APPENDIX A
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS AND AGENCY COMMENTS

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 10452
Project Name	Stubbo Solar Farm which includes: · the construction and operation of a solar photovoltaic (PV) energy generation facility with an estimated capacity of up to 400 MW; and · associated infrastructure, including a grid connection and battery storage.
Location	Blue Springs Road, Stubbo in the Mid-Western Regional Local Government Area
Applicant	UPC\AC Renewables Australia
Date of Issue	05/05/2020
General Requirements	The environmental impact statement (EIS) for the development must comply with the requirements in 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 site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); - a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development; · a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved solar farms, rural residential development and subdivision potential); · an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: - a description of the existing environment likely to be affected by the development; - an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed developments in the region (including the approved Beryl and Wollar Solar Farms and the proposed Dunedoo Solar Farm), taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice; - a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development (including draft management plans for specific issues as identified below); and - a description of the measures that would be implemented to monitor and report on the environmental performance of the development; · a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and · the reasons why the development should be approved having regard to: - relevant matters for consideration under the *Environmental Planning and Assessment Act 1979*, including the objects of the Act 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 (and its key components), including 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; and · a detailed evaluation of the merits of the project as a whole. 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 - certification that the information provided is accurate at the date of preparation. The development application must be accompanied by the consent in writing of the owner/s of the land (as required in clause 49(1)(b) of the Regulation).
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) and documented in a Biodiversity Development Assessment Report (BDAR), unless BCD (formerly OEH) and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values; and - 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 of the project on aquatic ecology, including aquatic and riparian biodiversity and key fish habitats; · **Heritage** – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including consultation with the local Aboriginal community in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents*; · **Land** – including: - an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: o a consideration of agricultural land, flood prone land, Crown lands (including Crown reserve 750765), mining, quarries, mineral or petroleum rights (including mineral licence ML1466, petroleum exploration licence PEL456 and coal authorisation AUTH 286); o consideration of any Aboriginal Land Claim, including but not limited to NC2018/002; o a soil survey to determine the soil characteristics and consider the potential for erosion to occur and agricultural land capability of the site; and o 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, and;
  - completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's *Land Use Conflict Risk Assessment Guide.*

· **Visual** – including an assessment of the likely visual impacts of the development (including any glare, reflectivity and night lighting) on surrounding residences, scenic or significant vistas, Siding Spring Observatory in accordance with the *Dark Sky Planning Guideline*, air traffic and road corridors in the public domain, including a draft landscaping plan for on-site perimeter planting, with evidence it has been developed in consultation with affected landowners;

· **Noise** – including an assessment of the construction noise impacts of the development in accordance with the *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 (including, but not limited to, Castlereagh Highway, Cope Road, Barneys Reef Road, Blue Springs Road and Merotherie Road), site access point, any Crown land, particularly in relation to the capacity and condition of the roads;
- a cumulative impact assessment of traffic from nearby developments (including cumulative impacts from Wollar Solar Farms and the proposed Dunedoo Solar Farm);
- a description of any proposed road upgrades developed in consultation with the relevant road and rail authorities (if required); and
- a description of the measures that would be implemented to mitigate any transport impacts during construction;

· **Water** – including:
- an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including Merotherie, Pine, Stubbo and Gum creeks traversing the site and surrounding water courses), 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:
- Battery Storage – include a Preliminary Hazard Analysis (PHA) prepared in accordance with *Hazard Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011), demonstrating that the battery energy storage system is suitably located and minimises risks to neighbouring land uses

	and on-site substation(s); and - 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** – including an assessment of the likely impacts on the local community, demands on Council infrastructure and a consideration of the construction workforce accommodation; and · **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, taking into consideration capacity and availability of local landfills.
Legislation, Policies & Guidelines	A list of some of the legislation, policies and guidelines that may be relevant to the assessment of the project can be found at: · 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 and any exploration licence and/or mineral title holders. In particular, you must undertake detailed consultation with affected landowners surrounding the development and Mid-Western Regional 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.
Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS.

