APPENDIX A SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

NSW GOVERNMENT | Planning & Environment

Contact: Lauren Rose
Phone: 02 9228 6325
Email: Lauren.Rose@planning.nsw.gov.au

Mr Christophe Leonard
Neoen Australia Pty Ltd
Suit 4 – Level 7, 60 Park Street
Sydney NSW 2000

Dear Mr Leonard,

SEARs for Griffith Solar Farm (SSD 14_6604)

Please find attached a copy of the Secretary's environmental assessment requirements (SEARs) for the preparation of the Environmental Impact Statement (EIS) for Griffith Solar Farm. These requirements have been prepared in consultation with relevant government agencies based on the information you have provided to date. I have also attached a copy of the government authorities' comments for your information and note that while a number of agencies have not yet responded, should comments be received they will be promptly forwarded to you. Please note that the Secretary may alter these requirements at any time.

If you do not lodge a DA and EIS for the development within 2 years, you must consult further with the Secretary in relation to the preparation of the EIS.

Prior to exhibiting the EIS that you submit for the development, the Department will review the document in consultation with the relevant agencies to determine if it addresses the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your EIS. This will enable the Department to:

- Confirm the applicable fee (see Division 1AA, Part 15 of the Environmental Planning and Assessment Regulation 2000); and
- Determine the number of copies (hard-copy and CD-ROM) of the EIS that will be required for viewing purposes.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Department of the Environment to determine if an approval under the EPBC Act is required (http://www.environment.gov.au or 6274 1111).

Your contact officer, Lauren Rose, can be contacted on (02) 9228 6325 or at lauren.rose@planning.nsw.gov.au. Please mark all correspondence regarding the proposal to the attention of the contact officer.

Yours sincerely

Karen Jones 26.8.14
Director – Infrastructure Projects

Secretary's Environmental Assessment Requirements

Section 78A (8A) of the Environmental Planning and Assessment Act 1979
Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 14_6604
Development	**Griffith Solar Farm** The construction and operation of 30MVA solar photovoltaic (PV) plant and associated infrastructure.
Location	Located at Yoogali within the Griffith City Council area, approximately 7 km south east of Griffith. The development site is located on Lots 59, 60, 61, 62, 81 and 82 in DP 751728.
Proponent	Neoen Australia Pty Ltd
Date of Issue	26 August 2014
General Requirements	The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of, Part 3 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the EP&A Regulation) and include the following: 1. The information required under clause 6: • the description of the development for the solar farm should include: → construction, operation and decommissioning details; → a site plan at an adequate scale with dimensions, showing the development's location, orientation, site coverage, access roads and entrances to public roads; → the location and dimensions of all development components including the solar PV module array, transformer stations and switchgears, control system, underground and above ground cabling, and transmission line linking the solar farm to the substation, fencing and landscaping around the solar-farm, on-site office, operations and maintenance buildings, temporary construction infrastructure and compounds, and access roads/road upgrades (including access tracks); → a timeline identifying the development's proposed construction and operation components, their envisaged lifespan and arrangements for decommissioning and staging; → supporting maps/plans clearly identifying existing environmental features (e.g. watercourses, vegetation), infrastructure and land use (including nearby residences and approved residential developments or subdivisions) and the location/siting of the development (including associated infrastructure) in the context of this existing environment; and → resourcing requirements (including, but not limited to, water supply and gravel). 2. the content listed in clause 7, including, but not limited to: • a summary of the EIS; • a statement of the objectives of the development, including a description of the strategic need, justification, objectives and outcomes. This should include: → a strategic assessment of the need, scale, scope and location of the development in relation to predicted electricity demand, predicted transmission constraints and the strategic direction of the region and the State in relation to electricity supply, demand and electricity generation technologies, and its role within the

	Commonwealth's Renewable Energy Target Scheme; and → a clear demonstration of quantified and substantiated greenhouse gas benefits, taking into consideration sources of electricity that could realistically be replaced and the extent of their replacement; • an analysis of feasible alternatives to the carrying out of the development, having regard to its objectives, including an assessment of the environmental costs and benefits of the development relative to alternatives and the consequences of not carrying out the development, the suitability of the chosen option and whether or not the development is in the public interest. This should include: → an analysis of the suitability of the development with respect to potential land use conflicts with existing and future surrounding land uses (including rural residential development, land of significant scenic or visual value, land of high agricultural value, mineral reserves including existing mineral exploration operations within the proximity of the subject area, forestry and conservation areas), taking into account local and strategic land use objectives including the potential loss of agricultural land and the impact on the local community; and → describe the alternatives considered (location and/or design) for all development components, and provide justification for the preferred development demonstrating its benefits including community benefits (for example community enhancement programmes) on a local and strategic scale and how it achieves stated objectives. • an analysis of the development, including an assessment, with a particular focus on the requirements of the listed key issues, in accordance with clause 7(1)(d) of the EP&A Regulation (where relevant); • an identification of how relevant planning, land use and development matters (including strategic and statutory matters) have been considered in the impact assessment (direct, indirect and cumulative impacts) and/or developing management/mitigation measures, including section 79C of the EP&A Act, applicable State Planning Policies (SEPP), Local Environmental Plans, the nature and extent of any prohibitions that apply to the development and demonstration that the site is suitable for the proposed use in accordance with SEPP 55; • a compilation of the measures proposed to mitigate any adverse effects of the development on the environment; • a justification for the development taking into consideration the objects of the EP&A Act; and • detail how the principles of ecologically sustainable development will be incorporated in the design, construction and ongoing operation phases of the development.
Key Issues	The EIS must address the following specific matters: • **Flora and Fauna** – the EIS must: → include an assessment of the impacts of all development components on flora and fauna (both terrestrial and aquatic, as relevant) and their habitat; → The assessment must take into account: o The *Threatened Species Assessment Guidelines* (DECC, 2007); and o The *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities* (DEC, 2004) and any draft or final recovery plans; → specifically consider impacts on threatened species, populations

	and ecological communities and their habitats listed under both State and Commonwealth legislation that have the potential to occur on the site and surrounding land, impacts on riparian and/ or instream habitat in the case of disturbance of waterways, and on biodiversity corridors; → include details of how flora and fauna impacts would be managed during construction and operation including adaptive management and maintenance protocols (including the mitigation and/or management of weeds); and → any steps taken to mitigate or offset any identified impacts to the environment should also be detailed in the EIS. Current OEH offsets policy should be used in assessing and determining the adequacy of any offsets. Note that a draft Biodiversity Offsets Policy for Major Projects is in the process of being finalised. • **Visual Impacts** - the EIS must: → provide an assessment of the landscape character and values and any scenic or significant vistas of the area potentially affected by the development. This should describe community and stakeholder values of the local and regional visual amenity and quality, and perceptions of the development based on surveys and consultation; → include a full assessment of the visual impacts associated with the solar farm, including identification and documentation of all key viewing points and corridors particularly from identified sensitive lands. This should also include the associated transmission line. Alternative pole designs should be presented and assessed and the potential for undergrounding in sensitive locations should also be assessed; → provide an assessment of the potential for reflectivity from the panels and associated infrastructure, and any safety impacts for motorists or aircraft (including a consideration of the establishment and maintenance of a visual buffer to minimise potential distraction of motorists); → include photomontages of the development taken from potentially affected residences (including approved but not yet developed dwellings or subdivisions with residential rights), settlements and significant public view points, and provide a clear description of proposed visual amenity mitigation and management measures for the solar farm; and → provide an assessment of the feasibility, effectiveness and reliability of proposed mitigation measures and any residual impacts after these measures have been implemented. • **Noise Impacts** - the EIS must: → include a noise assessment of all phases and components of the development including, but not limited to construction noise (focusing on high noise-generating activities and any works proposed outside of standard construction hours, traffic noise, and vibration generating activities). The assessment must identify noise/vibration sensitive locations (including approved but not yet developed dwellings), baseline conditions based on monitoring results, the levels and character of noise (eg. tonality, impulsiveness etc.) generated by noise sources, noise/vibration criteria, modelling assumptions and worst case and representative noise/vibration impacts; → include monitoring to ensure that there is adequate background noise data that is representative for all sensitive receptors; → provide justification for the nominated average background noise level used in the assessment process, considering any significant difference between daytime and night time

