

29 August 2018

Meghna D'souza Resource and Energy Assessments – Planning Services Department of Planning & Environment GPO BOX 39 SYDNEY NSW 2001

> Your Ref: SSD9031 Our Ref: DOC18/552528

Emailed: meghna.dsouza@planning.nsw.gov.au

Dear Ms D'souza,

## Re: Avonlie Solar Farm (SSD9031) – Environmental Impact Statement

Thank you for the opportunity to provide advice on the Environmental Impact Statement (EIS) for the Avonlie Solar Farm (SSD9031). This is a response from the Department of Planning & Environment – Division of Resources & Geoscience (DRG).

DRG specific requirements for the Avonlie Solar Farm (SSD9031) required the proponent to include in the EIS a mining and exploration title and application search referencing the Divisions MinView application, with results shown on a map. Further, Wright's Pit was to be identified on a map in relation to the Project area, and text to address any land use compatibility consideration. DRG also required the proponent to consult with the Division in relation to any biodiversity offset measures.

The proponent has addressed mining and exploration licences and applications in the EIS, and has reviewed the Division's MinView application, identifying that there are no mining, or exploration titles or application indicated over or in the vicinity of the Project site with results shown on a map. The location of Wright's Pit in relation to the proposal site is illustrated and supported by text (Refer to pages 14-115 of EIS).

DRG note the reduction in the Project boundary since the Preliminary Environmental Assessment (PEA), with Wright's Pit now located approximately 4.9 kilometres (km) east of the Project boundary.

An assessment by the Division of current available data confirms that at this stage of the Project, there are no current mineral, coal or petroleum titles or applications, or extractive industries in the vicinity of the project site. Accordingly, DRG are satisfied the proponent has addressed these specific requirements.

DRG also notes that the proposal has generated biodiversity credits which the proponent intends to retire in accordance with the *Biodiversity Conservation Act* 2016 (Refer to page *xxi* of EIS, page 98 of BDAR).



Queries regarding the above information, should be directed to the DRG GSNSW Land Use team at <a href="mailto:landuse.minerals@geoscience.nsw.gov.au">landuse.minerals@geoscience.nsw.gov.au</a>.

Yours sincerely

Preside Cilar

Cressida Gilmore Manager – Land Use

for Paul Dale

Director – Land Use & Titles Advice



File Ref. No:

BFS18/2158 (4345)

TRIM Doc. No: D18/61495

Contact:

Station Officer Mark Castelli

29 August 2018

The Department of Planning & Environment C/- Meghna D'souza GPO Box 39 SYDNEY NSW 2001

E. meghna.dsouza@planning.nsw.gov.au

Dear Meghna D'souza,

**Environmental Impact Statement (EIS) Avonlie Solar Farm Project (SSD 9031)** 

I refer to the above development proposal and the Department of Planning & Environment's (the Department) invitation for agencies to provide advice in relation to the subject development's EIS. Fire & Rescue NSW (FRNSW) have reviewed Section 7.7 (Hazards) of the proponent's EIS.

With regard to Section 7.7.2 of the EIS (Fire) FRNSW reiterate our emergency planning recommendations that were submitted to the Department on the 29 January 2018 in response to the Secretary's Environmental Assessment Requirements (SEARs).

For further information please contact Infrastructure Liaison Unit, referencing FRNSW file number BFS18/2158. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely

A/Superintendent John Hawes

A/Manager

Fire Safety Command Liaison Unit

<b>ABN</b> 12 593 473 110	www.fire.nsw.gov.au
Locked Bag 12,	T (02) 9742 7434
Greenacre NSW 2190	F (02) 9742 7483
	Locked Bag 12,





Local Land Services Sustainable Land Management

> 8 Bolton Street NARRANDERA NSW 2700 Tel: 02 6958 1804

www.lls.nsw.gov.au/region

20 August 2018

Meghna D'souza Planning Officer Resource and Energy Assessments Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Dear Meghna

Re: Avonlie Solar Farm (SSD 9031)

I write in response to your department's recent request to review and provide comment on the Avonlie Solar Farm (SSD 9031), located on Mitchells Road, Sandigo, in the Narrandera Shire Council local government area.

Local Land Services provides consideration to, and comment in respect of, the zone of the land and native vegetation clearing. For our agency's purpose, the land is considered to be regulated land subject to authorisation for removal of native vegetation under the *Local Land Services Act 2013*.

The Environmental Impact Statement (EIS) includes the below, as noted:

- The land proposed for SSD 9031 is freehold and zone RU1 primary production.
- The development proposed is deemed State Significant Development, a major project for NSW.
- I have reviewed the EIS with particular regard to clearing/removal of native vegetation.
- Vegetation is to be offset, consistent with a Biodiversity Offset Strategy included in the BAR.

Local Land Services note that the key biodiversity issues of concern have been considered in the EIS.

Clearing provisions under the Local Land Services Act 2013, section 600 states:

For the purposes of this Part, the clearing of native vegetation in a regulated rural area is **authorised under other legislation** in any of the following cases:

(a) The clearing was authorised by:



- (i) a development consent under **Part 4** of the *Environmental Planning and Assessment Act 1979*, or
- (ii) a State significant infrastructure approval under Part 5.1 of that Act

The Avonlie Solar Farm proposal, including vegetation clearing, is being assessed under **Part 4** of the EP&A Act. The potential impacts on native vegetation are discussed in section 7.1 of the report.

Accordingly, as the EIS gives consideration for such clearing, LLS does not provide any additional consent as an agency.

In summary, the EIS completely addresses matters with respect to vegetation clearing, offsetting and biodiversity requirements and authorises activities via the Planning legislation pathway.

Local Land Services has no further comment in respect to matters under Part 5 of the *Local Land Services Act 2013.* 

Kind regards,

Nicole Robinson



Your reference: Our reference: Contact:

SSD 9031 DOC18-537996 Simon Stirrat Ph 03 50516218

Date: 29 August 2018

Meghna D'souza Resource and Energy Assessments, Planning Services Department of Planning & Environment GPO Box 39 SYDNEY NSW 2001

Via email: meghnad.dsouza@planning.nsw.gov.au

Dear Ms D'souza

## RE: Avonlie Solar Farm (SSD 9031) - Exhibition of Environmental Impact Statement

I refer to your email dated 31 July 2018 seeking comment from the Office and Environment and Heritage (OEH) about the Environmental Impact Statement (EIS) for the Avonlie Solar Farm located in the Narrandera local government area.