MID-WESTERN REGIONAL COUNCIL
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JR | LAN900112

30 April 2020

Attention: Tatsiana Bandaruk
NSW Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy St
PARRAMATTA NSW 2150

Dear Tatsiana,

RE: STUBBO SOLAR FARM (SSD-10452)

Thank you for providing Mid-Western Regional Council (Council) with the opportunity to provide input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Stubbo Solar Farm (SSD-10452). Council has reviewed the requirements for SSD-10452 and requests the following issues to be specifically addressed as part of the impact assessment.

Transport
Council requests that a full traffic study be undertaken as part of the EIS which details the specific traffic route for all movements of materials and workforce, traffic volumes, size and timing of loads and expected impacts from heavy or oversize vehicles during both construction and operational phases.

Specific details should also be included for any road upgrades that will be expected/required as a result of the project. This includes intersection treatments, railway crossings, lane widths and surfacing details in accordance with the relevant AustRoad Guidelines.

Investigations into road ownership and required authorisations/approvals are also required, in the event the physical road does not sit within the road reserve, or alternatively the road belongs to Crown Roads, who have a separate approval process to that of Council.

Workforce
It is noted in the Scoping Report that there will be an estimated 400 workers at the peak of construction. Council requests that the proponent provide sufficient details regarding accommodation for the workforce, peak and average workforce numbers, travel arrangements to/from site, vehicle movements and hours of construction. In particular, any social impacts during construction on the surrounding towns especially Gulgong should be addressed.

It is also requested that the proponent consider the status and timing of any other state significant developments within the Mid-Western Region to minimise any adverse cumulative impacts.

Building Materials
Council requests that the proponent provide information regarding the building materials to be used and sourced during the construction phase. This includes the type of material required, where it will be sourced from, relevant truck movements, as well as any social and economic impacts on the relevant communities.

Noise and Visual Amenity
Council requests that specific details are provided to adequately assess any noise and visual amenity impacts that may be experienced by residents within local proximity of the project. As the project is of a very large scale, it is anticipated that noise and visual amenity will be key areas of concern for adjoining neighbours and local residents. Where impacts are expected, it is requested that the proponent provide a thorough analysis of these impacts and details on the proposed mitigation measures and management practices that will be implemented.

Waste
A significant amount of waste is expected to be generated by the project during both construction and decommissioning phases. Council requests that specific details are provided by the proponent in relation to the expected waste to be generated during each phase and how it will be managed. This includes details of the types of waste (including pallets, panels, steel piles, packaging and batteries), expected volumes and how the waste will be transported and disposed.

Agriculture
The scoping report outlines that the subject site is classified Class 5 under the land and soil capability assessment scheme. As the Mid-Western Region has no Class 1 land and only a small amount of Class 2 land, Classes 3-5 have greater value within the Region compared to other regions. An economic analysis needs to be provided to demonstrate the impact of removing 1,485 ha of valuable agricultural land from the local economy.

An Agricultural Impact Assessment is also requested. This should include soil testing to determine the specific highest agricultural capability of the subject site and identify the processes, inputs and costs associated with returning the subject site to a condition capable of sustaining agriculture when the site is no longer used for renewable energy.

DCP
The proponent may wish to consider the provisions of the Mid-Western Regional Development Control Plan 2013, in particular section 6.5 on Solar Energy Farm. This includes clauses relating to the decommissioning and the remediation of land following the cessation of the development to ensure the preservation of the agricultural potential of the land.

Community Consultation
Council also requests that the proponent provide details on its proposed communications plan and identifies mechanisms by which the community can provide feedback during construction and operations. This should also include the proponents approach to dealing with complaints or compliance issues.

Should you have any further enquiries in relation to this matter, please contact Council on (02) 6378 2850.

Yours sincerely,

JULIE ROBERTSON
DIRECTOR DEVELOPMENT

Our ref: DOC20/302940
Senders ref: SSD 10452

Ms Tatsiana Bandaruk
Senior Environmental Assessment Officer
Resource Assessments
Department of Planning, Industry and Environment
Tatsiana.bandaruk@planning.nsw.gov.au

Dear Ms Bandaruk

Stubbo Solar Farm (SSD 10452) – Request for input into SEARs

I refer to your email dated 16 April 2020 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 proposed Stubbo Solar Farm (SSD 10452), north of Gulgong.

