OUT17/10176

Elle Donnelley
A/Senior Planner
Resource Assessments & Planning Services
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Elle.Donnelley@planning.nsw.gov.au

Dear Elle

Further Advice-Coleambally Solar Farm - Request for input to SEARs

I refer to your email dated 23 January 2017 inviting the Division of Resources & Energy (DRE) to provide comments on the Coleambally Solar Farm - Request for input to SEARs.

DRE has reviewed and assessed the adequacy of information in relation Coleambally Solar Farm - Request for input to Secretary's Environmental Assessment (EA) Requirements (SEARs) and provides the following advice.

An important aspect of mineral and energy exploration is that geological knowledge and technological advances in exploration techniques change over time and as such the prospectivity of an area could also change over time.

Although currently, there are no known mineral (including metallic minerals, industrial minerals and construction materials) or energy (including coal petroleum) resources within the project site or current mineral, coal or petroleum titles or exploration tenements, the proponent should consider the potential for the project (including electricity transmission infrastructure which should be indicated on maps in the EA) to impact upon mineral and energy resources and exploration at various stages during the planning and construction stages of the project.

It is important that the proponent conduct an assessment as part of the EA, regarding the potential impacts of the project, including electricity transmission infrastructure, on any significant mineral and energy resources, including:

- Any operating mines, extractive industries or known mineral or petroleum resources
- Exploration activities in the vicinity of the proposed development
- Access for future exploration in the area.

DRE notes that there are several identified council operated construction material sites/operations in immediate vicinity of the project site. Refer to Figure 1 (below) for quarry locations.

DRE specifically requires the proponent to:

1. Inform DRE of the location of proposed electricity transmission infrastructure. It is not clear in the scoping document where the transmission lines for the project will be located, which may have implications for future exploration access.
2. Consult with Murrumbidgee Council regarding potential impacts on the continued operation and any potential future expansions of the quarries in the vicinity of the project area (refer to Figure 1) note: this should include evidence of notification of the project provided to Murrumbidgee Council including a map indicating the solar farm proposal area (including associated electricity transmission infrastructure) and any evidence of response from Council to the proponent.
3. Regularly check for new mineral and energy titles that may be granted during the planning, construction and implementation phases of the project to ensure that other stakeholders with interests in the subject area are consulted about the project. Titles searches can be carried out using the DRE Common Ground viewer at the location below:

http://www.resourcesandenergy.nsw.gov.au/landholders-and-community/common-ground

4. The EA documentation should also indicate, on a map or other visual means, the following:

    - the extent of the Project area
    - the location of affected minerals titles (adjacent and adjoining)
    - transmission and (project) related infrastructure
    - any transmission corridors
    - any other relevant information.

