Appendix 17
• an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning including: ○ consideration of the zoning provisions applying to the land, including subdivision; ○ completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's Land Use Conflict Risk Assessment Guide; and ○ assessment of impact on agricultural resources and agricultural production on the site and region.	Section 4.0 and Appendix 5 Section 6.5 and Appendix 8 Section 6.5 and Appendix 8

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
Visual – including a detailed assessment of the likely visual impacts (including glare, reflectivity and night lighting) of all components of the project (including arrays, transmission lines, substations and any other ancillary infrastructure) on surrounding residences and key locations, scenic or significant vistas, air traffic and road corridors in the public domain, and on the Siding Spring Observatory in accordance with the *Dark Sky Planning Guideline* (2016), and provide details of measures to mitigate and/or manage potential impacts (including a draft landscaping plan for on-site perimeter planting, with evidence it has been developed in consultation with affected landowners);	Section 6.11 Appendix 14
Noise – including an assessment of the construction noise impacts of the development in accordance with the *Interim Construction Noise Guideline* (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;	Section 6.12 Appendix 15
Transport – including: • an assessment of the peak and average traffic generation, including over-dimensional vehicles and construction worker transportation; • an assessment of the likely transport impacts to the site access route, site access point(s), any Crown land, particularly in relation to the capacity and condition of the roads, road safety and intersection performance; • a cumulative impact assessment of traffic from nearby developments including Barney's Reef Wind Farm; and • provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades (including resulting from heavy vehicle and over mass / over dimensional traffic haulage routes), road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority;	Section 6.6 Appendix 9
Water – including: • an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources traversing the site and surrounding watercourses, drainage channels, wetlands, riparian land, farm dams, 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 *Managing Urban Stormwater: Soils & Construction (Landcom 2004)*;	Section 6.8 Appendix 11
Hazards and Risks – including: • a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33* (DoP, 2011);	Section 6.13 Appendix 16

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
• a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment* (DoP, 2011). The PHA must consider all recent standards and codes and verify separation distances to on-site and off-site receptors to prevent fire propagation; • an assessment of potential hazards and risks including but not limited to bushfires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure against the *International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields*.	
Socio-Economic – the EIS must include an assessment of the social and economic impacts in accordance with *Social Impact Assessment Guideline* (DPIE, July 2021) (subject to transitional arrangements) and benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, assessment of impact on agricultural resources and agricultural production on the site and region.	Section 6.3 and Appendix 6 for the Social Impact Assessment Section 6.4 and Appendix 7 for the Economic Impact Assessment
Waste – identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 6.14 and Appendix 18
Consultation	
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 and mineral title holders. In particular, you must undertake detailed consultation with affected landowners surrounding the development, Mid-Western Regional Council, Crown lands and NSW Aboriginal Land Council. 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.	Section 5.0 and Appendix 6

Appendix 1 – SEARs Checklist

Table A.2 - Supplementary SEARS and where each requirement has been addressed in this EIS.

Requirement	Where addressed in EIS
General Requirements	
The Environmental Impact Statement (EIS) must address all matters outlined in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth) and all matters outlined below in relation to the controlling provisions.	
Project Description • The title of the action, background to the action and current status.	Section 1.0 Section 3.0
• The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on matters of national environmental significance (MNES).	
• How the action relates to any other actions that have been, or are being taken in the region affected by the action.	Section 1.6 & Section 6.16
• How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.	Section 7 and Appendix 10
Impacts • The EIS must include an assessment of the relevant impacts of the action on the matters protected by the controlling provisions, including: ○ a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts; ○ a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible; ○ analysis of the significance of the relevant impacts; and ○ any technical data and other information used or needed to make a detailed assessment of the relevant impacts.	Section 6.0
Avoidance, mitigation and offsetting • For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action including: ○ a description, and an assessment of the expected or predicted effectiveness of the mitigation measures, ○ any statutory policy basis for the mitigation measures; ○ the cost of the mitigation measures; ○ an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing; ○ the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.	Section 7.0 and Appendix 10

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
• Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.	Section 6.7 and Appendix 10
• For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any: ○ conservation advice or recovery plan for the species or community; ○ relevant threat abatement plan for the species or community; ○ wildlife conservation plan for the species; and ○ any strategic assessment.	Appendix 10
• In addition to the general requirements described above, specific information is required with respect to each of the determined controlling provisions. These requirements are outlined in paragraphs 15-17.	Appendix 10
Key Issues	
Biodiversity (threatened species and communities)	
Assessment Requirements	
• The EIS must identify each EPBC Act listed threatened species and community likely to be impacted by the action. For any species and communities that are likely to be impacted, the proponent must provide a description of the nature, quantum and consequences of the impacts. For species and communities potentially located in the project area or in the vicinity that are not likely to be impacted, provide evidence why they are not likely to be impacted.	Appendix 10
• For each of the EPBC Act listed threatened species and communities likely to be impacted by the action the EIS must provide a separate: ○ description of the habitat (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans; ○ details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements; ○ description of the relevant impacts of the action having regard to the full national extent of the species or community's range;	Appendix 10