The Biodiversity and Conservation Division (BCD) has considered your request and provides SEARs for the proposed development in **Attachments A** and **B**.

BCD recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Aboriginal cultural heritage
3. Water and soils
4. Flooding

If you have any questions about this advice, please do not hesitate to contact Michelle Howarth, Senior Conservation Planning Officer, via michelle.howarth@environment.nsw.gov.au or (02) 6883 5335.

Yours sincerely,

Samantha Wynn
Senior Team Leader Planning - North West
Biodiversity and Conservation Division

20 April 2020

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

Standard Environmental Assessment Requirements

OEH	Office of Environment and Heritage (now Biodiversity and Conservation Division)
BCD	Biodiversity and Conservation Division 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

Biodiversity

1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method, unless the Department determine that the proposed development is not likely to have any significant impacts on biodiversity values.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows;
   - The total number and classes of biodiversity credits required to be retired for the development/project;
   - The number and classes of like-for-like biodiversity credits proposed to be retired;
   - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
   - Any proposal to fund a biodiversity conservation action;
   - Any proposal to conduct ecological rehabilitation (if a mining project);
   - Any proposal to make a payment to the Biodiversity Conservation Fund.

   If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.

5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.
Aboriginal cultural heritage
6. The 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 the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010)*, and guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and consultation with BCD regional branch officers.
7. Consultation with Aboriginal people must be undertaken and documented in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW).* The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
8. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to BCD.
Water and soils
9. 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.
10. The EIS must describe background conditions for any water resource likely to be affected by the development, 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 http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
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*

11. The EIS must assess the impacts of the development on water quality, including:
    a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
    b. Identification of proposed monitoring of water quality.

12. The EIS must assess the impact of the development 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

13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 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

14. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.

15. The EIS must model the effect of the proposed development (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.

16. Modelling in the EIS must consider and document:
17. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
18. 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.
19. 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.
20. Relevant provisions of the NSW Floodplain Development Manual 2005.

21. The EIS must assess the impacts on the proposed development 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 river banks or watercourses.
    h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the 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/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2017)	https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298079/Biodiversity-Assessment-Method-May-2017.pdf
Biodiversity Development Assessment Report	https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298198/Serious-and-Irreversible-Impact-Guidance.PDF
Accreditation Scheme for Application of the Biodiversity Assessment Metho Order 2017	https://www.legislation.nsw.gov.au/regulations/2017-471.pdf
Biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf
The Department's Threatened Species Website	www.environment.nsw.gov.au/threatenedspecies/

Title	Web address
NSW BioNet (Atlas of NSW Wildlife)	www.bionet.nsw.gov.au/
NSW guide to surveying threatened plants (OEH 2016)	www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
The Department's threatened species survey and assessment guideline information	www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm
The Departments Data Portal (access to online spatial data)	http://data.environment.nsw.gov.au/
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/

Title	Web address
Acid Sulfate Soils Manual (Stone et al. 1998)	http://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	http://www.environment.nsw.gov.au/floodplains/manual.htm
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
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

OUT20/4989

5 May 2020

Ms Tatsiana Bandaruk
Senior Environmental Assessments Officer
Resource Assessments
Department of Planning, Industry and Development

tatsiana.bandaruk@planning.nsw.gov.au.

Dear Tatsiana

Stubbo Solar Development (SSD 10347) Recommendations for SEARs and Scoping Report Comments.

Thank you for the opportunity to provide comment on the above proposal as your email on 16 April 2020.

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.

This response is made as there is difficulties regarding access to the Major Projects Portal by the officer concerned.

The following recommendations area made in relation to the impact on agricultural land:

1. The site is made up of Sodosol soil type dominated lands, with a mapped land capability of Class 5. These soils require careful attention as they can be subject to surface sealing and erosion if managed poorly. The scoping report notes that further assessment will be undertaken to deal with earthworks and excavating activities to deal with soil erosion risks. The site also requires a full soil assessment especially with the erosion potential of the site, and the impacts on plant growth following construction is anticipated.
2. A closure strategy should also be included especially if a return to agricultural use is anticipated. This is where the baseline soil assessment will assist in returning land to a similar or improved land capability.
3. The SEARs recommendations in the attachment reinforce these issues NSW DPI Agriculture provides recommended SEARs (Attachment 1) and a range of guidelines

and resources (Attachment 2) to assist consent authorities, community and proponents in addressing the recommended SEARs.