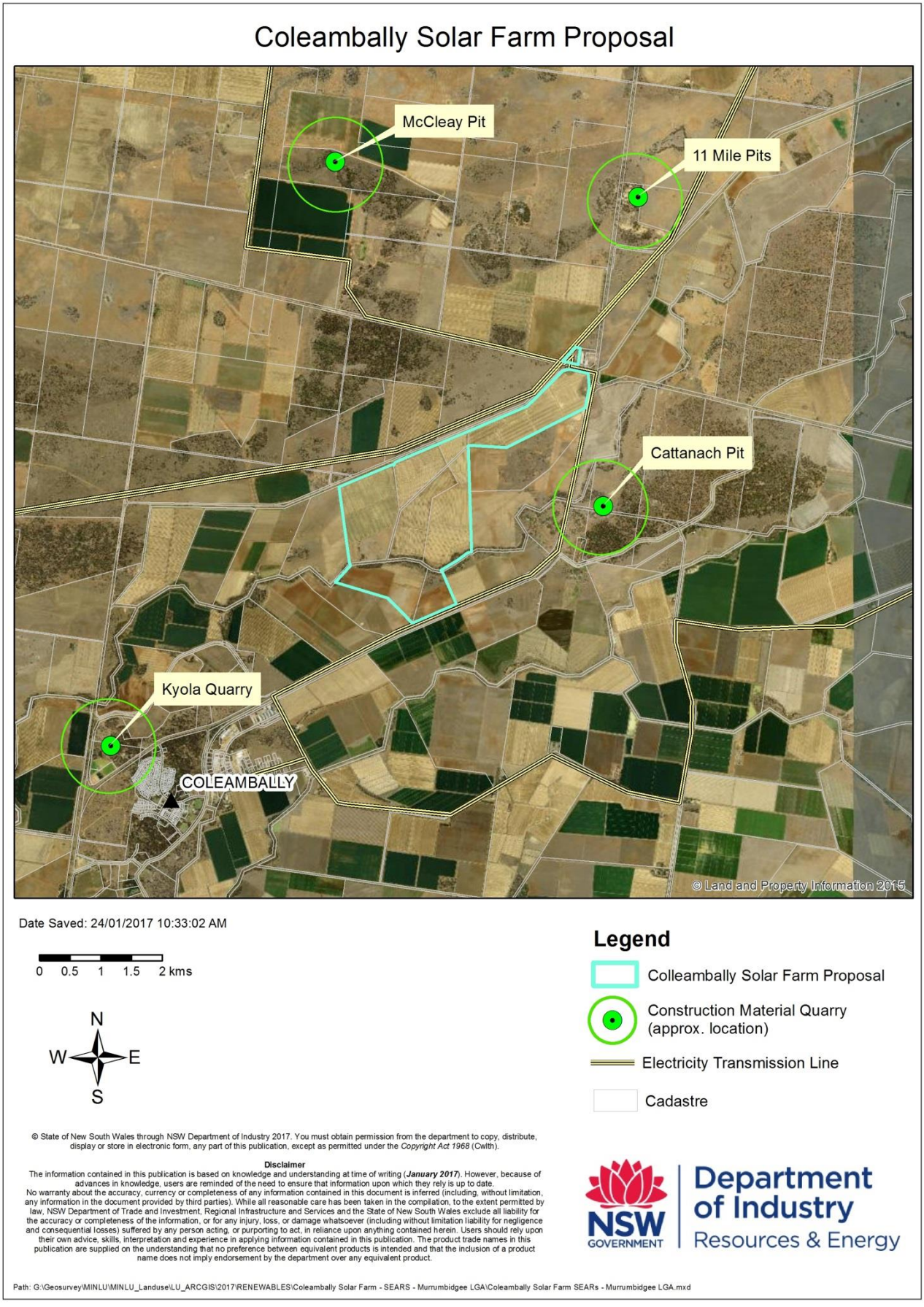
Should you have any enquires regarding this matter please contact Steve Cozens, Senior Project Officer, Royalty & Advisory Services on 9842 8573.

Yours sincerely

Steve Cozens
Senior Project Officer
Royalty & Advisory Services

cc. Gemma Barber
NGH Environmental
gemma.b@nghenvironmental.com.au

Figure 1 – Coleambally Solar Farm Proposal – Construction Material Quarry Locations



Gemma Barber

From: steve.cozens@industry.nsw.gov.au on behalf of Industry Coordination <industry.coordination@industry.nsw.gov.au>
Sent: Tuesday, 21 March 2017 2:08 PM
To: Elle.Donnelley@planning.nsw.gov.au
Cc: Gemma Barber; planning.matters@environment.nsw.gov.au; Shirley Hibbs
Subject: Re: Coleambally Solar Farm - Request for input to SEARs
Attachments: OUT17 10176 - Colleambally Solar Farm SEARS further advice to DPE.docx

Hi Elle

Some time ago we discussed DRE's reconsidered position on possible mineral resource sterilisation due to this project.

Please find attached DRE's specific requirements for the project SEARs.

I would appreciate it if these comments replace DRE's advice dated 1 February 2017.

I will cc. these additional comments to the proponent.

Kind regards

Steve

Royalty and Advisory Unit
NSW Trade & Investment | Resources & Energy | Operations & Programs
516 High St | Maitland NSW 2320 | PO Box 344 | HRMC NSW 2310
T: 02 4931 6666 | F: 02 4931 6776 | E: industry.coordination@industry.nsw.gov.au
W: www.industry.nsw.gov.au | www.resourcesandenergy.nsw.gov.au
Twitter: @nswre | Facebook: nswre

On 23 January 2017 at 09:56, Elle.Donnelley@planning.nsw.gov.au <Elle.Donnelley@planning.nsw.gov.au> wrote:

> **Coleambally Solar Farm (SSD 8208)**
>
> **Request for Input into Secretary's Environment Assessment Requirements (SEARs)**
>
> Good afternoon
>
> Neoen Australia Pty Ltd (Neoen) has requested SEARs for the Coleambally Solar Farm, located 5 kilometres north east of Coleambally within the Murrumbidgee Local Government Area.