	background noise levels if there are noise generating activities at night; and → clearly outline the noise mitigation, monitoring and management measures that would be applied to the development. This must include an assessment of the feasibility, effectiveness and reliability of proposed measures and any residual impacts after these measures have been incorporated. The assessment must take into account the following guidelines (as relevant): → Site Establishment and Construction – *Interim Construction Noise Guidelines* (DECC, 2009); → Traffic Noise – *NSW Road Noise Policy* (DECCW, 2011); → Vibration – *Assessing Vibration: A Technical Guideline* (DECC, 2006; and → Operation – *NSW Industrial Noise Guideline* (EPA, 2000). • **Heritage –** the EIS must include an assessment of impacts on Aboriginal heritage. The EIS must demonstrate the likely impacts of the development to Aboriginal heritage (including cultural and archaeological significance). Where impacts are identified the assessment shall: → outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures) generally consistent with the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (Department of Environment and Conservation, 2005); → be undertaken by a suitably qualified heritage consultant(s); → demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures); and → demonstrate that an appropriate archaeological assessment methodology, including research design (where relevant) has been undertaken, to guide physical archaeological test excavations of areas of potential archaeological deposits. The full spatial extent and significance of any archaeological evidence shall be established and results of excavations included. • **Traffic and Transport** – the EIS must assess the construction, operational and decommissioning traffic impacts of the development. The EIS must be accompanied by a Traffic Impact Assessment to address the impacts of traffic generated by the proposal on the nearby road network including: → details of the nature of traffic generated, vehicle numbers and types of vehicles, transport routes for vehicles accessing the site, and potential impacts on local and regional roads (including impacts on the structural integrity of the road network), bridges and intersections, including any proposed road upgrades and repairs; → details of measures to mitigate and/or manage the potential impacts, including measures to control soil erosion and dust generated by traffic volumes; and → details of site access roads including how these would connect to the existing road network and any operational maintenance or handover requirements. • **Hazard/Risks**– the EIS must include an assessment of potential hazards and risks associated with electric and magnetic fields (EMFs) (with reference to Australian Radiation Protection and Nuclear Safety

	Agency standards) and bushfires. The EIS should demonstrate the application of the Principles of Prudent Avoidance in relation to EMFs. The EIS must also detail measures to contain any hazardous substances to prevent the contamination of pasture and dams. The EIS must identify the potential hazardous chemical emissions from all processes and the proposed type, quantity and location of chemicals to be stored on site. • **Water Quality, Waterways and Flooding** – The EIS must identify likely impacts to the waterways and measures to minimise impacts including: → an assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts should also be provided; → details of the design of waterway crossings where such crossings are to be located in third order or higher streams; → address soil erosion issues and the potential for clearing to create salinity risks; → an assessment of potential flooding impacts, undertaken generally in accordance the NSW Government *Floodplain Development Manual 2005*, considering a full range of potential flood events up to and including the Probable Maximum Flood (PMF) and any local floodplain risk management planning processes; and → details of proposed storm water collection, storage and disposal systems including demonstration that surface and ground waters will be protected through adequate design, construction and management.
Environmental Risk Analysis	**General Environmental Risk Analysis** – notwithstanding the key assessment requirements, the EIS must include an environmental risk analysis to identify potential environmental impacts associated with the development, proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of the additional key environmental impact(s) must be included in the EIS.
Consultation	The Proponent must undertake a consultation program as part of the environmental assessment process, including consultation with, but not necessarily limited to, the following parties: • Griffith City Council; • Riverina Local Land Services; • Office of Environment and Heritage and Environment Protection Authority; • Department of Primary Industries (NSW Office of Water); • NSW Trade and Investment (Crown Lands Division and NSW Mineral Resources); • NSW Roads and Maritime Service; • NSW Rural Fire Service; • TransGrid; • Local Aboriginal Land Council; • Relevant mineral stakeholders (including exploration and mining title holders); and the local community and landowners The consultation process shall include measures for disseminating information to increase awareness of the development as well as methods

	for actively engaging stakeholders on issues that would be of interest/concern to them. The EIS must: → Demonstrate effective consultation with stakeholders, and that the level of consultation with each stakeholder is commensurate with their degree of interest/concern or likely impact; → Clearly describe the consultation process undertaken for each stakeholder/group including details of the dates of consultation and copies of any information disseminated as part of the consultation process (subject to confidentiality); and → Describe the issues raised during consultation and how and where these have been addressed in the EIS.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to the requirements for lodgement.

NSW GOVERNMENT | Office of Environment & Heritage

Your reference SSD 14_6604
Our reference: DOC14/148313
Contact: Miranda Kerr
Ph. 02 6022 0607

Ms Lauren Rose
Energy - Infrastructure Projects
Major Projects Assessment
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Rose

RE: Request for SEARs for Griffith Solar Farm (SSD 14_6604), Yoogali, Griffith City Council

Thank you for your letter dated 28 July 2014 to the Office of Environment and Heritage (OEH) requesting our Secretary's Environmental Assessment Requirements (SEARs) to undertake an Environmental Impact Statement (EIS) for the proposed Griffith Solar Farm (SSD 14_6604). This response is in regard to statutory matters relating to application of the *National Parks and Wildlife Act 1974* and the *Threatened Species Conservation Act 1995.*

OEH has considered the details of the proposal provided within the Scoping Study and has offers the following comments. In carrying out the assessment, the proponent should refer to the OEH general requirements for State Significant Development proposals and the relevant guidelines as listed in **Attachments A and B,** and relevant best practice management guidelines.

As an overall comment, the proposed development site appears to be highly disturbed and the impacts on both Aboriginal cultural heritage and biodiversity are likely to be low. However, if the proposal impacts upon roadside remnant vegetation to allow for access and/or grid connection, then the impacts on both Aboriginal cultural heritage and biodiversity, including threatened species, would need to be addressed in greater detail.

Aboriginal Cultural Heritage

The ground surface within the proposed development site appears to be highly disturbed and impacts to Aboriginal cultural heritage are expected to be low. Stands of remnant native vegetation, however, exist within road reserves where access and grid connection routes are planned. An archaeological investigation was conducted in 1982 for the proposed transmission line from Darlington Point to the Griffith sub-station (AHIMS CAT No 336). The study area included roadside along Hamilton Road adjacent Lots 58 and 62 DP 751728. No Aboriginal objects were identified by that investigation at that location. The length of Hamilton Road to the north of Lot 58 is identified as the proposed route for connecting the solar farm to the Griffith sub-station, and an area of potential vegetation clearing.

If soil is to be excavated in previously undisturbed areas or remnant vegetation is to be cleared, OEH recommends that the proponent undertake a cultural heritage assessment as detailed in **Attachment A**. In addressing these requirements, the proponent should comply with the processes described in the guidance material referenced in **Attachment B**.

Biodiversity

The Scoping Report (page 2) notes that Hamilton Road and Mirrool Branch Canal Road roadsides contain remnants of Weeping Myall (*Acacia pendula*) Woodland, which is listed as an Endangered Ecological Community (EEC) under both the NSW *Threatened Species Conservation Act 1995* (TSC Act) and the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). We advise that clearing of vegetation be avoided wherever possible, particularly along Hamilton and Mirrool Branch Canal Roads, which have been identified as potentially requiring works to facilitate site access and cabling. If vegetation is to be cleared, then the EIS must address the potential impacts on threatened species, populations and ecological communities, or their habitat as detailed in **Attachment A**, using the guidance material as detailed in **Attachment B**.

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The NSW Government is currently developing whole-of-government Biodiversity Offsets Policy for Major Projects that are to be used in assessing impacts to biodiversity and determining offsets for state significant development and state significant infrastructure projects (for further information see the OEH website - www.environment.nsw.gov.au/biodivoffsets/1480biofpolmp.htm). This policy has been recently publicly exhibited and submissions are now being considered. In the interim, OEH advises that the seven offsetting principles detailed in **Attachment C** should be applied to major projects, if required.

Draft SEARs

Recommended changes to the draft SEARs are as follows are provided in **Attachment D**. The *Key Issues* section specifying EIS requirements for Flora and Fauna mention the Murrumbidgee Catchment Management Plan. Catchment Management Plans are no longer relevant to natural resource management in NSW and reference to this document should be removed.

The Draft SEARs also include assessment requirements in regard to Water Quality, Waterways and Flooding. These provided sufficient detail to assess the likely impacts of the proposal on these matters.

Should you require any additional assistance or wish to discuss the matter further, please contact Miranda Kerr on (02) 6022 0607, or at miranda.kerr@environment.nsw.gov.au.

Yours sincerely

P.E 8/8/14

PETER EWIN
Senior Team Leader Planning
South West Region
Regional Operations
Office of Environment and Heritage

Enclosure:

ATTACHMENT A	Detailed requirements for Aboriginal cultural heritage assessment
ATTACHMENT B	Guidance Material
ATTACHMENT C	Biodiversity offsetting for Major Projects – Interim Arrangements for assessing and offsetting impacts
ATTACHMENT D	OEH recommendations – draft Secretary's Environmental Assessment Requirements

Attachment A

Detailed recommendations – Environmental Assessment for State Significant Development

In addition to the specific matters set out in the cover letter, impacts related to the following environmental issues need to be assessed, quantified and reported on:

1. Aboriginal cultural heritage;
2. Biodiversity; and
3. GIS layers

The environmental assessment should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is provided as **Attachment B**.