Should you require clarification on the information contained in this response, please contact Mary Kovac, Agricultural Landuse Planning Officer on 68811250.

Yours sincerely

T Prentice.

Tamara Prentice
Manager
Agricultural Land Use Planning

Attachment 1: SEARs Recommendations

Issue and desired outcome	Detail / Requirement
Site Suitable for development	• Complete a Landuse Conflict Risk Assessment (LUCRA) to identify potential landuse conflict, in particular relating to separation distances and management practices to minimise odour, dust and noise from sensitive receptors. A LUCRA is described in the DPI Land Use Conflict Risk Assessment Guide.
Consideration for impacts to agricultural resources and land	• Demonstrate that all significant impacts on current and potential agricultural developments and resources can be reasonably avoided or adequately mitigated. • Consider possible cumulative effects to agricultural enterprises and landholders as well as costing the forgone production over the life of the project. • Outline strategies to manage impact of agricultural aerial spraying in the area. • Outline details of potential landuse sharing with agriculture, such as agrovoltaics or grazing.
Biosecurity Standards met	• Include a biosecurity (pests, weeds and disease) risk assessment outlining the likely plant, animal and community risks. • Develop a biosecurity response plan to deal with identified risks as well as contingency plans for any failures. Including monitoring and mitigation measures in weed, disease and pest management plans.
Suitable traffic movements	• Consideration of the route for movements needs to be taken into account so that impacts on sensitive receptors are minimised (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 met	• If any earthworks are proposed, an assessment of the overall footprint where the natural contours of the land will be modified, the total amount of material involved, how any stockpiled material will be managed and outline of how this material will or will not be used for rehabilitation purposes. • Any land with a cropping history or land with a capability of category 3 or better as per the land and soil capability assessment scheme: second approximation (OEH), all cables/pipes to be buried at a depth >500mm to allow greater opportunity for agricultural activities • Trenching through sodic soils during construction must include soil amendment with Gypsum at a minimum rate of 10t/ha with actual rates to be determined following soil testing (Clay content, ECEC and EC). This is to be detailed in a construction management plan. It will also be useful for final decommissioning activities. • A full soil survey to be undertaken prior to works commencing as a benchmark for rehabilitation.

	• If the site is to be returned back to agricultural use, develop a draft Rehabilitation and Decommissioning/Closure Management Plan that outlines the rehabilitation objectives and strategies to its pre-project status. This includes, but is not limited to describing the design criteria of the final landuse and landform, indicators to be used to guide the return of the land back to agricultural production, along with the expected timeline for the rehabilitation program.
Adequate consultation with community	• Establish a complaints register that includes reporting and investigating procedures and timelines, and liaison with Council in relation to complaint issues.

Department of Primary Industries

FE20/326 C20/206

20 April 2020
Tatsiana Bandaruk
Infrastructure Assessments/Planning & Assessments
Department of Planning, Industry and Environment

Dear Ms Bandaruk,

RE: *Stubbo Solar Farm (SSD-10452) (Mid-Western Regional)*

DPI Fisheries are responsible for ensuring that fish stocks are conserved and that there is "no net loss" of key fish habitats upon which they depend. To achieve this, the Department ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act respectively) and the associated *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013).*

The EA should specifically address impacts on the aquatic ecology and controls to be established for permanent access tracks, temporary access tracks or underground cabling in *Key Fish Habitats* (Third order streams or larger (Strahler Stream Order System)) such as Stubbo Creek and potential impacts on riparian vegetation and threatened species as per below;

AQUATIC ECOLOGICAL ASSESSMENT
The aquatic ecological environmental assessment should include the following information;

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

WATERWAY CROSSINGS
The construction of permanent or temporary access tracks or underground cables through *Key Fish Habitat* should be in accordance with DPI Fisheries Guideline document: *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013).* This is to ensure that the works are designed and constructed in accordance with best management practice and with minimal impact on the aquatic environment.