The project involves constructing and operating a new 150 megawatt capacity solar farm; connecting the site to an existing substation; and accessing the site via Kidman Way (B87) or Ercildoune Road.

The project is a State Significant Development under Part 4 of *the Environmental Planning and Assessment Act 1979*.

You are invited to provide input into the drafting of the SEARs for an Environmental Impact Statement for the development. It would be appreciated if you would review the attached Preliminary Environmental Assessment and **provide input by Friday 3 February 2017.**

Thank you and please feel free to contact me to discuss.

Kind regards,

Elle

Elle Donnelley

A/Senior Planner | Resource Assessments | Planning Services

Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6340 E elle.donnelley@planning.nsw.gov.au

****My regular work days are Tuesday, Thursday and Friday**

NSW GOVERNMENT Planning & Environment

From: Susan Appleyard
To: Elle Donnelley
Subject: Re: Coleambally Solar Farm - Request for input to SEARs
Date: Thursday, 9 February 2017 10:52:55 PM

Elle
Sorry for the delay in getting back to you. Council's only issue not addressed in the preliminary document is the impact on council road infrastructure to connect to the substation. This will be remedied by a road opening permit which we have discussed with the application.
Regards
Susan

Sent from my iPhone

On 9 Feb 2017, at 4:11 pm, "Elle.Donnelley@planning.nsw.gov.au" <Elle.Donnelley@planning.nsw.gov.au> wrote:

> Hi Susan
>
> I'm following up a request I sent for input from Council on the proposed Coleambally Solar Farm project.
>
> I have attached my original request, which I understand may not have reached you via the mail@murrumbidgee.nsw.gov.au address.
>
> The SEARs need to be issued by COB Monday 13 February, so I would greatly appreciate a quick chat with you about the matter today if possible.
>
> Many thanks
>
> Elle
>
> **Elle Donnelley**
> **A/Senior Planner | Resource Assessments | Planning Services**
> Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
> T 02 9274 6340 E elle.donnelley@planning.nsw.gov.au
>
> <image001.jpg>
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> ---
>
> **From:** Elle Donnelley
> **Sent:** Monday, 23 January 2017 9:57 AM
> **To:** 'industry.coordination@industry.nsw.gov.au' <industry.coordination@industry.nsw.gov.au>; Planning Matters Mailbox <planning.matters@environment.nsw.gov.au>; 'mail@murrumbidgee.nsw.gov.au' <mail@murrumbidgee.nsw.gov.au>; EPA Planning Matters Mailbox <planning.matters@epa.nsw.gov.au>; 'landuse.enquiries@dpi.nsw.gov.au'; 'development.south.west@rms.nsw.gov.au'

<development.south.west@rms.nsw.gov.au>; 'admin.riverina@lls.nsw.gov.au' <admin.riverina@lls.nsw.gov.au>
Subject: Coleambally Solar Farm - Request for input to SEARs

Coleambally Solar Farm (SSD 8208)
Request for Input into Secretary's Environment Assessment Requirements (SEARs)

Good afternoon

Neoen Australia Pty Ltd (Neoen) has requested SEARs for the Coleambally Solar Farm, located 5 kilometres north east of Coleambally within the Murrumbidgee Local Government Area.

The project involves constructing and operating a new 150 megawatt capacity solar farm; connecting the site to an existing substation; and accessing the site via Kidman Way (B87) or Ercildoune Road.

The project is a State Significant Development under Part 4 of *the Environmental Planning and Assessment Act 1979*.

You are invited to provide input into the drafting of the SEARs for an Environmental Impact Statement for the development. It would be appreciated if you would review the attached Preliminary Environmental Assessment and **provide input by Friday 3 February 2017.**

Thank you and please feel free to contact me to discuss.