We have reviewed the exhibited EIS against the Secretary's Environmental Assessment Requirements (SEARs) provided by the Department of Planning and Environment (DPE) to the proponent on 9 February 2018. A summary of our assessment, advice and recommended conditions of approval is provided in Attachment A. Detailed comments are in Attachment B.

We consider that the EIS addresses flooding issues and largely meets the Secretary's requirements for biodiversity and Aboriginal cultural heritage assessment (ACH). Before we can endorse the ACH and biodiversity components of the EIS the proponent should address the issues contained in Attachment A.

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

If you have any questions regarding this matter, please contact Simon Stirrat on (03) 5051 6218 or email simon.stirrat@environment.nsw.gov.au.

Yours sincerely

**ANDREW FISHER** Senior Team Leader Planning **South West Branch Conservation and Regional Delivery** Office of Environment & Heritage

ATTACHMENT A - OEH Assessment Summary for Avonlie Solar Farm Environmental Impact Statement (SSD 9031) ATTACHMENT B - Detailed comments for Avonlie Solar Farm Environmental Impact Statement (SSD 9031)

# ATTACHMENT A OEH Assessment Summary for Avonlie Solar Farm Environmental Impact Statement (SSD 9031)

## Key Issues

1	Issue	Preparation and submission of site cards to AHIMS is required for all Aboriginal sites identified.
		Recommended action:
		On the discovery of Aboriginal objects, OEH must be notified under Section 89A of the NPW Act 1974.
	Extent and Timing	Pre-determination
	1.	
2	Issue	Timing of salvage of Aboriginal objects
	Extent and Timing	May only occur post project determination for State Significant Development (see comments in Attachment B)
	T	
3	Issue	An Aboriginal Site Impact Recording Form must be completed and submitted to AHIMS following harm for each site harmed or destroyed from salvage and construction works.
	Extent and Timing	Post-determination
4	Issue	Artefact collection and storage must be done either under a Care Agreement, deposited with the Australian Museum or in accordance with Requirement 26 of the Code of Practice.
	Extent and Timing	Post-determination. Consultation should also occur with RAPs regarding the proposed approach prior to project determination and the approach preferably resolved prior to project determination and documented in the final ACHAR.
	T	
5	Issue	It is not clear in the BDAR why certain threatened species (Glossy Black-Cockatoo and Swift Parrot) were excluded from the BAM calculations.
		Recommended action:
		Explain the reasoning behind decisions to include/exclude species credit species from the BAM analysis.
	Extent and Timing	Pre-determination
6	Issue	Two threatened orchids, Oaklands Diuris and Sandhill Spider Orchid have been identified as potential serious and irreversible impact (SAII) entities that may occur on the site. These species were not surveyed at the correct time. OEH recommends that the presence of SAII entities be resolved prior to approval.
		Recommended action:
		Surveys for the Oaklands Diuris and Sandhill Spider Orchid be completed in Spring.
	Extent and Timing	Pre-determination
	1	

7	Issue	The final biodiversity credit report has not been provided with the BDAR.
		Recommended action:
		The BDAR needs to include a final biodiversity credit report generated by the BAM calculator.
	Extent and Timing	Pre-determination

## **OEH Advice**

1.1 Is the 'baseline' for impact assessment reasonable?

Yes

The baseline impact assessment has in most cases been completed to the requirements of OEH.

- 1.2 Are predictions of impact robust (and conservative) with suitable Yes sensitivity testing?
- 1.3 Has the assessment considered how to avoid and minimise impacts? Yes
- 1.4 Does the proposal include all reasonably feasible mitigation options? Yes

Various mitigation options were considered for the management of ACH in the ACHAR and for biodiversity in the BDAR and EIS.

2. Is the assessed impact acceptable within OEH's policy context?

Once the proponent has addressed OEH comments, the assessment will be acceptable.

3. Confirmation of statements of fact

Minor clarification is required for both ACH and biodiversity.

4. Elements of the project design that could be improved

Selection of a site that did not require the removal of large paddock trees would have reduced the biodiversity impact of the development.

## ATTACHMENT B Detailed comments for Avonlie Solar Farm Environmental Impact Statement (SSD 9031)

## **Biodiversity**

Overall the Biodiversity Development Assessment Report (BDAR) presents the information required in the SEARs and the credit requirement generated from the assessment is appropriate based on the values described at the site.

#### **Offsets**

The BDAR concludes with a summary of biodiversity credits applicable to the development. The EIS (Executive Summary) states that these credits will be retired in accordance with the NSW Biodiversity Offsets Scheme.

The completion of the BAM calculation is the production of a Biodiversity Credit Report showing credit classes for ecosystem credits and species credits at the development site. This report needs to be provided as part of the BDAR.

## Threatened species assessed

Sections 4.1 through to Section 7 of the Biodiversity Development Assessment Report (BDAR) provide an explanation of why certain species that are predicted to occur by the BAM calculator were excluded from the analysis, based on various criteria including habitat suitability and geographic limitations. This is a legitimate process in the BDAR.

However, there is no clear reason why the Glossy Black-Cockatoo was excluded from analysis after the initial (Table 4.2) inclusion for assessment based on habitat being present on site. Similarly, the Swift Parrot was identified initially and was excluded from the BAM calculator based on habitat assessment. But it was included in the EPBC Act (test of significance) assessment based on the same criterion of habitat suitability.

To finalise the BDAR and offset calculations the proponent should explain why these species were excluded from BAM calculations.

Two threatened orchids, Oaklands Diuris and Sandhill Spider Orchid were identified as potential serious and irreversible impact (SAII) entities that may occur on the site. These species were not surveyed at the correct time and have been assumed to be present on site for the purposes of the BAM calculator. We consider that the surveys for these SAII species should occur prior to approval for this development and the conditions being issued. The statement in the BDAR (page 88) that 'if these species are detected a further assessment would be undertaken and any subsequent requirements implemented before work commenced' is vague. OEH recommends that the presence of SAII entities be resolved prior to approval.

#### **Data quality**

Electronic information was provided to OEH as requested to allow an assessment of the BDAR.

However, while the scanned data sheets were on the whole reasonably clear some were not easy to follow in order to check the BAM calculator outputs. In addition, the attribution of the shapefile mapping vegetation types in the project area is not exactly the same as the nomenclature used in the field data sheets. The consultant should provide clearer information when third parties are involved in data validation.

All the information provided as BAM documentation should be clearly marked, unambiguous and of sufficiently quality that a third party can readily repeat the analysis to get the same results, or to detect errors.

## Revegetation

The EIS refers to revegetation in the context of soil stabilisation and productive use of the solar array land area. Landscape plantings should be with locally occurring native species. DPE's standard conditions of consent for solar farms include a requirement for planting with local species.