LOSS OF RIPARIAN VEGETATION

There is also the likelihood of a loss of riparian vegetation associated with the proposed solar area footprint, particularly alongside Stubbo Creek and associated tributaries. The *"degradation of native riparian vegetation"* has been listed as a Key Threatening Process under the provisions of the *Fisheries Management Act* 1994. DPI Fisheries policy advocates the use of terrestrial buffer zones as per the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)* available on the Department's website at http://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation in order to maintain the riparian buffer zone and limit disturbance and susceptibility to bed or bank erosion.

THREATENED SPECIES, POPULATIONS AND ECOLOGICAL COMMUNITIES – *FISHERIES MANAGEMENT ACT 1994*

The proposal should include a threatened aquatic species assessment (as per part 7A *Fisheries Management Act* 1994) to address whether there are likely to be any significant impacts on listed threatened species, populations or ecological communities listed under the *Fisheries Management Act 1994*. It should be specifically noted that the proposal is located within an area considered habitat of the threatened species Southern Purple Spotted Gudgeon (*Mogurnda adspersa*). This species is known or expected to occur within Stubbo Creek and a number of nearby creeks. Threatened fish species mapping distributions are available at: http://www.dpi.nsw.gov.au/fishing/species-protection/threatened-species-distributions-in-nsw

Should you require further clarification on the above issues, please contact me on (02) 6763 1255 or 0429 908 856.

D. Ward.

David Ward
Fisheries Manager (Tamworth)

OUT20/4336

Tatsiana Bandaruk
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

tatsiana.bandaruk@planning.nsw.gov.au

Dear Ms Bandaruk

Stubbo Solar Farm (SSD 10452)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 16 April 2020 to the Department of Planning, Industry and Environment (DPIE) – Lands, Water and Department of Primary Industries (DPI) about the above matter.

The following advice for you to consider is from DPIE Water and NRAR. Please note Crown Lands, the Department of Primary Industries (DPI) – Fisheries and DPI - Agriculture all now provide a separate response directly to you.

The SEARs should include:

DPIE – Water and Natural Resources Access Regulator

1. 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.* (http://www.water.nsw.gov.au/__data/assets/pdf_file/0004/547222/licensing_approvals_controlled_activities_riparian_corridors.pdf).
2. Details of water supply requirements and arrangements for the life of the project (both construction and operation);
3. An assessment of the likely impacts (including flooding) on surface water and groundwater resources* and measures proposed to monitor, reduce and mitigate these impacts;
4. A description of erosion and sediment control measures to mitigate any impacts in accordance with *Managing Urban Stormwater: Soils & Construction* (Landcom 2004);
5. The proponent documents and addresses any sedimentation issues, through the development of an Erosion and Sediment Control Plan, in consultation with DPIE Water.
6. 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 – NRAR & Water can be sent by email to: landuse.enquiries@dpi.nsw.gov.au.

Any further referrals to (a) Crown Lands; (b) DPI – Fisheries; and (c) DPI – Agriculture can be sent by email to: (a) lands.ministerials@industry.nsw.gov.au; (b) ahp.central@dpi.nsw.gov.au; and (c) landuse.ag@dpi.nsw.gov.au respectively.

Yours sincerely

Alistair Drew
Project Officer, Assessments
DPIE Water – Strategic Relations
30 April 2020

Our reference: SF20/32937; DOC20/320593
Contact : Ms Hannah Copeland; (02) 6333 3800

Tatsiana Bandaruk
A/Senior Environmental Assessment Officer
Department of Planning & Environment

Via email: tatsiana.bandaruk@planning.nsw.gov.au

27 April 2020

Dear Ms Bandaruk

REQUEST FOR INPUT INTO SEARS- STUBBO SOLAR FARM SSD-10452 – PAE - 2824

I refer to the request dated 16 April 2020 for the Environment Protection Authority (EPA) to provide Secretary Environmental Assessment Requirements (SEARs) for the proposed Stubbo Solar Farm (SSD-10452) (the Proposal).

Based on the information provided, an Environment Protection Licence with the EPA under the *Protection of the Environment Operations Act 1997* (POEO Act) is not required as the Proposal does not consititute a "Scheduled" activity under the POEO Act. As the Proposal is not a scheduled activity and is not being conducted by a public authority, Mid-Western Regional Council will be the Appropriate Regulatory Authority (ARA) under the POEO Act, should development consent be granted.