Kind regards,

Elle

Elle Donnelley
A/Senior Planner | Resource Assessments | Planning Services
Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6340 E elle.donnelley@planning.nsw.gov.au

****My regular work days are Tuesday, Thursday and Friday**

<image001.jpg>

<Coleambally Solar - Preliminary Environmental Assessment.pdf>

NSW GOVERNMENT | Department of Primary Industries

OUT17/5364

Ms Elle Donnelly
Resource Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Elle.donnelley@planning.nsw.gov.au

Dear Ms Donnelley

Coleambally Solar Farm (SSD 8208)
Request for Secretary's Environmental Assessment Requirements

I refer to your email of 23 January 2017 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant divisions of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI.
Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

DPI has reviewed the Preliminary Environmental Assessment and advises that the Environmental Impact Statement should be required to include the following:

- An assessment of the impact of the development on agricultural land and flood prone land, a soil survey to consider the potential for erosion to occur, and paying particular attention to the compatibility of the development with the existing land uses on the site and adjacent land during operation and after decommissioning, with reference to the zoning provisions applying to the land.

- A Rehabilitation and Decommissioning/Closure Management Plan that outlines the rehabilitation objectives and strategies including; a description of the design criteria for the final landuse and landform, indicators to guide the return of the land back to agricultural production, expected timeline for rehabilitation, monitoring and mitigation measures to be adopted for rehabilitation remedial actions, and a commitment to bury cables and pipes to a depth >500mm on any land with a cropping history or land with a capability for cropping to allow greater opportunity for agricultural activities to continue above the cables. This is a particular issue for the cables/pipes which will be left in situ once restoration is complete.

- An assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources, wetlands, riparian land, groundwater dependent ecosystems and acid sulfate soils), related infrastructure, adjacent licensed water users and basic landholder rights, and measures proposed to monitor, reduce and mitigate these impacts

- Details of water supply arrangements.

General assessment recommendations for agricultural and water resources have been provided at **Attachments A** and **B** respectively to assist the proponent in the preparation of the Environmental Impact Statement.

Yours sincerely

Mitchell Isaacs
Director, Planning Policy & Assessment Advice
6 February 2017

DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:
https://goo.gl/o8TXWz

Attachment A

Coleambally Solar Farm (SSD 8208)
Request for Secretary's Environment Assessment Requirements
Detailed comments – DPI Agriculture

SEARs Recommendations

Issue and desired outcome	Detail / Requirement
Site Suitable for development	• Detail that the proposal is consistent with strategic plans and zone requirements • Complete a Landuse Conflict Risk Assessment (LUCRA) to identify potential landuse conflict, in particular relating to separation distances and management practices to minimise odour, dust and noise from sensitive receptors. A LUCRA is described in the DPI Land Use Conflict Risk Assessment Guide. • Include a map to scale showing the above operational and infrastructure details including separation distances from sensitive receptors.
Consideration for impacts to agricultural resources and land	• Describe the current and potential *Important Agriculture Land* on the proposed development site and surrounding locality including the land capability and agricultural productivity. • Demonstrate that all significant impacts on current and potential agricultural developments and resources can be reasonably avoided or adequately mitigated. • Consider possible cumulative effects to agricultural enterprises and landholders. • Detail the expected life span of the proposed development • Outline strategies to manage impact of agricultural aerial spraying in the area. • Outline details of potential landuse sharing with agriculture.
Bushfire risk identified and managed	• Risk assessment level and mitigation plan developed to address bush fire risk.
Suitable and secure water supply	• Estimated water demand and water availability should be clearly outlined in the proposal. The source of water and any sanitisation methods to be detailed in the application. • Outline any impacts to water use from agriculture and mitigation measures if required.
Surface & Groundwater protected	• Proposed development design, operation and by-product management should be undertaken to avoid nutrient and sediment build up and minimise erosion, off site surface water movement and groundwater accession. • The proposal should detail how design and operation will be undertaken for by-product management in accordance with best practice to prevent excess build-up of nutrients and salts in the soil profile and increase the risk of leaching. A monitoring program should be developed.
Biosecurity Standards met	• Include a biosecurity (pests, weeds and disease) risk assessment outlining the likely plant, animal and community risks as per guidelines in Attachment 2. • Develop a biosecurity response plan to deal with identified risks as well as contingency plans for any failures. Including monitoring and mitigation measures in weed, disease and pest management plans. • Details of adequate fencing to keep livestock out.
Suitable traffic movements	• Consideration of the route for movements needs to be taken into account so that impacts on sensitive receptors are minimised (eg noise, dust, volume of traffic). This should include consideration of Travelling Stock Reserves1 (TSR) and the movement of livestock or farm vehicles along / across the affected roads
Visual amenity achieved	• Amenity impacts are assessed and any necessary response to mitigate visual impacts is described and illustrated. In particular night lighting and glare from solar panels.
Land stewardship met	• Develop Rehabilitation and Decommissioning/Closure Management Plans that outlines the rehabilitation objectives and strategies. This includes, but is not limited to, describing the design criteria of the final landuse and landform, indicators to be used to guide the return of the land back to agricultural production, along with the expected timeline for the rehabilitation program. • Outline monitoring and mitigation measures to be adopted for rehabilitation remedial actions.