#### Mitigation

Table 8.1 (row 1) refers to clearing outside optimum windows requiring pre-clearing surveys to ensure no impacts on fauna. Surveys, or tree inspection, should be conducted prior to clearing regardless of timing as indicated in row 3 of the table.

## **Conditions of approval**

EIS Section 6.2.7 Safeguards and mitigation measures provides tabulated commitments to mitigation measures for the project. These commitments should be included as conditions of approval. This could potentially be limited to four conditions relating to the preparation of the following plans to be approved by relevant authorities:

- Biodiversity Management Plan
- Construction Environmental Management Plan
- Weed Management Plan
- Erosion and Sediment Control Plan.

The conditions can stipulate that the plans should include, but not be limited to, the relevant commitments from Table 6.10. In addition, these plans should include adaptive management strategies to monitor and respond to impacts on biodiversity values (see section 8.1 of the EIS).

## **Flooding**

The EIS does address the Secretary's requirements for flooding.

OEH accepts that this development site represents a low flood risk due to being located away from any major drainage path, only being subject to local overland flow type flooding. As such the abbreviated flood assessment presented is justified and sufficiently demonstrates the flood impacts due to this development are expected to be minor.

#### Aboriginal cultural heritage

The basement impact assessment for Aboriginal cultural heritage has in most cases been completed to the requirements of OEH.

The SEARs requirement for impacts on Aboriginal cultural heritage values to be assessed and documented in the ACHAR is done apart from some isolated artefacts that have not had site cards submitted to AHIMS (see detailed comments below).

There was also a requirement that the ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project. This was not done but there is a commitment to do this in the AHMP.

## Feasible mitigation options

Recommendation 7 in ACHAR (NGH 2018:55) states: RES Australia Pty Ltd should prepare a Cultural Heritage Management Plan (CHMP) to address the potential for finding Aboriginal artefacts during the construction of the Solar Farm and management of known sites. The Plan should include an unexpected finds procedure to deal with construction activity. Preparation of the CHMP should be undertaken in consultation with the registered Aboriginal parties.

According to the OEH correspondence in the SEARs, the unexpected finds protocol is to be developed in the assessment stage and not post determination.

The timing of developing the unexpected finds protocol is a requirement of the SEARs, and will not impact the timing of determination. There is a commitment in the EIS and ACHAR that the unexpected finds protocol will be developed in an AHMP. There is some benefit for a stand-alone succinct CHMP and unexpected find protocol for ease of use by construction staff and other contractors that could be used in project inductions.

#### Statements of fact

In the ACHAR Section 8 Legislation Context it is stated that: "Proposals classified as State Significant Development or State Significant Infrastructure under the EP&A Act have a different assessment regime. As part of this process, Section 90 harm provisions under the NPW Act are not required, that is, an AHIP is not required to impact Aboriginal objects" (NGH, 2018:54). This statement should be clarified and state that for State Significant Development that is authorised by a development consent, an AHIP under section 90 of the NPW Act is not required (refer to Division 4.7 Section 4.41 of the EP&A Act 1979).

When the proponent has reviewed OEH comments and responded to the satisfaction of OEH, the assessment for Aboriginal cultural heritage will be acceptable.

#### **Detailed comments**

Comment on EIS section 6.3 (page 96) in the OEH requirements, also to include:

The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the [development/project] to formulate appropriate measures to manage unforeseen impacts.

Note there is a commitment in AH7 that an unexpected finds protocol will be prepared before construction (EIS, 2018:101).

Comments on Table 6-11 in EIS and in parts of table in Section 8.2 of EIS:

- AH2 in the 'C' column it currently reads prior to construction, this should read 'Post determination and prior to construction'
- AH4 in the 'C' column this currently reads design stage. Aboriginal objects or sites cannot be salvaged until approval is issued for SSD projects under the EP&A Act. This should be changed to 'Post determination and prior to construction'
- AH5 add to safeguard and mitigation measures, an Aboriginal Site Impact Recording
  Form will be completed and submitted to AHIMS for each site harmed or destroyed from
  salvage and construction works. Artefact disposition and storage must be done either under
  a care agreement, deposited with the Australian Museum or in accordance with
  Requirement 26 of the Code of Practice (DECCW 2010:35-6). Consultation should occur
  with RAPs regarding the proposed approach prior to project determination and the
  approach preferably resolved prior to project determination and documented in the final
  ACHAR.
- AH6 in the 'C' column it currently reads prior to construction, this should read 'Post determination and prior to construction'

Conclusion states "Aboriginal heritage impacts – the Aboriginal Heritage survey and assessment found that no impact to Aboriginal cultural heritage would occur from the proposal after update of design". This statement is inconsistent with section 6.3 of the EIS and the ACHAR.

Comments on Appendix E: 2018. NGH Environmental Pty Ltd 'Aboriginal Cultural Heritage Assessment Avonlie Solar Farm- Draft'

The date on the front cover and second page says date of report is May 2017, on page 3 and 4 it says the date is May 2018. This should be reconciled.

Comments on the recommendations in the Executive Summary (page viii) and in Section 9 (pages 54-55) of the ACHAR:

- Recommendation 4 salvage can only occur post project determination and prior to construction.
- Recommendation 5 an Aboriginal Site Impact Recording Form must also be completed and submitted to AHIMS for each site harmed or destroyed from salvage and construction works. Artefact disposition and storage must be done either under a care agreement, deposited with the Australian Museum or in accordance with Requirement 26 of the Code of Practice (DECCW 2010:35-6).

 Recommendation 6 – collection of Aboriginal objects may only occur post project determination.

In section 2 of the ACHAR it says for Stage 4 of the consultation "A minimum of 28 days was allowed for responses to the document" (NGH, 2018:8). Any responses from RAPs on the draft ACHAR should be detailed here, including how the proponent responds to any issues raised. If no responses were received from the RAPs on the draft ACHAR this should be stated here.

Table 6 (NGH, 2018:33-36) and table 8 (2018:46-50) in the ACHAR has some sites listed with AHIMS numbers and many without (under AHIMS for the isolated finds it is listed as N/A). All Aboriginal objects must be notified to OEH under Section 89A of the NPW Act. As stated in the ACHAR this is achieved through the preparation of site cards and submission to AHIMS. We note that registration of news sites on AHIMS was relayed in previous correspondence from OEH in a letter dated 18 April 2018 regarding this project. The proponent is requested to ensure and confirm that all Aboriginal sites have been registered on AHIMS. Tables 6 and 8 of the ACHAR are then to be updated with the AHIMS IDs.