Nevertheless, the EPA has considered the Proposal's Preliminary Environmental Assessment (PEA). The EPA recommends the SEARs require the Environmental Assessment to include the following:

- Measures to minimise dust emissions from the project site as well as along access roads leading to the site during construction.
- Measures for appropriate storage (bunding) of chemicals and fuels to reduce risks of spills contaminating waterways and land both during and after construction.
- Measures to minimise noise and vibration during the contrsuction and operation phase which will include compliance with standard working hours, machinery operations hours and noise mitigation measures
- Measures for the appropriate storage of batteries in line with manufacturer instructions and presence of appropriate signage.
- The consideration of waste management and resource recovery with particular respect to the waste generated during construction.
- Measures to protect surface waters during and after construction for sediment and erosion controls in accordance with EPA endorsed publication "Managing Urban Stormwater- Soils and Cosntruction" Landcom 4th Edition March 2004.

If you have any questions regarding this matter, please contact Ms Hannah Copeland at the Central West (Bathurst) Office of the EPA on (02) 6333 3800 or via e-mail at central.west@epa.nsw.gov.au

Yours sincerely

SHERIDAN LEDGER
Unit Head Central West Region
Environment Protection Authority

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www.epa.nsw.gov.au

NSW GOVERNMENT

Our ref: DOC20/299919

Tatsiana Bandaruk
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

By email: tatsiana.bandaruk@planning.nsw.gov.au

Dear Ms Bandaruk,

Request for Secretary's Environmental Assessment Requirements (SEARs) for the Stubbo Solar Farm (SSD 10452)

Thank you for your referral dated 16 April 2020 inviting SEARs input from the Heritage Council of NSW on the above State Significant Development (SSD) proposal.

The proposed SSD site is not in the vicinity of any State Heritage Register item. The scoping report by RPS dated 7 April 2020 has been reviewed for the current advice. The RPS report identifies two SHR listed items in a 10 km radius around the study area, however states that the archaeological potential of the study area is 'largely unknown'. It is therefore recommended that the draft heritage SEARs are amended and the following additional SEARS are included:

Heritage and archaeology
a) A Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on the heritage significance of the site and adjacent areas and is to identify the following:

- all heritage items (state and local) within the vicinity of the site including built heritage, landscapes and archaeology, detailed mapping of these items, and assessment of why the items and site(s) are of heritage significance;
- compliance with the relevant Conservation Management Plan;
- the impacts of the proposal on heritage item(s) including visual impacts, required BCA and DDA works, new fixtures, fittings and finishes, any modified services;
- the attempts to avoid and/or mitigate the impact on the heritage significance or cultural heritage values of the site and the surrounding heritage items; and
- justification for any changes to the heritage fabric or landscape elements including any options analysis.

Historical archaeology
b) If the SOHI identifies impact on potential historical archaeology, an historical archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the guidelines *Archaeological Assessment* (1996) and *Assessing Significance for Historical Archaeological Sites and Relics* (2009). This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate

Research Design and Excavation Methodology should also be prepared to guide any proposed excavations or salvage program.

If you have any questions regarding the above advice, please contact Dr Dragomir Garbov, Senior Maritime Archaeology Officer at Heritage NSW on (02) 8275 1948 or Dragomir.Garbov@environment.nsw.gov.au.

Yours sincerely,

27/04/2020

Dr Siobhan Lavelle OAM
Senior Team Leader, Specialist Services
Heritage NSW
Department of Premier and Cabinet
As Delegate of the Heritage Council of NSW

Regional NSW

Tatsiana Bandaruk

Senior Environmental Assessment Officer

Social and Infrastructure Assessments

Dept of Planning, Industry and Environment

4 Parramatta Square

Parramatta NSW 2150

Our ref: DOC20/322059

Your ref: SSD-10452

Emailed: via planning portal

29 April 2020

Dear Tatsiana

Subject: Stubbo Solar Farm (SSD-10452) – Request for Secretary's Environmental Assessment Requirements (SEARs).

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).