	• Any land with a cropping history or land with a capability for cropping cables/pipes to be buried at a depth >500mm to allow greater opportunity for agricultural activities to continue over the top, particularly for non-decommissioning cables/pipes once restoration is complete. • Trenching through sodic soils during construction must include soil amendment with Gypsum at a minimum rate of 10t/ha. Actual rates to be determined following soil testing (Clay content, ECEC and EC).
Adequate consultation with community	• Consult with relevant agencies such as on the design, construction and operation of the proposed infrastructure. • Consult with the owners / managers of affected and adjoining neighbours and agricultural operations in a timely and appropriate manner about; the proposal, the likely impacts and suitable mitigation measures or compensation. • Establish a complaints register that includes reporting and investigating procedures and timelines, and liaison with Council in relation to complaint issues.
Contingency and Environmental Management Plan developed	• Contingency plans should be developed to enable the operation to deal with emergency situations. Commitment to the preparation of an Emergency Management plan that outlines procedures and responsibilities for responding to bushfire threats and possible mass mortality events which might result from extreme climatic conditions, routine or emergency animal disease outbreaks.

Guidelines for assessment

Land Use Conflict Risk Assessment Guide	www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/lucra
Agricultural Issues for Extractive industry Development	http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/extractive-industries
Agricultural Issues for Landfill Developments	http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/landfill-developments
Infrastructure Proposals on Rural Land	http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/infrastructure-proposals

End Attachment A

Attachment B

Coleambally Solar Farm (SSD 8208)
Request for Secretary's Environment Assessment Requirements
Detailed comments – DPI Water

DPI Water General Assessment Requirements for general projects

The following detailed assessment requirements are provided to assist in adequately addressing the assessment requirements for this proposal.

For further information visit the DPI Water website, www.water.nsw.gov.au

Key Relevant Legislative Instruments

This section provides a basic summary to aid proponents in the development of an Environmental Impact Statement (EIS), and should not be considered a complete list or comprehensive summary of relevant legislative instruments that may apply to the regulation of water resources for a project.

The EIS should take into account the objects and regulatory requirements of the *Water Act 1912* (WA 1912) and *Water Management Act 2000* (*WMA 2000*), and associated regulations and instruments, as applicable.

Water Management Act 2000 (WMA 2000)
Key points:

- Volumetric licensing in areas covered by water sharing plans
- Works within 40m of waterfront land
- SSD & SSI projects are exempt from requiring water supply work approvals and controlled activity approvals as a result of the *Environmental Planning & Assessment Act 1979 (EP&A Act)*.
- No exemptions for volumetric licensing apply as a result of the *EP&A Act*.
- Basic landholder rights, including harvestable rights dams
- Aquifer interference activity approval and flood management work approval provisions have not yet commenced and are regulated by the *Water Act 1912*
- Maximum penalties of $2.2 million plus $264,000 for each day an offence continues apply under the *WMA 2000*

Water Act 1912 (WA 1912)
Key points:

- Volumetric licensing in areas where no water sharing plan applies
- Monitoring bores
- Aquifer interference activities that are not regulated as a water supply work under the *WMA 2000*.
- Flood management works
- No exemptions apply to licences or permits under the *WA 1912* as a result of the *EP&A Act*.
- Regulation of water bore driller licensing.