1. Aboriginal Cultural Heritage

The *Environmental Planning and Assessment Act 1979* (EP&A Act) requires that proponents of a development/activity and the determining authority adequately assess the impact of a development or activity on Aboriginal cultural heritage.

The *National Parks and Wildlife Act 1974* (NPW Act) protects Aboriginal objects and Aboriginal places in NSW. Aboriginal sites are widespread throughout New South Wales with considerable regional variation in the types of sites, their age, their contents and how they are situated in the landscape. It is an offence to do any of the following without an exemption or defence (penalties apply):

- knowingly harm or desecrate an Aboriginal object or Aboriginal place (the 'knowing' offence)
- harm or desecrate an Aboriginal object or Aboriginal place (the 'strict liability' offence)

The NPW Act provides a number of exemptions and defences to these offences and also excludes certain acts and omissions from the definition of harm. For more information about the regulation of Aboriginal cultural heritage, go to the OEH website: www.environment.nsw.gov.au/licences/achregulation.htm

OEH keeps a register of notified Aboriginal objects and declared Aboriginal places in NSW. The register is called the Aboriginal Heritage Information Management System (AHIMS). You can search AHIMS to discover if an Aboriginal object has been recorded, or an Aboriginal place declared, on any parcel of land. For more information about accessing AHIMS, go to the OEH website:
www.environment.nsw.gov.au/licences/WhatInformationCanYouObtainFromAHIMS.htm

Please note that surveys for Aboriginal objects have not been done in many parts of NSW. Aboriginal objects may exist on a parcel of land even though they have not been recorded in AHIMS.

It is in the interest of proponents to ensure that all reasonable precautions are taken to prevent the occurrence of damage to Aboriginal objects.

The environmental assessment should contain:

1. a description of the Aboriginal objects and declared Aboriginal places located within the area of the proposed activity
2. a description of the cultural heritage values, including the significance of the Aboriginal objects and declared Aboriginal places, that exist across the whole area that will be affected by the proposed activity and the significance of these values for the Aboriginal people who have a cultural association with the land
3. how the requirements for consultation with Aboriginal people have been met (as specified in clause 80C of the NPW Regulation) if an Aboriginal Heritage Permit (AHIP) is required
4. the views of those Aboriginal people regarding the likely impact of the proposed activity on their cultural heritage (if any submissions have been received as a part of the consultation requirements, the report must include a copy of each submission and your response)
5. actual or likely harm posed to the Aboriginal objects or declared Aboriginal places from the proposed activity, with reference to the cultural heritage values identified

6. any practical measures that may be taken to protect and conserve those Aboriginal objects or declared Aboriginal places and
7. any practical measures that may be taken to avoid or mitigate any actual or likely harm, alternatives to harm or, if this is not possible, to manage (minimise) harm.

In addressing the requirements above, the proponent may refer to the following documents:

a). *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011). This document provides guidance on the process for investigating and assessing Aboriginal cultural heritage in NSW and can be accessed at: www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf.

b). *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010). The process and methods described in this Code should be followed where the assessment of Aboriginal cultural heritage requires an archaeological investigation to be undertaken. A copy of the Code can be obtained at: www.environment.nsw.gov.au/licences/archinvestigations.htm.

c). *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010). This document further explains the consultation requirements that are set out in clause 80C of the *National Parks and Wildlife Regulation 2009*. The process set out in this document must be followed and documented in the EIS. A copy of the document can be obtained at: www.environment.nsw.gov.au/licences/consultation.htm.

If Aboriginal objects are found to be directly or indirectly adversely affected by the proposed development, the proponent will need to apply for, and be issued, an Aboriginal Heritage Impact Permit (AHIP) by OEH to comply with the National Parks and Wildlife Act 1974. Details on how to apply for an AHIP can be obtained from the OEH website at: www.environment.nsw.gov.au/resources/cultureheritage/20110280AHIPguideforapplicants.pdf

2. Biodiversity

The primary aims of the EIS for the proposal, as it relates to biodiversity, will be to:

1. Establish the area, character and conservation value of existing ecosystems, and dependent species to be impacted on the site;
2. Provide detailed information about the measures required to avoid and minimise impacts to natural and biological values on the proposed site; and
3. Demonstrate how the development will improve or maintain biodiversity.

The EP&A Act requires that proponents of a development/activity and the determining authority adequately assess the impact of a development or activity on flora and fauna, including threatened species, populations or ecological communities, or their habitats in any environmental assessment documents.

The EIS must include a large scale map of the proposal and surrounding area. This map should accurately locate the proposed development footprint in relation to extant vegetation, Threatened Ecological Communities and habitat features important to threatened species. The condition of remnant vegetation on the site should be documented in order to establish the presence of threatened species habitat, such as hollows, and threatened ecological communities. Threatened species habitat is not necessarily limited to areas of contiguous vegetation adjoining the river. Features such as isolated trees (living or dead), tree hollows and ground timber, along with the matrix in which these features exist, may provide important habitat. If necessary, the applicant should then identify methods, using the principles of "avoid, mitigate, offset", to minimise the impact of the development on these values.

The types of vegetation should be described in accordance with the NSW Vegetation Types (VIS Classification) Database at www.environment.nsw.gov.au/research/Visclassification.htm. Ideally all works should aim to retain all native vegetation on site. However, any impacts to vegetation should be quantified in terms of area (hectares) of vegetation including understorey and ground cover areas, vegetation condition and number of hollow-bearing trees. Existing vegetation mapping can be downloaded from the OEH website at http://mapdata.environment.nsw.gov.au.

If clearing of vegetation is planned and an offset is necessary, OEH recommends that the assessment should proceed using the BioBanking Assessment Methodology (BBAM). BioBanking Assessment Tools should be used to calculate appropriate offsets, and are available through the OEH website at: www.environment.nsw.gov.au/biobanking/tools.htm

The BBAM can be used **either** to obtain a BioBanking statement, or to assess impacts of a proposal and to determine required offsets without obtaining a statement. In the latter instances, if the required credits are not available for offsetting, appropriate alternative options may be developed in consultation with OEH officers.

Where a proposal is assessed using the BioBanking Assessment Methodology (BBAM):

1. Where a BioBanking Statement is being sought under Part 7A of the *Threatened Species Conservation Act 1995* (TSC Act), the assessment must be undertaken by an accredited BioBanking assessor (as specified under Section 142B (1)(c) of the TSC Act) and done in accordance with the *BioBanking Assessment Methodology and Credit Calculator Operational Manual* (DECCW 2009). To qualify for a BioBanking Statement a proposal must meet the 'improve or maintain' standard.

1a. The EIS should include a specific Statement of Commitments that reflects all requirements of the BioBanking Statement including the number of credits required and any DG approved variations to impact on Red Flags.

2. Where the BioBanking Assessment Methodology is being used to assess impacts of a proposal and to determine required offsets, and a BioBanking Statement is not being obtained, the EIS should contain a detailed biodiversity assessment and all components of the assessment must be undertaken in accordance with the *BioBanking Assessment Methodology and Credit Calculator Operational Manual* (DECCW 2009).

2a. The EIS should include a specific Statement of Commitments which:

   a. is informed by the outcomes of the proposed BioBanking assessment offset package

   b. sets out the ecosystem and species credits required by the BioBanking Assessment Methodology and how these ecosystem and/or species credits will be secured and obtained

   c. if the ecosystem or species credits cannot be obtained, provides appropriate alternative options to offset expected impacts, noting that an appropriate alternative option may be developed in consultation with OEH officers and in accordance with OEH policy

   d. demonstrates how all options have been explored to avoid red flag areas, and

   e. includes all relevant BioBanking files (e.g. *.xml output files), data sheets, underlying assumptions (particularly in the selection of vegetation types from the vegetation types database), and documentation (including maps, aerial photographs, GIS shape files, other remote sensing imagery etc.) to ensure that the OEH can conduct an appropriate review of the assessment.

3. Where the *'NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects'* is being used then the proponent must stipulate which level(s) of offset is being offered in relation to each of the vegetation communities and threatened species that require species credits. In accordance with the interim policy, justification must be provided as to why it is appropriate to apply the Tier 2 ('no net loss') or Tier 3 ('mitigated net loss') outcomes. In considering whether the mitigated net loss standard is appropriate, justification must be provided on: (i) whether the credits required by the calculator are available on the market; (ii) whether alternative offset sites (other than credits) are available on the market; and (iii) the overall cost of the offsets and whether these costs are reasonable given the circumstances'. This must be to satisfaction of, and in consultation with, OEH.

4. Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby OEH estate reserved under the *National Parks and Wildlife Act 1974* or any marine and estuarine protected areas under the *Fisheries Management Act 1994* or the *Marine Parks Act 1997* should be considered. Please refer to the *Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water* (DECCW 2010).

5. With regard to the Commonwealth EPBC Act, the assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

3. GIS layers

The proponent must include with their environmental assessment to OEH spatial layer(s) that detail the:

- Application boundary
- Development footprint
- All ancillary Infrastructure
- Boundary of any offset sites
- Vegetation mapping for both the impact and any offset site(s) and
- Vegetation sample plot location for both the impact and offset site(s).

This information must be provided in an Esri geodatabase (9.3) or shapefile format, or any esri compatible dataset in GDA or MGA 94.

Distribution records for plants and animal species in a format suitable to upload to the NSW Wildlife Atlas. See www.environment.nsw.gov.au/wildlifeatlas/about.htm#contribute

Attachment B – Guidance Material

Title	Web Address
Relevant Legislation	
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	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
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Threatened Species Conservation Act 1995	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Aboriginal Cultural Heritage	
Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005)	Available from DP&E.
Aboriginal Cultural Heritage Consultation Requirements for Proponents (EPA 2010)	www.environment.nsw.gov.au/licences/consultation.htm
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (EPA 2010)	www.environment.nsw.gov.au/licences/archinvestigations.htm
Aboriginal Site Impact Recording Form	www.environment.nsw.gov.au/licences/DECCAHIMSSiteRecordingForm.htm
Aboriginal Heritage Information Management System (AHIMS) Registrar	www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Biodiversity	
BioBanking Assessment Methodology (DECC 2008)	www.environment.nsw.gov.au/resources/biobanking/08385bbassessmethod.pdf
BioBanking Assessment Methodology and Credit Calculator Operational Manual (OEH 2011)	www.environment.nsw.gov.au/resources/biobanking/09181bioopsman.pdf
Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians (EPA 2009)	www.environment.nsw.gov.au/resources/Threatenedspecies/09213amphibians.pdf
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC 2004)	www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf
OEH Threatened Species website	http://www.environment.nsw.gov.au/threatenedspecies/
Atlas of NSW Wildlife (BioNet)	http://www.bionet.nsw.gov.au/
Vegetation Types databases	www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm
PlantNET	http://plantnet.rbgsyd.nsw.gov.au/

Attachment C

Biodiversity offsetting for Major Projects – Interim Arrangements for assessing and offsetting impacts

Biodiversity Offsetting Principles

Projects must avoid and minimise impacts and offset any remaining impacts in accordance with the following seven offsetting principles:

1. Before offsets are considered, impacts must first be avoided and unavoidable impacts minimised through mitigation measures. Only then should offsets be considered for the remaining impacts.
2. Offset requirements should be based on a reliable and transparent assessment of losses and gains.
3. Offsets must be targeted to the biodiversity values being lost or to higher conservation priorities.
4. Offsets must be additional to other legal requirements.
5. Offsets must be enduring, enforceable and auditable.
6. Supplementary measures can be used in lieu of offsets.
7. Offsets can be discounted where significant social and economic benefits accrue to NSW as a consequence of the proposal.

1. Avoiding and minimising impacts

The EIS should clearly identify how the proposed project has avoided and minimised, to the fullest extent practicable, impacts to biodiversity, particularly threatened species, populations, ecological communities and their habitats.

2. Assessing biodiversity impacts using the BioBanking Assessment Methodology.

The BioBanking Assessment Methodology (BBAM) is to be used to identify and describe the biodiversity values of the site, and to assess the impacts of a proposal and to determine required offsets, both ecosystem credits and species credits.

The EIS should contain a detailed biodiversity assessment and all components of the assessment must be undertaken in accordance with the BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECC, 2008).

The EIS should document the outcomes of the application of the BBAM to the site, and the required ecosystem and species credits. All relevant 'BioBanking files (e.g. *.xml output files), data sheets and documentation (including maps, aerial photographs, GIS shape files, other remote sensing imagery etc.) should be included to ensure OEH can conduct an appropriate review of the assessment.

3. Achieving the offset requirement

The EIS should document the Offset Strategy that is proposed, demonstrating achievement of the offset being like-for-like (as per BBAM offset rules), or an ecosystem or species with a higher conservation status.

It should set out the ecosystem and species credits required by the BioBanking Assessment Methodology and how these ecosystem and/or species credits will be secured and obtained;

4. The offset must be additional to other legal requirements

The Offset Strategy must demonstrate that the proposed offset site is not subject to a requirement to implement existing conservation obligations, or, that it will adhere to the 'additionality' rules within BBAM.

5. Offsets must be enduring

The Offset Strategy must identify the legal mechanism that will be used to secure the offset site. While BioBanking agreements are the preferred mechanism for securing offsets, other conservation mechanisms may also be acceptable prior to formal commencement of the FBA. Interim mechanisms for securing offsets include (listed in order of preference):

- BioBanking agreement (preferred)

- purchase and retirement of the appropriate biodiversity credits from a third party biobank site
- dedication of land under the *National Parks and Wildlife Act 1974* (NPW Act)
- Trust Agreements under the *Nature Conservation Trust Act 2001*
- a Property Vegetation Plan registered on title under the *Native Vegetation Act 2003*
- a Planning agreement under s 93F of the *Environmental Planning and Assessment Act 1979.*

6. Use of Supplementary measures

If a suitable offset cannot be located, the Offset Strategy included in the EIS must demonstrate, and that all endeavours were undertaken to identify a suitable offset site, and how suitable sites were attempted to be located. In the event that it is agreed that a suitable offset site cannot be located, supplementary measures may be used.

Any proposal for the use of supplementary measures must be discussed with OEH prior to the EIS being submitted for exhibition.

7. Discounting of offsets

It is OEH's position that all impacts are to be fully offset. Discounting will only be applied in rare circumstances where the offset requirements would be so onerous as to prevent a project proceeding. In addition, that project would need to have significant net social and/or economic benefits.

The inclusion in the Offset Strategy of any such proposal should be first discussed with OEH.

Attachment D

OEH recommendations – draft Secretary's Environmental Assessment Requirements

Text in red indicates suggested additions; red strike through indicates text recommended for removal.

Key Issues	The EIS must address the following specific matters:

- **Flora and Fauna** – the EIS must:
  - → include an assessment of the impacts of all development components on flora and fauna (both terrestrial and aquatic, as relevant) and their habitat.
  - → The assessment must take into account:
    - ~~the *Threatened Species Assessment Guidelines* (DECC, 2007)~~
    - ~~the~~ OEH's *Threatened ~~Species~~ Biodiversity Survey and Assessment: Guidelines for Developments and Activities* (DEC, 2004) (available at www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm) and any relevant draft or final recovery plans.
    - ~~Murrumbidgee Catchment Management Plan including details on the existing site conditions and likelihood of disturbance (including quantifying the worst case extent of the impact on the basis of vegetation type and total native vegetation disturbed);~~
  - → specifically consider impacts on threatened species, populations, and ecological communities and their habitats listed under both State and Commonwealth legislation that have the potential to occur on the site and surrounding land, impacts on riparian and/ or instream habitat in the case of disturbance of waterways, and on biodiversity corridors;
  - → include details of how flora and fauna impacts would be managed during construction and operation including adaptive management and maintenance protocols (including the mitigation and/or management of weeds); and
  - → Any steps taken to mitigate or offset any identified impacts to the environment should also be detailed in the EIS. The NSW offset principles for major projects are to be used in assessing and determining the adequacy of any offsets. ~~include measures to avoid, mitigate or offset impacts consistent with "improve or maintain" principles. Sufficient details must be provided to demonstrate the availability of viable and achievable options to offset the impacts of the development, if required.~~

Lauren Rose

From: Wayne Jones <wayne.jones@dpi.nsw.gov.au>
Sent: Tuesday, 12 August 2014 2:28 PM
To: Lauren Rose
Subject: Griffith Solar Farm [SSD 14_6604] SEARs

Hi Lauren

Please see following draft DPI comments on the above project. Formal response should follow shortly.