In Table 8 it says Avonlie Artefact Scatter 3 (AAS3) and Avonlie Artefact Scatter 4 (AAS4) will be directly impacted and salvaged (NGH, 2018:45-46). Elsewhere in the report including executive summary, recommendations, in information relayed to RAPs regarding management and text below the table on page 50 it states these sites have been excluded from the development footprint, thereby removing them from harm. Table 8 requires updating that the sites will be avoided by harm. If there has been a change and sites AAS3 and AAS4 are now proposed to be harmed, additional consultation will need to occur with RAPs regarding proposed management and OEH provided with an opportunity to review and comment.

Section 7.2 page 53 of the ACHAR states: "The artefacts should be collected and moved to a safe area within the property that will not be subject to any ground disturbance." OEH note artefact disposition and storage must be done either under a care agreement, deposited with the Australian Museum or in accordance with Requirement 26 of the Code of Practice (DECCW 2010:35-6). The ACHAR is to be updated to reflect one or more of these options, pending discussions with the RAPs.

Section 8 Legislation Context states: "Proposals classified as State Significant Development or State Significant Infrastructure under the EP&A Act have a different assessment regime. As part of this process, Section 90 harm provisions under the NPW Act are not required, that is, an AHIP is not required to impact Aboriginal objects" (NGH, 2018:54). This statement should be clarified that for State significant development that is authorised by a development consent an AHIP under section 90 of the NPW Act is not required (refer to Division 4.7 Section 4.41 of the EP&A Act 1979).

## **Historic heritage**

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





The Secretary
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Your reference:

SSD 9031

Our reference: D18/298

DA18080214335 BB

Attention: Meghna D'souza

14 August y 2018

Dear Sir/Madam,

Part 3A - State Significant Development Application - Avonlie Solar Farm - Lots 1 and 2 DP 606800, and Lots 13, 22, 26, 30, 43, 53 DP 754538

I refer to your letter dated 1 August 2018 seeking comment in relation to bush fire protection for the above proposal in accordance with section 75F (4) of the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has reviewed the environmental assessment and the following conditions are recommended:

- 1. A Fire Management Plan (FMP) shall be prepared for the proposed facility in consultation with the local NSW RFS District Office. The FMP shall include:
  - 24 hour emergency contact details including alternative telephone contact;
  - Site infrastructure plan;
  - Fire fighting water supply plan;
  - Site access and internal road plan;
  - Construction of asset protection zones and their continued maintenance;
  - Location of hazards (physical, chemical and electrical) that will impact on the fire fighting operations and procedures to manage identified hazards during the fire fighting operations; and
  - Such additional matters as required by the NSW RFS District Office.
- 2. The entire solar array development footprint shall be managed as an asset protection zone as outlined within section 4.1.3 of *Planning for Bush Fire Protection, 2006* and the NSW RFS document *Standards for asset protection zones*.
- 3. A 10 metre defendable space, managed as an asset protection zone, shall be provided around the perimeter of the solar array development site and any proposed building to allow for emergency service personnel to undertake property protection activities.

Postal address

NSW Rural Fire Service Planning and Environment Services Locked Bag 17 GRANVILLE NSW 2141 T 1300 NSW RFS
F (02) 8741 5433
E records@rfs.nsw.gov.au
www.rfs.nsw.gov.au



4. A minimum 20,000 litre water supply (tank) fitted with a 65mm Storz fitting shall be located adjoining the internal property access road within the required asset protection zone.

If you have any queries regarding this advice, please contact Bradley Bourke, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

Martha Dotter

Acting Team Leader, Development Assessment and Planning

Planning and Environment Services (South)



29 August 2018

SWT18/00007 SF2018/022326 MM

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

Attention: Meghna D'souza

SSD-9031 - EXHIBITION - PROPOSED SOLAR FARM - AVONLIE, LOT 5 DP133396, LOTS 1 & 2 DP606800, LOT 1 DP100042 & LOTS 13, 22, 26, 30, 40, 43, 53 DP75438, MUNTZ ROAD, NARRANDERA.

I refer to your correspondence regarding the subject Application which was referred to the Roads and Maritime Services for assessment and comment.

Roads and Maritime Services has reviewed the Environmental Impact Statement (EIS) dated February 2018 prepared by NGH Environmental and the Traffic Access Assessment (TAA) prepared by Traffic Design Group Ltd (TDG) for the Avonlie Solar Farm project. From the information provided it is understood that the proposal is for the establishment and operation of a 200 MW solar photovoltaic (PV) plant and associated infrastructure on the subject site.

The subject site is located to the south of Narrandera and west of Galore to the south of the Sturt Highway. Access to the development site is proposed to be gained from Sandigo Road and Muntz Road which are classed as local roads within a 100 km/h speed zone. Access to the site particularly for the delivery of components will rely on access via the Sturt Highway. The Sturt Highway is a classified road.

. From the information provided it is understood that delivery of components to the site will rely on access from the Sturt Highway via its intersection with Sandigo Road. Vehicular access in to the development site is proposed from Muntz Road which is a local road therefore any access driveway should be consistent with the requirements of Council. The submitted TAA refers to, and demonstrates turn paths for, semi-trailers to 19 metres in length for the transport of components to the development site. Both the Sturt Highway and Sandigo Road are approved B-Double routes.

It is understood that the construction period will be approximately 15-18 months. Due to the characteristics of such a development the significant proportion of traffic generation (for both light and heavy vehicles) occurs during the construction stage of the development with the operational phase generating limited traffic. The submitted documentation considers the heavy and light vehicle traffic generation for construction of the facility. The submitted documentation does not finalise the preferred route for the delivery of components to the development site or the source of other products, such as the aggregate, water and sand, however it is noted from the EIS that items such as solar panels and racking systems will "most likely" be transported by road from Sydney via the Hume and Sturt Highways.

Section 7.3.3 of the EIS lists the proposed safeguards and mitigation measures for traffic and transport relates issues. The submitted reports acknowledge that this development will require the preparation of an appropriate Construction Traffic Management Plan. As the proposal relies on access via the classified and local road network this plan should be finalised in consultation with the relevant road authorities, in this case being both the Roads and Maritime Services and Council.

The site does not have frontage to the Sturt Highway but will rely access via the intersection of Sandigo Road with the Sturt Highway during both the construction and operational phases of the project. Due to the potential traffic generation during the peak periods, including light vehicles, and the acute angle of the intersection a Basic Right Turn (BAR) and Auxiliary Left Turn – short (AUL(s)) treatment is required as a minimum intersection treatment at the intersection of the Sturt Highway and Sandigo Road. The EIS acknowledges the need for the upgrade of this intersection. Any consent should be conditioned to require the intersection be upgraded to the required standard and details provided to certify that the required intersection treatment is constructed.