Water Management (General) Regulation 2011
Key points:

- Provides various exemptions for volumetric licensing and activity approvals
- Provides further detail on requirements for dealings and applications.

Water Sharing Plans – these are considered regulations under the *WMA 2000*

Access Licence Dealing Principles Order 2004

Harvestable Rights Orders
Water Sharing Plans

It is important that the proponent understands and describes the ground and surface water sharing plans, water sources, and management zones that apply to the project. The relevant water sharing plans can be determined spatially at www.ourwater.nsw.gov.au. Multiple water sharing plans may apply and these must all be described.

The *Water Act 1912* applies to all water sources not yet covered by a commenced water sharing plan.

The EIS is required to:

- Demonstrate how the proposal is consistent with the relevant rules of the Water Sharing Plan 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 (including groundwater dependent ecosystems), water quality and surface-groundwater connectivity.
- Provide a description of any site water use (amount of water to be taken 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, including:
    - Sufficient market depth to acquire the necessary entitlements for each water source.
    - Ability to carry out a "dealing" to transfer the water to relevant location under the rules of the WSP.
    - Daily and long-term access rules.
    - Account management and carryover provisions.
- Provide a detailed and consolidated site water balance.
- Further detail on licensing requirements is provided below.

Relevant Policies and Guidelines

The EIS should take into account the following policies (as applicable):

- NSW Guidelines for Controlled Activities on Waterfront Land (NOW, 2012)
- NSW Aquifer Interference Policy (NOW, 2012)
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012)
- Australian Groundwater Modelling Guidelines (NWC, 2012)
- NSW State Rivers and Estuary Policy (1993)
- NSW Wetlands Policy (2010)
- NSW State Groundwater Policy Framework Document (1997)
- NSW State Groundwater Quality Protection Policy (1998)
- NSW State Groundwater Dependent Ecosystems Policy (2002)
- NSW Water Extraction Monitoring Policy (2007)

DPI Water policies can be accessed at the following links:
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

An assessment framework for the NSW Aquifer Interference Policy can be found online at: http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/Aquifer-interference.

Licensing Considerations

The EIS is required to provide:

- Identification of water requirements for the life of the project in terms of both volume and timing (including predictions of potential ongoing groundwater take following the cessation of operations at the site – such as evaporative loss from open voids or inflows).
- 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.
- Explanation of how the required water entitlements will be obtained (i.e. through a new or existing licence/s, trading on the water market, controlled allocations etc.).
- 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.
- Applicability of any exemptions under the *Water Management (General) Regulation 2011* to the project.

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, including a calculator, visit:
http://www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff

Dam Safety

Where new or modified dams are proposed, or where new development will occur below an existing dam, the NSW Dams Safety Committee should be consulted in relation to any safety issues that may arise. Conditions of approval may be recommended to ensure safety in relation to any new or existing dams.

See www.damsafety.nsw.gov.au for further information.

Surface Water Assessment

The predictive assessment of the impact of the proposed project on surface water sources should include the following:

- Identification of all surface water features including watercourses, wetlands and floodplains transected by or adjacent to the proposed project.
- Identification of all surface water sources as described by the relevant water sharing plan.

- Detailed description of dependent ecosystems and existing surface water users within the area, including basic landholder rights to water and adjacent/downstream licensed water users.
- Description of all works and surface infrastructure that will intercept, store, convey, or otherwise interact with surface water resources.
- Assessment of predicted impacts on the following:
    - flow of surface water, sediment movement, channel stability, and hydraulic regime,
    - water quality,
    - flood regime,
    - dependent ecosystems,
    - existing surface water users, and
    - planned environmental water and water sharing arrangements prescribed in the relevant water sharing plans.

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.

Where it is considered unlikely that groundwater will be intercepted or impacted (for example by infiltration), a brief site assessment and justification for the minimal impacts may be sufficient, accompanied by suitable contingency measures in place in the event that groundwater is intercepted, and appropriate measures to ensure that groundwater is not contaminated.

Where groundwater is expected to be intercepted or impacted, the following requirements should be used to assist the groundwater assessment for the proposal.