Regards
Wayne

Wayne Jones | Land Use Planning Coordinating Officer
Department of Primary Industries
Level 48, MLC Centre, 19 Martin Place Sydney NSW 2000
T:02 9338 6708 | E: wayne.jones@dpi.nsw.gov.au

OUT14/25728

Ms Lauren Rose
Infrastructure Projects
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Lauren.Rose@planning.nsw.gov.au

Dear Ms Rose,

Griffith Solar Farm [SSD 14_6604]
Request for input into Secretary's Environmental Assessment Requirements

I refer to your email dated 28 July 2014 to the Department of Primary Industries in respect to the above matter.

Comment by NSW Office of Water
The NSW Office of Water (Office of Water) has reviewed the Scoping Report accompanying the request for Secretary's Environmental Assessment Requirements and provides the following comments below, and further detail in **Attachment A**.

It is recommended that the EIS be required to include:

- The identification of an adequate and secure water supply for the life of the project. Confirmation that water can be sourced from an appropriately authorised and reliable supply. This is to include an assessment of the current market depth where water entitlement is required to be purchased.
- Details of water proposed to be taken (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan.
- Assessment of any volumetric water licensing requirements (including those for ongoing water take following completion of the project).
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Assessment of any potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts.

- Consideration of relevant policies and guidelines.

For further information please contact Tim Baker, Senior Water Regulation Officer (Dubbo Office) on 6841 7403 or at tim.baker@water.nsw.gov.au.

Comment by Agriculture NSW
Crown Lands advise that the Draft SEARs are adequate to thoroughly assess the proposal.

For further information please contact David Davis, Resource Management Officer, (Yanco Agricultural Institute) on 6951 2750 or at david.davis@industry.nsw.gov.au.

Fisheries NSW and Crown Lands advise no issues.

Attachment A

Griffith Solar Farm [SSD 14_6604]
Request for Input into Secretary's Environmental Assessment Requirements
Additional Comment by NSW Office of Water

Relevant Legislation
The Environmental Impact Statement (EIS) should take into account the objects and regulatory requirements of the *Water Act 1912* and *Water Management Act 2000* (*WMA 2000*), as applicable. Proposals and management plans should be consistent with the Objects (s.3) and Water Management Principles (s.5) of the *WMA 2000*.

Water Sharing Plans
The proposal is located within the area covered by the Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources and the Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources. The EIS is required to:

- Demonstrate how the proposal is consistent with the relevant rules of the WSP including rules for access licences, distance restrictions for water supply works and rules for the management of local impacts in respect of surface water and groundwater sources, ecosystem protection, water quality and surface-groundwater connectivity.
- Provide a description of any site water use (amount of water from each water source) and management including all sediment dams, clear water diversion structures with detail on the location, design specifications and storage capacities for all the existing and proposed water management structures.
- Provide an analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of any relevant WSP.
- Provide a detailed and consolidated site water balance.

Relevant Policies and Guidelines
The EIS should take into account the following policies (as applicable):

- Guidelines for Controlled Activities on Waterfront Land (2012);
  - Aquifer Interference Policy (2012);
- NSW State Rivers and Estuary Policy (1993);
- NSW State Groundwater Policy Framework Document (1997);
- NSW State Groundwater Quality Protection Policy (1998);
- NSW State Groundwater Dependent Ecosystems Policy (2002); and
- Department of Primary Industries Risk Assessment Guidelines for Groundwater Dependent Ecosystems (2012);
  - NSW Water Extraction Monitoring Policy (2007);
- Australian Groundwater Monitoring Guidelines (2012).

http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/default.aspx
http://www.water.nsw.gov.au/Water-licensing/Approvals?Controlled-activities/default.aspx

The EIS needs to demonstrate the proposal is consistent with the spirit and principles of these policy documents.

Licensing Considerations
The EIS is required to provide:

- Details of the water supply source(s) for the proposal including any proposed surface water and groundwater extraction from each water source as defined in the relevant Water Sharing Plan/s and all water supply works to take water.
- Information on the purpose, location, construction and expected annual extraction volumes including details on all existing and proposed water supply works which take surface water, (pumps, dams, diversions, etc).
- Details on all bores and excavations for the purpose of investigation, extraction, dewatering, testing and monitoring. All predicted groundwater take must be accounted for through adequate licensing.
- Details on existing dams/storages (including the date of construction, location, purpose, size and capacity) and any proposal to change the purpose of existing dams/storages.
- Details on the location, purpose, size and capacity of any new proposed dams/storages.

Water allocation account management rules, total daily extraction limits and rules governing environmental protection and access licence dealings also need to be considered.

The Harvestable Right gives landholders the right to capture and use for any purpose 10 % of the average annual runoff from their property. The Harvestable Right has been defined in terms of an equivalent dam capacity called the Maximum Harvestable Right Dam Capacity (MHRDC). The MHRDC is determined by the area of the property (in hectares) and a site-specific run-off factor. The MHRDC includes the capacity of all existing dams on the property that do not have a current water licence. Storages capturing up to the harvestable right capacity are not required to be licensed but any capacity of the total of all storages/dams on the property greater than the MHRDC may require a licence.

For more information on Harvestable Right dams:
http://www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff

Groundwater Assessment
To ensure the sustainable and integrated management of groundwater sources, the EIS needs to include adequate details to assess the impact of the project on all groundwater sources including:

- The predicted highest groundwater table at the site.
- Works likely to intercept, connect with or infiltrate the groundwater sources.
- Any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.
- A description of the flow directions and rates and physical and chemical characteristics of the groundwater source.
- The predicted impacts of any final landform on the groundwater regime.
- The existing groundwater users within the area (including the environment), any potential impacts on these users and safeguard measures to mitigate impacts.
- An assessment of the quality of the groundwater for the local groundwater catchment.
- An assessment of groundwater contamination (considering both the impacts of the proposal on groundwater contamination and the impacts of contamination on the proposal).
- Measures proposed to protect groundwater quality, both in the short and long term.
- Measures for preventing groundwater pollution so that remediation is not required.
- Protective measures for any groundwater dependent ecosystems (GDEs).
- Proposed methods of the disposal of waste water and approval from the relevant authority.
- The results of any models or predictive tools used.

Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- Any proposed monitoring programs, including water levels and quality data.
- Reporting procedures for any monitoring program including mechanism for transfer of information.
- An assessment of any groundwater source/aquifer that may be sterilised from future use as a water supply as a consequence of the proposal.
- Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).
- Description of the remedial measures or contingency plans proposed.

- Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

Groundwater Dependent Ecosystems
It is suggested the EIS considers the potential impacts on any Groundwater Dependent Ecosystems (GDEs) at the site and in the vicinity of the site and:

- Identify any potential impacts on GDEs as a result of the proposal including:
  - the effect of the proposal on the recharge to groundwater systems;
  - the potential to adversely affect the water quality of the underlying groundwater system and adjoining groundwater systems in hydraulic connections; and
  - the effect on the function of GDEs (habitat, groundwater levels, connectivity).
- Provide safeguard measures for any GDEs.

Watercourse and Riparian Land
The EIS should consider the Guidelines for Controlled Activities on Waterfront Land (2012).

The EIS should address the potential impacts of the project on all watercourses likely to be affected by the project, existing riparian vegetation and the rehabilitation of riparian land. It is recommended the EIS provides details on all watercourses potentially affected by the proposal, including:

- Scaled plans showing the location of:
  - watercourses and top of bank;
  - riparian corridors widths to be established along the creeks;
  - existing riparian vegetation surrounding the watercourses (identify any areas to be protected and any riparian vegetation proposed to be removed);
  - the site boundary, the footprint of the proposal in relation to the watercourses and riparian areas; and
  - proposed location of any asset protection zones.
- Photographs of the watercourses.
- A detailed description of all potential impacts on the watercourses/riparian land.
- A description of the design features and measures to be incorporated to mitigate potential impacts.
- Geomorphic and hydrological assessment of water courses including details of stream order (Strahler System), river style and energy regimes both in channel and on adjacent floodplains.

End Attachment A

Regards
Wayne

Wayne Jones | Land Use Planning Coordinating Officer
Department of Primary Industries
Level 48, MLC Centre, 19 Martin Place Sydney NSW 2000
T:02 9338 6708 | E: wayne.jones@dpi.nsw.gov.au

NSW EPA

Your reference: SSD 14_6604
Our reference: EF13/5560; DOC14/144979-01
Contact: Stephanie Todd 02 6969 0700

The Student Planner
Infrastructure Projects
Development Assessment Systems and Approvals
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Mrs Rose

Re Proposed Griffith Solar Farm – SSD 14_6604

Thank you for your electronic mail dated 28 July 2014 to the Environment Protection Authority (EPA) requesting our information requirements for the Environmental Impact Statement (EIS) to be prepared for the proposed solar farm at Lots 59, 60, 61, 62, 81 and 82 DP 751728 Yoogali.