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

MEG has identified Coal Authorisation (AUTH) 286 – held by the Secretary of NSW Department of Planning Industry and Environment and Petroleum Exploration Licence (PEL) 456 held by Hunter Gas Pty Ltd, overlapping the project site.

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

- The Environmental Impact Statement (EIS) must include a dated mineral, coal and petroleum titles and applications search through the MEG MinView application, with results shown on a map(s) including the location and extent of the project site and any electricity transmission infrastructure and transmission lines. Current mining and exploration titles and applications can be viewed at: http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/geoscienceinformation/services/online-services/minview.

- The proponent must consult with Hunter Gas Pty Ltd. This should include a letter of notification of the proposal to the title holder including a map indicating the solar farm proposal area (including associated electricity transmission infrastructure) in relation to the exploration title boundaries.

- The Department considers consultation to have occurred on this occasion regarding AUTH286 and additionally advises that we have no resource sterilisation concerns to raise regarding the portion of AUTH286 overlapping with the subject site.

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

- The Division requests 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 MEG - Land Use team at landuse.minerals@geoscience.nsw.gov.au.

Yours sincerely,

Steven Palmer

Manager, Land Use Assessment

Geological Survey of NSW – Mining, Exploration and Geoscience.

27 April 2020

WST20/00116/01

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

Attn: Tatsiana Bandaruk

Dear Ms Bandaruk

SSD-10452: Request for input into Secretary Environmental Assessment Requirements Stubbo Solar Farm

Thank you for the request for input into Secretary Environmental Assessment Requirements for Stubbo Solar Farm referred via the Major Projects Portal dated 16 April 2020.

Transport for NSW (TfNSW) has reviewed the documentation provided in the scoping material and understands the proposed development will be a grid-connected photovoltaic (PV) solar farm of up to 400 megawatts (MW) capacity with a study area of 1,485 hectares. The proposal will connect to the 330kV Wellington to Wollar transmission line that traverses through the southern section of the site. Access is proposed via Barneys Reef, Blue Springs, and Merotherie Roads which intersect with Cope Road (MR598) and Castlereagh Highway (HW18). Approximately 400 employees will be employed during peak construction and 10 employees during the operation and maintenance phase.

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

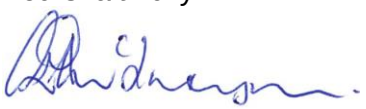
- Project schedule:
  - Hours and days of work, number of shifts and start and end times.
  - Project phases and stages, including construction, operation and decommissioning.
- Traffic volumes:
  - Existing background traffic.
  - Project related traffic for each phase or stage of the project.
  - Projected cumulative traffic at commencement of operation and a 10 year horizon.
- 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.

Transport for NSW
51-55 Currajong Street PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 DX20256
P 6861 1449 | **W** development.western@rms.nsw.gov.au | ABN 18 804 239 602

- 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, pool vehicles and buses.
  - Heavy (haulage) vehicles.
  - Over size and over mass vehicles.
- Road safety assessment of key haulage route/s.
- Assessment of the cumulative impacts on the road network from other construction projects and operation of nearby coal mines, solar and wind farms.
- Impact of traffic generation on public roads and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning.
- The need for improvements to the road network, including road widening and intersection treatments, to cater for and mitigate the impact of project related traffic. Road facilities, accesses and intersection treatments are to 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).
- Identification and assessment of impacts of the project, such as blasting, lighting, visual, noise, dust and drainage on the function and integrity of affected public roads.
- Controls for transport and use of dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, *Australian Dangerous Goods Code* and *Australian Standard 4452 Storage and Handling of Toxic Substances.*
- A Traffic Management Plan (TMP) developed in consultation with relevant Councils and TfNSW. The TMP is to identify strategies to manage the impacts of project related traffic, including any community consultation measures for peak haulage periods.
- A Driver Code of Conduct for haulage operations including, but not be limited to:
  - Safety initiatives for haulage through residential areas and/or school zones.
  - An induction process for vehicle operators and regular toolbox meetings.
  - A public complaint resolution and disciplinary procedure.

Please forward a copy of the SEARs to TfNSW at the same time they are sent to the applicant. If you wish to discuss this matter further, please contact Ainsley Bruem, A/Manager Land Use on (02) 6861 1449.