- The known or 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.
- Bore construction information is to be supplied to DPI Water by submitting a “Form A” template. DPI Water will supply “GW” registration numbers (and licence/approval numbers if required) which must be used as consistent and unique bore identifiers for all future reporting.
- A description of the watertable and groundwater pressure configuration, flow directions and rates and physical and chemical characteristics of the groundwater source (including connectivity with other groundwater and surface water sources).
- Sufficient baseline monitoring for groundwater quantity and quality for all aquifers and GDEs to establish a baseline incorporating typical temporal and spatial variations.
- 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 groundwater quality, its beneficial use classification and prediction of any impacts on groundwater quality.
- An assessment of the potential for 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

The EIS must consider 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.

Watercourses, Wetlands and Riparian Land

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:
  - wetlands/swamps, watercourses and top of bank;
  - riparian corridor 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/wetlands and a map showing the point from which the photos were taken.
- A detailed description of all potential impacts on the watercourses/riparian land.
- A detailed description of all potential impacts on the wetlands, including potential impacts to the wetlands hydrologic regime; groundwater recharge; habitat and any species that depend on the wetlands.

- 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.

Landform rehabilitation

Where significant modification to landform is proposed, the EIS must include:

- Justification of the proposed final landform with regard to its impact on local and regional surface and groundwater systems;
- A detailed description of how the site would be progressively rehabilitated and integrated into the surrounding landscape;
- Outline of proposed construction and restoration of topography and surface drainage features if affected by the project; and
- An outline of the measures to be put in place to ensure that sufficient resources are available to implement the proposed rehabilitation.

Consultation and general enquiries
General licensing enquiries can be made to Advisory Services: water.enquiries@dpi.nsw.gov.au, 1800 353 104.

Assessment or state significant development enquiries, or requests for review or consultation should be directed to the Strategic Stakeholder Liaison Unit, water.referrals@dpi.nsw.gov.au.

A consultation guideline and further information is available online at:
www.water.nsw.gov.au/water-management/law-and-policy/planning-and-assessment

End Attachment B

NSW GOVERNMENT Department of Industry

OUT17/3132

Elle Donnelley
A/Senior Planner
Resource Assessments & Planning Services
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Elle.Donnelley@planning.nsw.gov.au

Dear Elle

Coleambally Solar Farm - Request for input to SEARs

I refer to your email dated 23 January 2017 inviting the Division of Resources & Energy (DRE) to provide comments on the Coleambally Solar Farm - Request for input to SEARs.

DRE has reviewed and assessed the adequacy of information in relation Coleambally Solar Farm - Request for input to Secretary's Environmental Assessment Requirements (SEARs) and provides the following advice.

DRE requires the proponent specifically to:

- Liaise with DRE regarding the location of proposed electricity transmission infrastructure. It is not clear in the scoping document where the transmission lines required for the project will be located, which may have implications for future exploration access.
- Consult with Murrumbidgee Council regarding potential impacts on the continued operation and any potential future expansions of the quarries.
  note: this should include evidence of notification of the project provided to Murrumbidgee Council including a map indicating the solar farm proposal area (including associated electricity transmission infrastructure) as set out in the requirements above, and any evidence of response from Council to the proponent.

The Environmental Assessment (EA) must consider the potential impact of the project, including associated ancillary infrastructure, on any mineral resources, as prescribed under the *Mining Act 1992* and construction materials, both within and adjacent to the project area.

The EA is to indicate, on a map or other visual means, the following:

- the extent of the Project area,
- the location of affected minerals titles (adjacent and adjoining),
- transmission and (project) related infrastructure,
- any transmission corridors, and
- any other relevant information.

The proponent must conduct an assessment as part of the EA, regarding the potential impacts of the project, including electricity transmission infrastructure, on any significant mineral resources, including:

- any operating mines, extractive industries or known mineral or petroleum resources
- exploration activities in the vicinity of the proposed development
- access for future exploration in the area.

DRE notes that there are several identified council operated construction material sites/operations in immediate vicinity of the project site. Refer to Figure 1 (below) for quarry locations.

For future title searches the proponent should refer to:

http://www.resourcesandenergy.nsw.gov.au/landholders-and-community/common-ground

Should you have any enquires regarding this matter please contact Steve Cozens, Senior Project Officer, Royalty & Advisory Services on 9842 8573.