The EPA has responsibilities for the regulation of scheduled activities under the *Protection of the Environment Operations Act 1979* (the Act). We wish to advise that based on the information provided the proposed solar farm is not a scheduled activity under the Act and does not require an environment protection licence.

We have considered the details of the proposal as described in your electronic mail and have identified the information required for the EIS as outlined in Attachment 'A'. The key information requirements for the project are as follows.

- Identify the potential air quality impacts (dust) and potential noise impacts from the proposal and detail management and mitigation measures for those impacts; and
- Details on the proposed storm water collection, storage and disposal systems including demonstration that surface and ground waters will be protected through adequate design, construction and management.

In carrying out the assessment the proponent should refer to the relevant guidelines identified at Attachment 'B'.

PO BOX 397 Griffith NSW 2680
Suite 7, 130-140 Banna Avenue Griffith NSW
Tel: (02) 6969 0700 Fax: (02) 6969 0710
ABN 30 841 387 271
www.epa.nsw.gov.au

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

Yours sincerely

8/8/14

DARREN WALLETT
Head, Griffith Unit
Environment Protection Authority

ATTACHMENT 'A'

Potential environmental impacts of the project

The following potential environmental impacts of the project need to be assessed, quantified and reported on.

(a) Air;
(b) Noise;
(c) Water;
(d) Land; and
(e) Waste and chemicals.

The Environmental Impact Statement (EIS) should address how the required environmental goals outlined below will be met for each potential impact.

The EIS should describe mitigation and management options that will be used to prevent, control, abate or mitigate identified potential environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment.

This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Potential impacts on air quality

The goal of the project in relation to air quality should be to ensure sensitive receptors are protected from any adverse impacts from dust.

Details would need to be provided on the proposed measures to manage dust from all sources. Measures to prevent or control the emission of dust from the construction of the solar farm must be detailed based on the outcome of an assessment for dust undertaken in accordance with our guidelines the 'Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales' (EPA, 2005). The assessment must identify all sensitive receptors in proximity to the proposed development.

Emissions from any equipment used during construction must meet the design criteria detailed in the *Protection of the Environment Operations (Clean Air) Regulation 2010*. Details need to be provided on the proposed air pollution control techniques from any air emission points, including proposed measures to manage and monitor efficiency and performance.

Potential impacts of noise

Construction equipment has the potential to cause noise pollution, particularly where works are close to residential or noise sensitive areas. The goals of the project should include operation and maintenance of construction equipment in accordance with relevant EPA policy, guidelines and criteria, and in order to minimise potential impacts from noise.

We expect that potential noise sources are assessed in accordance with the 'NSW Industrial Noise Policy' (EPA, 2000), and where required mitigation measures are proposed (e.g. appropriate equipment chosen to minimise noise levels). All residential or noise sensitive premises likely to be impacted by the development must be identified and included in the assessment.

The proposed development will result in increased traffic movements. The potential noise impacts associated with any traffic increases need to be assessed in accordance with the 'NSW Road Noise Policy' (EPA, 2011).

Potential impacts on water quantity and quality

The goals of the project should include:

- No pollution of waters (including surface and groundwater), except to the extent authorised by the EPA (i.e. in accordance with an Environment Protection Licence) and appropriate consideration should be given to a flood risk assessment;
- Polluted water (including process waters, wash down waters, polluted stormwater or sewage) should be captured on the site and collected, treated and beneficially reused, where this is safe and practicable to do so; and
- It is acceptable in terms of the achievement or protection of the NSW Water Quality and River Flow Objectives and the NSW Groundwater Quality Protection Policy.

The EIS should document the measures that will achieve the above goals.

Details of the site drainage and any natural or artificial waters within or adjacent to the development must be identified and where applicable measures proposed to mitigate potential impacts of the development on these waters. The EIS should provide details of the proposed design and construction of water management systems for the site to ensure surface and ground waters are protected from contaminants.

Potential impacts on land

The goals of the project should include:

- No pollution of land, except to the extent authorised by the EPA (ie in accordance with an Environment Protection Licence);
- The potential impact of land erosion from the development is mitigated;
- That landscapes impacted by stockpiling and vehicle movements are appropriately monitored and managed in accordance with relevant EPA guidelines.

The EIS should document the measures that will achieve the above goals.

Waste and chemicals

The goals of the project should include:

- To ensure that environmental risks from hazardous waste emissions and hazardous chemicals are minimised. The EIS must identify the potential hazardous chemical emissions from all processes and the proposed type, quantity and location of chemicals to be stored on site;
- No waste disposal occurs on site except in accordance with an Environment Protection Licence;
- Spill management measures, including items such as bunding, and emergency procedures should be clearly outlined;
- Waste products from the development must be processed in accordance with the relevant EPA waste guidelines.

ATTACHMENT 'B'

Guidance Material

Air quality

- Protection of the Environment Operations (Clean Air) Regulation 2010
- Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2005)
- Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2005)
- Assessment and Management of Odour from Stationery Sources in NSW (EPA, 2006)

Noise and vibration

- NSW Industrial Noise Policy (EPA, 2000)
- NSW Road Noise Policy (EPA, 2011)
- Assessing Vibration: a technical guideline (EPA, 2006)
- Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)
- Interim Construction Noise Guidelines (EPA, 2009)

Water quality

- National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ, 2000)
- National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ, 2000)
- Using the ANZECC Guidelines and Water Quality Objectives in NSW (EPA, 2006)

Groundwater

- The NSW State Groundwater Policy Framework Document (DLWC, 1997)
- The NSW State Groundwater Quality Protection Policy (DLWC, 1998)
- The NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)
- National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC, 1995)

Stormwater

- Managing Urban Stormwater: Soils and Construction (Landcom, 2004)
- Managing Urban Stormwater: Treatment Techniques (Draft) (EPA, 1997)

Wastewater

- Environmental Guidelines: Use of Effluent by Irrigation (EPA, 2004)
- Environmental Guidelines: Storage and Handling of liquids (EPA, 2007)

Waste

- Waste Classification Guidelines (EPA, 2008)
- Environmental Guidelines: Use and Disposal of Biosolids Products (EPA, 1997)
- Environmental Guidelines: Composting and Related Organics Processing Facilities (EPA, 2004)
- Environmental Guidelines: Solid Waste Landfills (EPA, 1996)

Reference: 102488

11/08/2014

Lauren Rose
Student Planner
Infrastructure Projects
Development Assessment Systems & Approvals
Department of Planning & Environment
GPO Box 39 | Sydney NSW 2001

Dear Ms Rose

RE: NEOEN "GRIFFITH SOLAR FARM" SEARS REQUEST COMMENTS - GRIFFITH CITY COUNCIL – LOTS 59-62 AND 81-82 DP 751728, YOOGALI

The intent of this letter is to provide comments relating to the proposed "Griffith Solar Farm" Scoping Report and Draft Secretary's Environmental Assessment Requirements. The applicant proposes to construct a 30 MVA solar photovoltaic (PV) plant and associated infrastructure on Lots 59, 60, 61, 62, 81 and 82 DP 751728, Yoogali (corner of Irrigation Way and Mirrool Branch Canal Road). The subject site is approximately 55 Ha, is zoned RU1 – Primary Production and is presently used for irrigated agriculture. Council officers have reviewed the Scoping Report and are generally satisfied with the draft SEAR's provided by the Department of Planning and Environment and have provided comments, issues and additional assessment requirements in Attachment 'A'.

For further information regarding this matter please contact Coordinator of Planning and Compliance, Kelly McNicol at 02 6962 8110.

Yours sincerely

KELLY MCNICOL
COORDINATOR OF PLANNING AND COMPLIANCE

Griffith City Council, PO Box 485, Griffith NSW 2680, 1 Benerembah Street, Griffith NSW 2680
• Ph: 02 6962 8100 • Fax: 02 6962 7161 Corporate • 02 6964 4369 Engineering
Email: admin@griffith.nsw.gov.au • Web: www.griffith.nsw.gov.au

ATTACHMENT A – GRIFFITH CITY COUNCIL COMMENTS – NEOEN SCOPING REPORT AND DRAFT SEARS

The draft SEAR's have been reviewed and Griffith City Council would like the applicant to provide the following additional information, plans and analysis:

Development Control Plans, Policies and Plans

The following Development Control Plans and Council Policies are applicable to the proposed development and should be addressed in the EIS:

- Griffith Local Environmental Plan 2014
- Griffith Land Use Strategy: Beyond 2030
- Development Control Plan No. 1 – Non-Urban Development
- Development Control Plan No. 20 – Off-Street Parking (2011)
- Onsite Waste Management Plan
- Griffith City Council Engineering Guidelines
- Section 94A Contributions Plan

Flora and Fauna

- A Landscaping / Vegetation Plan shall be prepared showing the location of all proposed and existing vegetation. The Plan shall include a suitable visual buffer surrounding the proposed PV plant and infrastructure. Any proposed vegetation on site should include species typically associated with weeping myall woodland.
- The accessways shall be located so as to disturb the least number of weeping myall trees and associated vegetation.
- A re-vegetation / site remediation plan should be required to ensure that at the end of the lifespan of the PV plant and infrastructure the site is returned to its previous state and the infrastructure is not abandoned.