It is understood from the documentation that approximately 300 construction personnel would be required on site during the peak construction period. The submitted documentation indicates that the construction workforce is proposed to be housed within the local area including Narrandera, Collinguille and surrounding localities. The EIS refers to the use of buses to transport workers to and from the site.

The development will comprise of a series of solar panels (up to 670,000) to be erected on the subject site. The documentation refers to various options being considered for the mounting of the solar panels however the anticipated solution will have a typical maximum height of 4 metres above ground level. Given the type and scale of the proposed development and its proximity to a public road it is considered appropriate that issues relating to potential for distraction of, and for glare impacts on, passing motorist be addressed. Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the proponent shall implement mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.

Roads and Maritime is mainly concerned with the impact of the development on the safety and efficiency of the road network. Roads and Maritime emphasises the need, particularly during the construction phase of this development, to minimise the impacts on the existing road network. As the subject site is to be accessed via an intersection with the Sturt Highway which is located within a 100 km/h speed zone the following conditions are proposed for road safety reasons.

Roads and Maritime Services has assessed the Development Application based on the documentation provided and would raise no objection to the development proposal subject to the Consent Authority ensuring that the development is undertaken in accordance with the information submitted as amended by the inclusion of the following as conditions of consent (if approved):-

- 1. Prior to the commencement of construction activities on the development site a Traffic Management Plan shall be prepared in consultation with the relevant road authorities (Council and Roads and Maritime Services) to outline measures to manage traffic related issues associated with the development, particularly during the construction and decommission processes. The appointed transport contractor shall be involved in the preparation of this plan. The plan shall address all light and heavy traffic generation to the development site and detail the potential impacts associated with the development, the mitigation measures to be implemented, and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to the following;
  - i) Details of haulage, including transport routes, volumes, vehicle type and length, timing, and frequency,
  - ii) Finalise details of any required road-specific mitigation measures.
  - iii) Require that all vehicular access to the site be via the approved access route.

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- iv) Details of measures to be employed to ensure safety of road users and minimise potential conflict with project generated traffic,
- v) Proposed hours for construction activities, as night time construction presents additional traffic related issues to be considered.
- vi) The management and coordination of the movement of vehicles for construction and worker related access to the site and to limit disruption to other motorists, emergency vehicles, school bus timetables and school zone operating times.
- vii) The management of construction staff access to the works site is to include strategies and measures employed to manage the risks of driver fatigue and driver behaviour.
- viii) Measures to address adverse climatic conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the facility (e.g. fog, dust, wet weather).
- ix) procedures for informing the public where any road access will be restricted as a result of the project,
- x) any proposed precautionary measures such as signage to warn road users such as motorists about the construction activities for the project,
- xi) a Driver Code of Conduct to address such items as; appropriate driver behaviour including adherence to all traffic regulations and speed limits, safe overtaking and maintaining appropriate distances between vehicles, etc and appropriate penalties for infringements of the Code,
- xii) details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site.
- 2. The Proponent must engage an appropriately qualified person to prepare a Road Dilapidation Report for transport routes, particularly intersections, to be used during the construction (and decommissioning) activities, in consultation with the relevant road authority (Roads and Maritime Services and Council). This report is to address all road related infrastructure. Reports must be prepared prior commencement of, and after completion of, construction (and decommissioning). Any damage resulting from the construction (or decommissioning) traffic, except that resulting from normal wear and tear, must be repaired at the Proponent's cost. The applicant is accountable for this process, rather than the proposed haulage contractor. Such work shall be undertaken at a time as agreed upon between the Proponent and relevant road authorities.
- 3. Prior to the commencement of construction on-site, the Proponent must undertake all works to upgrade any road, its associated road reserve and any public infrastructure in that road reserve, to a standard suitable for use by heavy vehicles to meet any reasonable requirements that may be specified by the relevant roads authority. The design and specifications, and construction, of these works must be completed and certified by an appropriately qualified person to be to a standard to accommodate the traffic generating requirements of the project. On Classified Roads the geometric road design and pavement design must be to the satisfaction of the Roads and Maritime Services.
- 4. As a minimum the intersection of the Sturt Highway and Sandigo Road is to be constructed and the roadside maintained to the satisfaction of Roads and Maritime Services to comply with the following:
  - a) be constructed and the roadside maintained so as to provide the Sight Distance requirements for a reaction time of 2.5 seconds at the intersection with the Sturt Highway in accordance with the Austroads Publications as amended by the supplements adopted by Roads and Maritime Services for the posted speed limit. Compliance with this requirement is to be certified by an appropriately qualified person prior to construction of the vehicular access.
  - b) as a minimum be constructed with a Basic Right Turn (BAR) and Auxiliary Left Turn short (AUL(s)) intersection treatment on the Sturt Highway in accordance with the Austroads Guide to Road Design as amended by the supplements adopted by Roads and Maritime Services for the posted speed limit. The intersection is to be constructed to the standards required for an approved B-Double route. Details certifying the construction of the intersection to the required standard shall be provided to Roads and Maritime Services.
  - c) The construction of Sandigo Road to provide for 2 travel lanes and be sealed for at least 50 metres from its intersection with the Sturt Highway. The intersection shall be designed and constructed so that vehicles turning between the Sturt Highway and Sandigo Road are not required to cross to the

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opposing travel lane in order to perform a turn manoeuvre. The intersection shall be line marked in accordance with Australian standards.

- d) be designed and constructed so as not to interfere with the capacity of the current roadside drainage network and to prevent water from proceeding onto, or ponding on, the carriageway of the Sturt Highway. If a culvert is to be installed and is to be located within the clear zone of the carriageway for the posted speed limit it shall be constructed with a traversable type headwall
- 5. A management plan to provide measures to suppress dust generation from the development site and the transportation route shall be prepared and implemented to the satisfaction of Council and Roads and Maritime Services.
- 6. Any damage or disturbance to the road reserve of the Sturt Highway is to be restored to match surrounding landform in accordance with Council requirements.
- 7. As the Sturt Highway is part of the State Road network works on the carriageway of the highway will require the developer to enter into a Works Authorisation Deed (WAD) with Roads and Maritime Services before finalising the design or undertaking any construction work within or connecting to the road reserve. The Works Authorisation Deed documentation is to be submitted for each specific change to the state road network for assessment and approval by Roads and Maritime Services prior to commencement of any works within the road reserve. The applicant is to contact the Land Use Manager for the South West Region on Ph. 02 69236611 for further detail.
- 8. Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the proponent shall immediately implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.
- 9. Any works within the road reserve of the Sturt Highway requires approval under Section 138 of the Roads Act, 1993 from the road authority (Council) and concurrence from Roads and Maritime Services prior to commencement of any such works. The developer is responsible for all public utility adjustment/relocation works, necessitated by the development and as required by the various public utility authorities and/or their agents.
- 10. Works associated with the development shall be at no cost to Roads and Maritime Services

Under the provisions of the Environmental Planning & Assessment Act the Consent Authority is responsible to consider any likely impacts on the natural or built environment. Depending on the level of environmental assessment undertaken to date and nature of the works it may be necessary for the developer to undertake further environmental assessment for any ancillary road works required as a condition on the development.