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
○ description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action; ○ identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account; ○ a description of any offsets proposed to address residual adverse significant impacts and how these offsets will be established. ○ details of how the current published NSW Biodiversity Assessment Method (BAM) has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts; and ○ details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the action in accordance with the BAM and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites.	
• Any significant residual impacts not addressed by the BAM may need to be addressed in accordance with the EPBC Act 1999 Environmental Offset Policy. http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.	Appendix 10
Other approvals and conditions • Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations.	Section 4 and Appendix 5
Environmental Record of person proposing to take the action • Information in relation to the environmental record of a person proposing to take the action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations.	The RES Group has a large development portfolio of solar, wind and energy storage power plants across Australia, North America, Europe, and the Middle East. Over the past 40 years, RES has delivered more than 21 gigawatts (GW) of renewable energy projects across the globe and supports and operational asset portfolio exceeding 7 GW worldwide. Active in Australia since 2004, RES has a development pipeline of approximately 5GW of new renewable energy projects and a construction and asset management portfolio of over 1.1 GW. RES in Australia has undertaken several projects under the EPBC Act and has satisfactorily implemented all the conditions of its previous Commonwealth and State

Appendix 1 – SEARs Checklist

Requirement	Where addressed in EIS
	approvals. RES is committed to transparent and meaningful engagement with planning and environmental authorities with respect to its development project.
Information Sources • For information given in an EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.	Section 10

Table A.3 - DPE Feedback on Soft Copy EIS Package and where addressed in EIS

Feedback	Response / Where addressed in EIS
Biodiversity – BDAR will need to be updated to address Commonwealth requirements – supplementary SEARs to be issued. Further information required around consultation with BCS, particularly around SAII impacts and Category 1 land	Sections 6.7 and 7.0, Appendix 10
Visual – Include images/photomontages showing residual visual impacts after mitigation (eg. screening) and include detailed assessment of proper transmission line impacts. All proposed mitigation measures need to be finalised, particularly where mitigation is proposed on private landholdings including any neighbour agreements. An updated and detailed concept landscape plan is required showing the design and detail of the proposed mitigation works and certified by a landscape architect as being able to achieve intended mitigation within 3 years of project operations commencing	Section 6.11 and Appendix 14
Traffic – Proposed upgrade works need to be clearly set out and consistent between EIS and traffic technical study. Traffic study should not refer to other documents (the "icubed" reports) and contain all information relevant to the route selection and required upgrade	Section 6.6 and Appendix 9
Water Use – Provide additional detail of where water will likely be sourced, including capacity of nearby sources to provide for project demand & any details of ground water access	Section 6.8 and Appendix 11
Mineral Exploration – Include information regarding outcomes of consultation with the exploration licence holder	Section 5.5
Native Title – Provide information regarding outcomes of consultation with Native Title claimant.	Section 6.9.1.1
Neighbour Benefits Program – Further information required around what is proposed. If a VPA is proposed, this needs to be set out clearly.	Sections 2.4.2 and 2.4.3
Mapping – higher quality / resolution maps required across EIS package. Please also include a map showing nearby sensitive receivers for the project in the EIS.	Refer to the figures throughout the EIS and Appendix 2

Appendix 1 – SEARs Checklist

Feedback	Response / Where addressed in EIS
Landowners consent must be provided for all lots which comprise the project.	Provided to DPE separately
Quantity Surveyor report – please see detailed feedback below. • Demonstrate the calculations have been prepared by a suitably qualified person to provide the detailed calculation of the capital investment value (CIV) for the project. • QS report should refer to the planning circular PC - 21- 20 and include all items that will be capitalised by the firm over the life of the project. • Explain assumptions behind the Foreign currency exchange rate of US1:AUS1.35. • Explain the 3% contingency. • Explain why spares are excluded and explain how they treat 'replacement of capital' in the CIV calculation? • Explain the costing for the 2 Substations identified in the project. • Explain enabling works - costs of all temporary construction and buildings. • Explain what ancillary works costs include – detail. • Confirm whether labour costs and long service levy are included. • Explain why the TransGrid connection works excluded. • Explain where the Public Road upgrade at Site Access point off Castlereagh Highway is included. • Explain reasons not to include any costs of mitigating impacts of the proposal, identified in the EIS.	Provided to DPE separately
PHA – please see detailed feedback below. For major battery projects, the Department typically requires that a Preliminary Hazards Analysis (PHA) be prepared, in accordance with State Environmental Planning Policy (Resilience and Hazards) 2021, the Department's Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment (DoP, 2011). The PHA must: • Consider the most recent standards and codes such as and not limited to NFPA 855, AS 5139, IEC 62897, UL 9540, FM Global DS 5-33, and UL 9540A test reports when establishing separation distances • Demonstrate that the separation distances between BESS to on-site or off-site receptors and the separation distances between BESS sub-units (containers, modules, etc.) prevent fire propagation • Verify that the areas designated for BESS are sufficient taking into account separation distances between BESS sub-units • Demonstrate that the fire risks from BESS can comply with the Department's Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning.	Section 6.13.1 and Appendix 16
Inconsistencies and errors	
Cultural huts exclusion zone shown only over 1 of the 2 huts in many figures.	Refer to figures through the EIS and in Appendix 2 that have been updated

Appendix 1 – SEARs Checklist

Feedback	Response / Where addressed in EIS
Clarify whether setback around historic heritage sites is 40m for both or 40m and 20m.	Section 6.10
Clarify setbacks around first/second order streams – some figures shown panels over first order streams, other parts of EIS specify a 20m setback.	Section 1.4 and 6.8
No exclusion zone shown for the northern most associated receiver on the site.	This receiver is on land subject to an option to purchase agreement, as discussed in Section 2.2.5