Plans of the Site Office and Maintenance Building

- The applicant shall provide floor plans and elevations of the proposed site office and maintenance building as well as ensure the locations are detailed on the overall site plan.
- The proposed vehicle parking locations shall be provided on the site plan.

Essential Services:

- The applicant is to identify potable water requirements (if any) for the site. The applicant is to make their own arrangements with MI in relation to the raw water supply to the site. MI's written approval is to be obtained for any alteration to MI's infrastructure, and the construction of any vehicular access over MI's infrastructure.
- The applicant is to make their own arrangements with the service provider to ensure the supply of electricity is sufficient to meet the demands of the proposed development.
- The applicant is to make their own arrangements in regards to the sewage discharge for the proposed site office and maintenance building. The requirements outlined in *Council's On-Site Sewage Management Plan* will apply.

Drainage

- As part of the submitted documentation, the applicant has not provided any details in relation to the stormwater drainage or on-site conservation. The subject allotments are surrounding by three (3) Murrumbidgee Irrigation raw water supply channels. The site is currently used for irrigated crop farming practices and has associated drainage swales, drains etc for the purposes of farming drainage. In its current capacity it appears that stormwater drainage does not cross over neighbouring property boundaries. Due to the nature of the proposal, additional stormwater runoff would be associated with the solar farm, the office building, accessway and internal access track etc. The applicant is to provide details of stormwater drainage for the site to ensure stormwater runoff is controlled and to ensure stormwater runoff does not cross over property boundaries.

Access and Traffic

The applicant has stated in the submitted documentation that the preferred route to the site is to be from Irrigation Way, onto Mirrool Branch Canal Road, and then onto Poletta Road.

The intersection of Hamilton Road and Irrigation Way is located west of the site and is available to access the subject site. See Figure 2 below. Sufficient sight distance is available for vehicles entering Irrigation Way from Hamilton Road.

Figure 2 – Hamilton Road. Photo taken from Hamilton Road looking south-west.

Hamilton Road is a bitumen sealed road with a sealed width of approximately six (6) metres. See Figure 3 below.

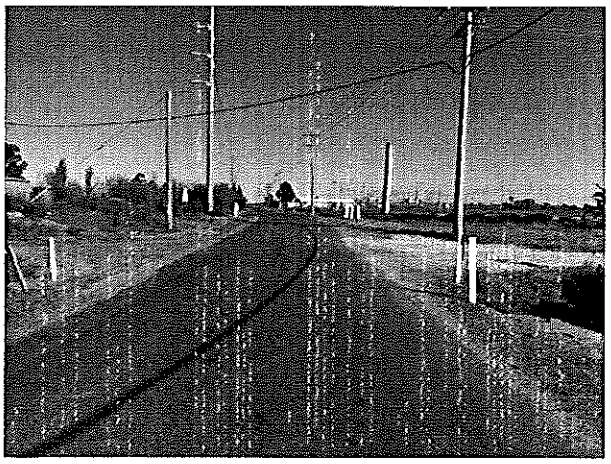

Figure 3 – Hamilton Road. Photo taken from Hamilton Road looking south-west.

A State Rail Corp railway line is located parallel to Irrigation Way and crosses Hamilton Road. The vehicle stacking distance from the edge of Irrigation Way to the stop sign of the railway line is approximately fifteen (15) meters in length.

This stacking distance is not sufficient for a standard nineteen (19) meter semi-trailer vehicle to turn from Irrigation Way and stop at the railway line to prevent vehicle overhang onto Irrigation Way. It is expected that semi-trailer vehicles would only be required to access the subject site during construction activity and not during general operation/maintenance of the solar farm. This is to be confirmed by the applicant as part of the application for the development.

The intersection of Irrigation Way and Mirrool Branch Canal Road is located south of the subject site and is available to access the subject site. See Figure 4 below. Sufficient sight distance is available for vehicles entering Irrigation Way from Mirrool Branch Canal Road.

Figure 4 – Intersection of Mirrool Branch Canal Road and Irrigation Way. Photo taken from Mirrool Branch Canal Road looking south-west.

Mirrool Branch Canal Road is a gravel all weather road with a carriageway width of approximately six (6) metres. See Figure 5 below.

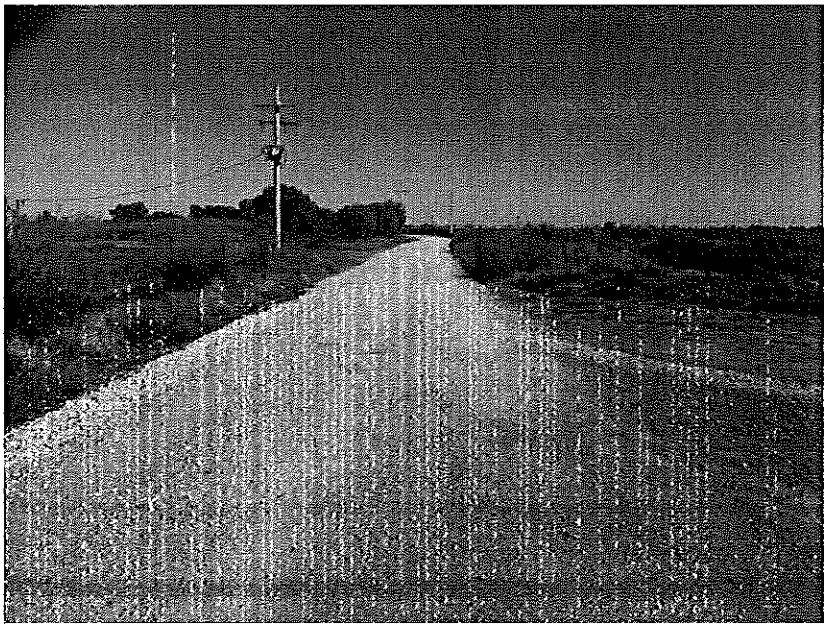

Figure 5 – Mirrool Branch Canal Road. Photo taken from Mirrool Branch Canal Road looking south-west.

A State Rail Corp railway line is located parallel to Irrigation Way and crosses Mirrool Branch Canal Road. The vehicle stacking distance from the edge of Irrigation Way to the stop sign of the railway line is approximately nineteen (19) meters in length.

This stacking distance is not sufficient for a standard nineteen (19) meter semi-trailer vehicle to turn from Irrigation Way and stop at the railway line to prevent vehicle overhang onto Irrigation Way. It is expected that semi-trailer vehicles would only be required to access the subject site during construction activity and not during general operation/maintenance of the solar farm. This is to be confirmed by the applicant as part of the application for the development.

Construction Management

The applicant is to submit a Construction Management Plan to outline the provision for construction vehicle activity anticipated to be associated with the construction of the development.

It is important to note that any vehicular access off Poletta Road, will require Poletta Road to be constructed to a width and standard as specified in *Council's Engineering Guidelines Subdivision and Development Standards December 2008.* This is due to Poletta Road currently not constructed to any formalized surface or width to accommodate traffic movements associated with this type of development. See Figure 6 below. The Construction Management Plan is to include, but not be limited to the following information:

- type, size and number of vehicles to be associated with the construction of the site;
- route of construction vehicles to the site;
- signage, including on the site, and for traffic control (where applicable);
- construction access to the site;
- location(s) for the stockpile of materials, soil, and construction vehicles onsite;
- loading and unloading activities/locations onsite;
- soil, dust and erosion suppression measures during construction;
- any other construction activity which may impact on neighbouring developments and/or the surrounding road network.

The applicant is to also provide details of the number and size of vehicles associated with the day to day operations of the development. The applicant is also to provide details of vehicular access to the site during day to day operations; this is to include vehicles travelling from the existing substation on Lot 1 DP 865611 to the subject site. It is important to note that any vehicular access off Poletta Road, will require Poletta Road to be constructed to a width and standard as specified in *Council's Engineering Guidelines Subdivision and Development Standards December 2008.* This is due to Poletta Road currently not constructed to any formalized surface or width to accommodate traffic movements associated with this type of development. See Figure 6 below.