<u>Please forward a copy of the Notice of Determination for this Development Application to the Roads</u> and Maritime Services at the same time as advising the applicant.

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

Yours faithfully

Per: '
Jonathan Tasker
Acting Director
South West NSW

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Hi Meghna.

Safework NSW will not be making comment on the Development Application and Environmental Impact Statement for the proposed Avonlie Solar Farm.

Safework will look forward to working with the successful contractor during the construction phase.

## regards

## **Mark Barber**

**Acting Director Southern Operations** 

## SafeWork NSW, Better Regulation

## **Department of Finance, Services and Innovation**

Address: Level 2, 76 Morgan Street, Wagga Wagga NSW 2650

Ph: 02 6933 6501 Mb: 0438 980 610

mark.barber@safework.nsw.gov.au



**TransGrid Reference Number: 2018-357** 

Proposal: Avonlie Solar Farm (SSD 9031) - <u>Exhibition of Environmental Impact Statement</u>

Location: Lots 1/ 2 in DP 606800, Lots 13, 22, 26, 30, 43, 53 in DP 754538

TransGrid have received notification of the exhibition of **Avonlie Solar Farm (SSD 9031) - <u>Exhibition</u>** of **Environmental Impact Statement** 

Private electricity generation developments may require modifications to the electricity transmission network infrastructure. For the connection of new electricity generation sites, construction and operation of ancillary electricity transmission works should be included in the scope of the planning approval. The scope of works and project boundary should include all works associated with connection to the National Electricity Market, including ancillary substation works, transmission line works (direct and upstream) and telecommunications works that would be necessary for the construction and operation of the Project, and all affected land parcels.

Where the Proponent requires further information to clarify the extent of electricity transmission works that will be required, it is recommended that consultation is carried out with TransGrid; <a href="mailto:Shara.Karamian@transgrid.com.au">Shara.Karamian@transgrid.com.au</a> 9284 3353

TransGrid recommend that a description of electricity transmission network infrastructure required for the development should be included in the scope of work and mapped within the project boundary. That is, inclusion of text such as the example highlighted below:

In particular, the EIS must include:

- a stand-alone executive summary;
- 2. a full description of the development, including:
  - details of construction, connection with the 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;
  - details of connection with the national electricity grid, including construction and operation of ancillary electricity transmission infrastructure

It is noted that private electricity generation developments may require modifications to the electricity transmission network infrastructure. As such, construction and operation of ancillary electricity transmission works should be included in the scope of the planning approval. The scope of works should include all works associated with connection to the National Electricity Market, such as

ancillary substation works, transmission line works (direct and upstream), and telecommunications works that would be necessary for the construction and operation of the Project. The EIS should identify all land parcels affected by these works and include them within the project boundary.

Narrandera Shire Council

Our ref: 5279 / 387384

12 September 2018

Mr Mike Young Resource & Energy Assessments Department of Planning & Environment GPO Box 39 SYDNEY NSW 2001

Email: Mike.Young@planning.nsw.gov.au Email: Clay.Preshaw@planning.nsw.gov.au

Attention: Meghna D'Souza

Resource and Energy Assessments | Planning Services

Email: meghna.dsouza@planning.nsw.gov.au

#### Dear Mike

RE: Submission in Response to EIS on the Proposed Avonlie Solar Farm - Application No SSD 18\_9031

Narrandera Shire Council ('NSC') appreciates the opportunity to respond with comments on the EIS for the proposed 200MW Avonlie Solar ('Project'), located 20km south-east of Narrandera.

Whilst there will be environmental and socio-economic advantages from the Project to Narrandera LGA, there will also be various other consequences that NSC will be required to accommodate and manage.

At the forefront of NSC's approach to considering the proposed Project is the desire to ensure that socio-economic benefits flow to its residents and ratepayers and that environmental, social and economic costs are borne by Renewable Energy Systems (RES) Australia Pty Ltd ('Proponent') rather than be transferred to the constituents of the shire.

This submission canvasses a number of matters that NSC wishes to see addressed. To that end, NSC's ultimate support for the Project is contingent upon agreement being reached with the Proponent on several key issues prior to the determination of the Development Application. These include, inter alia:

- a. Resolution of the scope, extent and funding of road upgrading works prior to construction of the Project and the ongoing repair and maintenance program for said roads during both the construction phase and the operational phase of the Project; and
- b. That the Proponent makes fair and equitable annual financial contributions to Council for public benefit purposes including road maintenance, environmental and community enhancement and recovery of Council project-related costs.

The submission elaborates on these and other matters.

## 1. Cumulative Impact of Renewable Energy Projects in the Region

There is extensive, on-going planning and development of at least 20 solar farms, plus other major developments, occurring in the Riverina-Murray region. Some of the known projects are listed in Table 1.

Table 1: List of Solar Farms (SF) and Other Recent Major Developments in the Riverina-Murray Region

Buronga SF	Riverina SF
Limondale SF	Mulwala SF
Sunraysia SF	Yanco SF
Sandigo SF (Narrandera)	Jindera SF
Avonlie (Narrandera)	Darlington Pt SF
Yarrabee SF (Narrandera)	Sebastopol SF
Hay SF	Deniliquin Ethanol Plant
Finley SF	Currawarra SF
Hillston SF	Griffith SF
Tarleigh Park SF	Glenellen SF
Coleambally SF	

Table 1 highlights many like-minded projects and the likelihood that they may well be competing for resources and generating cumulative impacts. Cumulative impacts on the environment result from incremental impacts of the Avonlie Project, when added to other recent, current and foreseeable future projects.