Yours faithfully



Andrew McIntyre
Manager Land Use Assessment
Western Region
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Tatsiana Bandaruk

From: Brendan.M Hurley <Brendan.M.Hurley@fire.nsw.gov.au>
Sent: Wednesday, 6 May 2020 10:45 AM
To: Tatsiana Bandaruk
Cc: Fire Safety
Subject: Stubbo Solar (SSD-10452) - Request for advice on SEARs. BFS20/1329

Stubbo Solar (SSD-10452) - Request for advice on SEARs

Dear Tatsiana,

I refer to the submission of the request for agency input into the SEARs, dated 30th April 2020, for the above development to Fire & Rescue NSW (FRNSW). The relevant parts of the proponent's Scoping Report and Draft SEARs have been reviewed and the following comments are submitted for consideration.

Large scale solar farm developments are usually located within NSW Rural Fire Services' (RFS) fire districts. Notwithstanding, in the event of either a significant fire event or hazardous material incident (hazmat), FRNSW will be responded to either assist the RFS or to fulfill the role of the designated hazmat combat agency.

It is FRNSW experience that large-scale photovoltaic installations and associated battery energy storage solutions (BESS) present unique hazards and risks to our personnel when fulfilling their emergency duties. It is highlighted that the Fire and Rescue NSW Act 1989 (the Act) imposes specific statutory functions and duties upon the Commissioner of FRNSW. Clause 5A of the Act requires the Commissioner to take all practicable measures for preventing and extinguishing fires and protecting and saving life and property within a FRNSW fire district. Clause 5A of the Act also requires the Commissioner to protect and save life and property endangered by hazmat incidents and for confining a hazmat incident and for rendering the hazmat site safe.

In addition, the Work Health and Safety (WHS) Act 2011 (and its subordinate Regulation) classify FRNSW as a person (entity) conducting a business or undertaking (PCBU). Clauses 34 and 35 of the WHS Regulation impose specific obligations upon a PCBU to identify hazards and manage risks at workplaces. A site involved in fire or hazmat incident is deemed to be a FRNSW place of work.

Due to the electrical and fire 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.

In the event of a fire or hazardous material incident, it is important that first responders have ready access to information which enables effective hazard control measures to be quickly implemented. Without limiting the scope of the emergency response plan (ERP) requirements of Clause 43 of the Work Health and Safety Regulation 2011 (the Regulation), the following matters are recommended to be addressed:

1. That a comprehensive ERP is developed for the site.

2. That the ERP specifically addresses foreseeable on-site and off-site fire events and other emergency incidents (such as fires involving solar panel arrays, battery energy storage systems, bushfires in the immediate vicinity) or potential hazmat incidents.

3. That the ERP details the appropriate risk control measures that would need to be implemented to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards).

   Such measures will include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures to be instigated, minimum evacuation zone

distances and a safe method of shutting down and isolating the photovoltaic system (either in its entirety or partially, as determined by risk assessment).

4. Other risk control measures that may need to be implemented in a fire emergency (due to any unique hazards specific to the site) should also be included in the ERP.

5. That two copies of the ERP (detailed in recommendation 1 above) be stored in a prominent 'Emergency Information Cabinet' located in a position directly adjacent to the site's main entry point/s.

6. Once constructed and prior to operation, that the operator of the facility contacts the relevant local emergency management committee (LEMC). The LEMC is a committee established by Section 28 of the State Emergency and Rescue Management Act 1989. LEMCs are required to be established so that emergency services organisations and other government and non-government agencies can proactively develop comprehensive inter agency local emergency procedures for significant hazardous sites within their local government area. The contact details of members of the LEMC can be obtained from the relevant local council.

7. As a Condition of Consent that a Fire Safety Study (FSS) be prepared for the BESS part of the site and submitted to FRNSW for review and determination. The FSS should be developed in consultation with and to the satisfaction of FRNSW.

For further information please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS20/1329. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards
Brendan

A/INSPECTOR BRENDAN HURLEY
TEAM LEADER INFRASTRUCTURE LIAISON
FIRE SAFETY | Fire and Rescue NSW
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