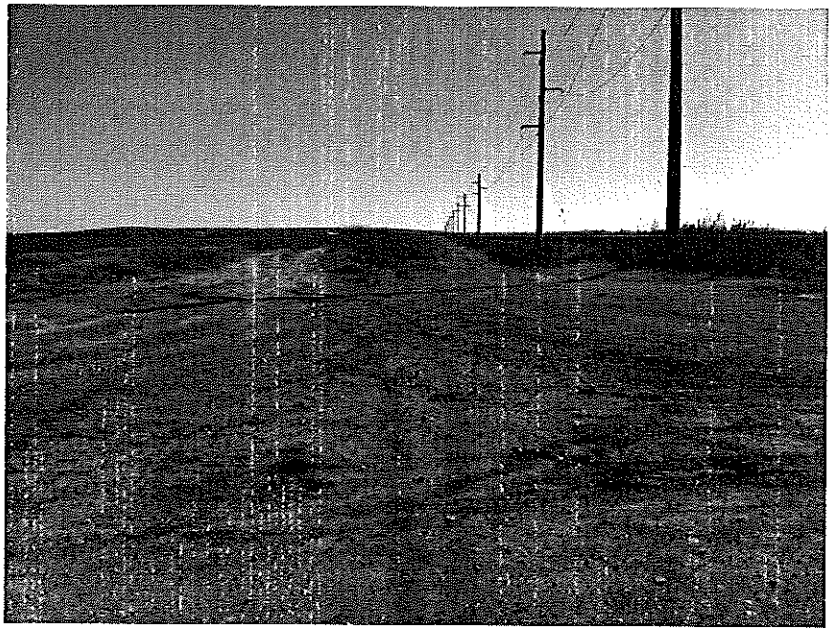

Figure 6 – Poletta Road, looking north-west.

8 August 2014

CR2014/004016
SF2014/060432
MM

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

Attention: Lauren Rose

SSD14-6604 – PROPOSED SOLAR FARM, LOTS 59 60 62 81 & 82 DP751728, IRRIGATION WAY (MR80), YOOGALI.

I refer to the Department's correspondence forwarded to Roads and Maritime Services requesting the provision of key issues and assessment requirements to be included in the Secretary's Environmental Assessment Requirements for the subject development proposal.

From review of the information provided it is understood that the development proposal represents the establishment of a Solar Farm with a capacity of up to 30MVA on the subject site. The subject site has frontage to Irrigation Way (MR80) which is a classified road within a 100 km/h speed zone. Irrigation Way is referred to as Griffith Road in the information provided. The information supplied provides limited detail in relation to potential traffic generation or regarding the proposed access arrangements to the public road network to the proposed development.

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

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

A Traffic Management Plan outlining measures to manage vehicular access to the site, particularly during the construction and decommissioning phases should be prepared. This plan shall detail the potential impacts associated with the phases of the development, the measures to be implemented to maintain the standard and safety of the road network, and procedures to monitor and ensure compliance.

Given the type and scale of the proposed development it is considered appropriate that issues relating to potential for distraction of, and for glare impacts on, passing motorist be addressed in any submission. As a minimum, consideration should be given to the establishment and maintenance of a visual buffer, such as a vegetated buffer, within the subject site along its frontage to any public road, particularly Irrigation Way.

1 Simmons Street Wagga Wagga NSW 2650 | PO Box 484 Wagga Wagga NSW 2650 | DX5407
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Roads and Maritime Services emphasises the need to minimise the impacts of any development on the existing road network and maintain the level of safety, efficiency and maintenance along the road network. Given the scale of the proposal a Traffic Impact Assessment (TIA) should be submitted with the Development Application. Any Traffic Impact Assessment needs to address the impacts of traffic generated by this development upon the nearby road network.

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

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) 69371611.

Yours faithfully

Per:
Mr Lindsay Tanner
Regional Manager
South West Region

Lauren Rose

From: Malcolm Drummond <malcolm.drummond@trade.nsw.gov.au>
Sent: Wednesday, 30 July 2014 8:40 AM
To: Lauren Rose
Subject: Request for Input for SEARs - Griffith Solar Farm

Dear Lauren,

NSW Trade & Investment - Mineral Resources Branch have no resource related issues or assessment requirements in regard to the above proposal.
Kind Regards
Malcolm Drummond | Senior Geoscientist - Land Use Assessment
NSW Trade & Investment | Division of Resources and Energy
516 High Street | Maitland NSW 2320 | PO Box 344 | Hunter Region Mail Centre NSW 2310
T: 02 4931 6704 | E: malcolm.drummond@trade.nsw.gov.au
W: www.trade.nsw.gov.au | www.resourcesandenergy.nsw.gov.au

Lauren Rose

From: Airport Developments <Airport.Developments@AirservicesAustralia.com>
Sent: Thursday, 31 July 2014 10:39 AM
To: Lauren Rose
Cc: Carly Fiumara
Subject: FW: Request for Input for SEARs - Griffith Solar Farm
Attachments: 1625_001.pdf; Scoping study_Griffith_Solar_Farm.pdf; Griffith Draft SEARs.docx; ATT00001.txt

Hi Lauren

I hope you aren't getting sick of me yet… just making sure that all the bases are covered! This is the same story as Jemalong so please send us through the below information when you receive it for both Jemalong and Griffith.

- Heights of all structures in AHD
- Corner coordinates for the station
- What exactly is being installed, including technical specifications &
- Any transmitting devices ad their subsequent technical specifications.

Thanks Lauren, feel free to give me a buzz tomorrow if you want to.

Jessica

Jessica Neidert/Airport Development Assistant
E-mail: jessica.neidert@airservicesaustralia.com

Airservices Australia
Ph +61 2 6268 4725 Fax +61 2 6268 4003
www.airservicesaustralia.com

From: Lauren Rose [mailto:Lauren.Rose@planning.nsw.gov.au]
Sent: Monday, 28 July 2014 5:56 PM
To: Airport Developments
Subject: Request for Input for SEARs - Griffith Solar Farm

Dear Tony,

Please find attached a letter requesting input to the Secretary's Environmental Assessment Requirements (SEARs) for the above proposal together with the draft SEARs and the Scoping Report.

The Department requests that you provide details of any key issues and assessment requirements by **Friday 8 August.**

Lauren Rose
Student Planner
Infrastructure Projects
Development Assessment Systems & Approvals
Department of Planning & Environment
GPO Box 39 | Sydney NSW 2001 | T 02 9228 6325| E lauren.rose@planning.nsw.gov.au

Lauren Rose

From: Tim Pearse
Sent: Thursday, 7 August 2014 5:12 PM
To: Lauren Rose
Subject: RE: Request for Input for SEARs - Jemalong Solar Station & Griffith Solar Farm
Attachments: Request for Input for SEARs - Griffith Solar Farm; Request for Input for SEARs - Jemalong Solar Station

Dear Lauren,

I'm writing to provide a response to the Department of Planning & Infrastructure on the Telco Authority requirement for wording in the SEAR's for Jemalong Solar Station and the Griffith Solar Farm.
The Telco Authority can advise that on this occasion for both of these developments that the risk of interference into the Telco Authority's radio communications is very low risk.
In both cases I have also spoken to my colleagues within the Rural Fire Service and they have also assessed that these developments are no risk to RFS radio communications activities.
Therefore no additional wording is required in the SEAR's for these 2 developments.

However, given each development circumstance is different, the Telco Authority would be grateful if NSW Planning can advise all future developments so it can review the proposal and advise on the requirements to SEAR's.

Kind regards

Tim Pearse
Manager – Facilities Planning
NSW Telco Authority
Level 17W, McKell Building
2-24 Rawson Place Sydney 2000
p: 02 9372 8252 | f: 02 9372 7954 | m: 0412 998 674
email:tim.pearse@finance.nsw.gov.au
www.telco.nsw.gov.au

NSW GOVERNMENT | Telco Authority

Note: My free/busy calendar information may not be up to date in Groupwise as I am on the Oulook 2010 Pilot. Please contct me by phone, email or Instant Messenger to confirm my availability.

From: Lauren Rose
Sent: Tuesday, 22 July 2014 4:19 PM
To: Tim Pearse
Subject: Request for Input for SEARs - Jemalong Solar Station

Dear Mr Pearse

Please find attached a letter requesting input to the Secretary's Environmental Assessment Requirements (SEARs) for the above proposal together with the draft DGRs and the Scoping Report.

The Department requests that you provide details of any key issues and assessment requirements by **Tuesday 5 August.**

Lauren Rose
Student Planner
Infrastructure Projects
Development Assessment Systems & Approvals
Department of Planning & Environment
GPO Box 39 | Sydney NSW 2001 | T 02 9228 6325| E lauren.rose@planning.nsw.gov.au