Cumulative impact issues include:

- the impact of the increased demand on the housing rental market caused by the construction workforce
- the increasing demand on limited resources in the local area, such as health and education services
- the impact on the region resulting from an increased demand for skilled labour

#### 2. Roads and Traffic

The traffic and transport impact assessment is considered to be deficient in that the local road network in the project area was not designed to accommodate so many heavy/large and light vehicles over such a long time period. The local roads in the main are narrow and rudimentary. Intersections are of a similar low standard, commensurate with the type and volume of local traffic.

Council seeks dialogue with the Proponent as soon as possible to set the terms for the future management of local roads and Project-related traffic.

Whilst the information appears a little confusing, it is understood from page 41 of the EIS and pages 2 and 3 of the Traffic Assessment Report that the combined six-month peak construction period for the solar panels followed by the batteries, will generate the following traffic flows:

Heavy vehicles: 32 - 24 vehicles/day (64 - 48 movements/day)

Light vehicles: 149 - 115 vehicles/day (298 - 230 movements/day)

#### 2.1 Road Upgrading prior to Construction Activity

Local roads including Sandigo Road, Muntz Road, Quilters Road, Malwa Lane and Birrego Road may be accessed by Project traffic.

- During construction, when traffic generation will be at its peak, Sandigo Road is expected to
  accommodate a total of an additional 181 vehicles or 362 additional vehicle movements per day,
  with a substantial portion being heavy vehicles. In response, the Proponent proposes to provide
  three passing areas along Sandigo Road. As the Roads Authority, NSC deems this inadequate given
  the nature and volume of Project traffic and thus requires an upgrade as specified in Attachment
  1.
- The minimalist approach to adjust Muntz Road by upgrading an S-bend and building four passing bays is similarly inadequate. Please refer to Attachment 1 for the required upgrade standards.
- The intersection of Sandigo and Muntz Roads is expected to accommodate approximately 42 vehicle movements per hour and also needs to be upgraded as per Attachment 1.
- Sandigo Road: See Appendix 1.

Aside from the above works, as the local Roads Authority, NSC requires the Proponent to meet with Council as soon as possible to jointly develop a comprehensive road works program. The elements are to include:

- a. A detailed condition survey be undertaken (at Proponent's cost) of all local roads (including bridges, culverts, grids, etc) complete with photographs, and agreement reached with NSC on the survey results.
- b. Agreement that on completion of Project construction, all local roads experiencing Project traffic will be reinstated to an equivalent or better condition than that found in the abovementioned condition survey (at Proponent's cost).
- c. Notification if any other local roads are to be trafficked by Project vehicles, with condition surveys completed beforehand.
- d. That during the construction phase, the Proponent maintains all local roads utilised by Project traffic in good condition, providing safe, all-weather access. NSC requires three-monthly inspections of such roads with the Proponent.
- e. A speed limit of 80kph on all local roads.
- f. Adequate advisory signage within road reserves to advise traffic of the route to be taken to access the development. Approval must be gained for the adequacy and intended location of such signage from NSC.
- g. That the Traffic Management Plan provides suitable strategies to safeguard the safety of school bus activity.
- h. That the Proponent provides NSC with details of all underground cable and overhead powerline locations and shows where they intersect road reserves prior to the commencement of construction. It will be necessary for NSC to approve all submitted details prior to construction.
- i. An agreement from the Proponent that if, during the life of the Project, NSC finds evidence of significant increases in traffic volumes or vehicle types on other roads in the locality not addressed in the EIS (or in the road condition survey) that can be directly attributable to the Project, the

Proponent agrees to a negotiated settlement with NSC to provide additional funds for road repair, maintenance or any necessary upgrade works.

j. A Road and Traffic Management Plan for the 12 months of decommissioning and that such a condition is included in any consent. NSC will require the provision of road condition and repair and maintenance arrangements similar to those during the construction phase.

#### 2.2 Roads and Traffic during Operations

During the 30 years' operational life, local roads including Sandigo Road, Muntz Road, Quilters Road, Malwa Lane and Birrego Road will be accessed by Project traffic. As the local Roads Authority, NSC will require annual road maintenance contributions from the Proponent. Such contributions will be expected to commence on acceptance by NSC that the subject roads have been returned to, or exceed, the conditions found prior to construction, after completion of construction of the solar farm.

#### 3. Water Supply

The EIS proposes the Project will source 11.2ML of non-potable water during the 18-month construction phase from the Narrandera Shire Depot stand pipe. Approximately 0.34 ML of potable water will also be imported to the site during the construction period.

During the 30-year operational phase, 1.7ML per year of non-potable water will be required for panel washing and other maintenance activities and similarly is proposed to be sourced from a NSC standpipe.

NSC wishes to re-open discussions regarding the water supply arrangements with the Proponent as soon as possible.

## 4. Telecommunications

Mobile phone and internet services in the locality of the Project are quite poor. The influx of 200 workers during construction will place additional strain and demands on the existing services and adversely impact the existing service provided to locals. NSC requests the Proponent liaise with mobile phone tower providers to secure an upgraded (if required) to mobile phone and internet service prior to construction commencement.

#### 5. Noise, Dust and Visual Impacts

NSC requests that the 12 landholders living within 5km of the Project are fully protected with respect to noise, dust and visual impacts. If there are any residences within 500m of an unsealed road used by Project traffic, NSC requires the road is to be sealed to a width of 6.0m for a distance of 150m either side of the midpoint of the house.

#### 6. Employment Matters

NSC is of the view that the EIS does not provide adequate consideration of the potential social and economic impacts of the development during the 18-24 month construction phase, especially in the light of the other major projects being developed in the region.

Also, NSC is keen to see projects such as this employ 'locals' to help build economic resilience in the community. To this end NSC seeks an up-front commitment from the Proponent regarding:

a. The number of 'locals' who will be employed during the construction phase. Council wishes to see the Proponent commit to a minimum of 140 locals being hired during construction.

- b. The number of apprenticeships/traineeships provided to 'locals'. Council wishes to see the Proponent commit to a minimum of ten annual apprenticeships or traineeships.
- c. The number of Indigenous personnel to be employed. Council wishes to see the Proponent commit to employment of Indigenous staff commensurate with the demographic makeup of our community. For example Narrandera Shire has an indigenous population of approximately 10% and this should be the percentage of indigenous staff employed under point a. above.

#### 7. Waste Management

The amount of waste predicted to be generated by the Project is estimated to be nearly 400 truckloads, approximately 5,000 tonnes of waste. The EIS proposes to dispose of waste at local waste management centres including the Narrandera Waste Depot (17km) and possibly others 100km away.

NSC's waste management facilities are of limited scope and capacity and the landfill has a very limited life. If the Proponent wishes to dispose of waste at its facilities, then it will need to provide financial compensation to offset the increased consumption of airspace. This is to avoid such costs being transferred to residents and ratepayers because of having to bring forward waste facility expansions. NSC wishes to discuss this matter further with the Proponent.

#### 8. Biosecurity

The site of the proposed solar farm is located at the gateway to the Murrumbidgee Irrigation Area, one of the most significant food bowls in the country. Biosecurity is an important issue. NSC anticipates that the vast majority of materials involved in the project will be imported and in very significant quantities. NSC requests that a condition of consent requires the Proponent to ensure that all inbound containerised material is certified as biosecurity safe.

#### 9. Financial Contributions to Narrandera Shire Council

As the sphere of government directly responsible for the day-to-day governance of Narrandera LGA, the issues confronting NSC are significant, complex and diverse. Whether it be roads and bridges, water and sewerage systems, waste, community buildings, recreation facilities or social services, the availability and quality of this infrastructure impacts on the standard of living and economic prosperity of our citizens and ratepayers.

Infrastructure provision, housing affordability, workforce skills and recruitment, social and cultural cohesion and amenity are just some of the challenges confronting Council as it seeks to channel the benefits arising from the renewable energy sector into community wellbeing and long-term sustainability.

NSC is keen to ensure it derives direct and appropriate financial recompense as regards the proposed Project, consistent with its needs to provide the social and hard infrastructure necessary to support all within the Shire — including itinerants — and to avoid the transfer of Project-related costs to local ratepayers.

NSC is appreciative of the Proponent's decision to provide a one-off payment of \$250K at the commencement of Project construction. NSC considers additional annual payments are warranted to address a variety of direct and indirect consequences, including those generated via cumulative impacts from other renewable energy developments in the wider region. Council thus seeks urgent discussions with the Proponent to seek agreement on annual financial contributions that will enable the delivery of a broad public benefit and optimization of a social licence.

This issue is of great importance to Council and it is Council's expectation that DPE will include a condition of consent that requires this issue and agreement reached via a VPA or other such mechanism prior to construction commencing.

## 10. Dialogue with DP&E as it deliberates on the Project

NSC seeks to maintain close dialogue with the Department of Planning & Environment as it deliberates on the proposed Project. To this end we request:

- Being notified when the Proponent's response to all submissions is available;
- Receiving a copy of any Project-related correspondence or reports generated subsequent to receipt of submissions; and
- Receiving a copy of any draft consent conditions for comment at the same time that they are forwarded to the Proponent.

As a key stakeholder, NSC wishes to be kept fully informed and engaged in the planning process for this Project.

If you have any queries regarding the abovementioned matters please don't hesitate to contact the undersigned.

Yours sincerely

George Cowan

General Manager

#### APPENDIX 1: LOCAL ROADS UPGRADE REQUIREMENTS

Considering the proposed Project will generate intense use of local roads during the approximately 18 months of construction, a minimum of 30 years of operations and 12 months of decommissioning, NSC as the Roads Authority for local roads requires the Proponent to fund and deliver the following:

## A. Road Upgrades prior to Commencement of Construction

- 1. An upgrade of 1.5km of Sandigo Road (up to 100m past the Sandigo and Muntz Roads intersection) to the following specifications:
  - A minimum of 200mm compacted gravel (gravel of minimum CBR of 30)
  - Construct a 7m seal width with 1m gravelled shoulder on either side
  - Provide a 20/14 seal
- 2. An upgrade of 2.5km of Muntz Road to sealed condition to the following specifications:
  - A minimum of 150mm compacted gravel (gravel of minimum CBR of 30)
  - Construct a 6m seal width with 1m gravelled shoulder on either side.
  - Provide a 20/14 seal
- 3. An upgrade of Sandigo Road and Muntz Road intersection, convert into BAR/BAL treatment:
  - A minimum of 200mm compacted gravel (gravel of minimum CBR 30)
  - Provide 20/14 seal
  - · Line mark the BAR/BAL configuration up to 30m off the edge line of road

#### B. Road Maintenance during the Construction Phase

Full payment of the repair and maintenance costs on those roads directly impacted by Project-related traffic.

## C. Road Maintenance during the Operation Phase

Payment to NSC of \$15,000 per annum + CPI for ongoing repair and maintenance costs.



OUT18/11846

Meghna D'souza Resource & Energy Assessments NSW Department of Planning and Environment

meghna.dsouza@planning.nsw.gov.auu

Dear Ms D'souza

## Avonlie Solar Farm (SSD 9031) Environmental Impact Statement

I refer to your email of 31 July 2018 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries. Any further referrals to the Department of Industry can be sent by email to <a href="mailto:landuse.enquiries@dpi.nsw.gov.au">landuse.enquiries@dpi.nsw.gov.au</a>.

The department provides the following comments and recommendations for consideration in assessment of the proposal.

#### **Comments**

- It is noted that Section 7.9 (Cumulative Impacts) does not provide the sum total of agricultural land being taken out of production by this and other proposed developments in the area. Such an analysis would assist in better understanding cumulative impacts on agricultural land.
- Appendix C1 and C2 contained no record of Narrandera Shire Council's consent for the proponent to access and take water from the council-owned standpipe during construction and operation of the proposed development.
- Farm dams are to be retained for stock watering and possibly panel cleaning. While no
  licence or approval is required to take and use water from harvestable rights dams, the
  water taken from these dams is only able to be used within the landholding on which the
  harvestable rights dam exists.
- The EIS states that it is unlikely that groundwater will be extracted during construction. However, if groundwater is to be extracted at any stage of the development, the proponent must obtain the relevant entitlement and approval prior to any extraction.

#### Recommendations

- The proponent should apply for consent (from Narrandera Shire Council) to take and use water from the council standpipe, if this has not already been obtained.
- The proponent should provide details about the potential construction of underground cabling and access tracks which may occur within riparian corridor areas within the development site. The department also recommends that the proponent assesses the impacts of any construction within the riparian corridors and ensures adherence to the relevant riparian corridor management guidelines.

- The proponent should include any proposed construction plans for drainage features and scour protection in the detailed design plans and these plans should be shared with Dol Water.
- The proponent should provide specification of the confirmed excavation depths of all earthworks in the detailed design plans. Potential for groundwater impacts should be readdressed when final design plans are completed.
- The proponent should ensure a transfer of control of constructed Crown roads ("Muntz Road") to Narrandera Shire Council to manage as Shire roads for public access.
- The proponent should lodge an application for tenure and road closure over the unnamed Crown road.

Yours sincerely

Alex King

Director Cabinet & Legislation Services

Lands and Water - Strategy and Policy

6 September 2018