Yours sincerely

Zane West
Manager Royalties & Advisory Services

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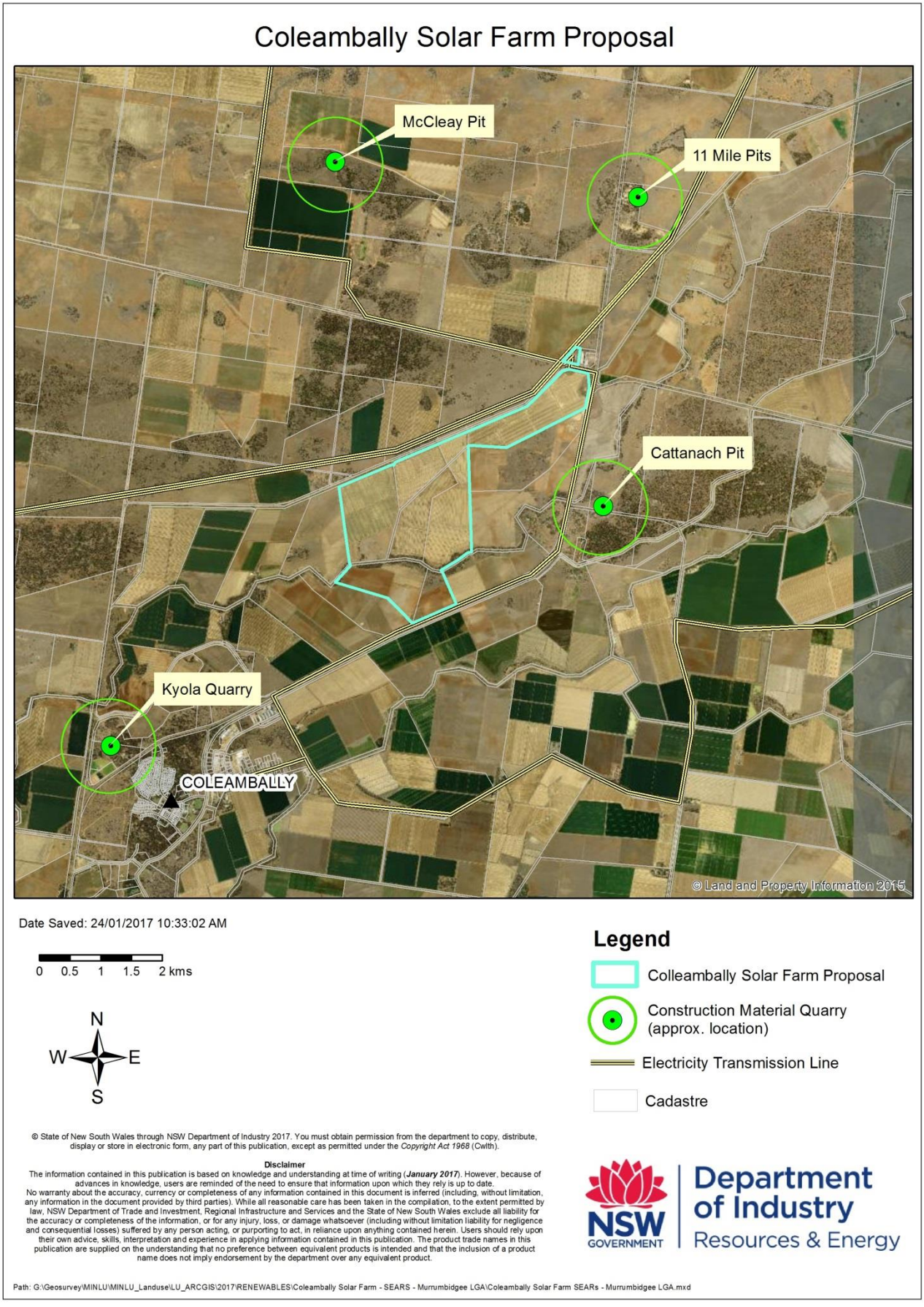
Figure 1 – Coleambally Solar Farm Proposal – Construction Material Quarry Locations



NSW EPA

PCU069348

Department of Planning
6 FEB 2017
Planning Room

Our Ref EF13/5300; DOC17/47618-01
Sender's Ref SSD 8208

The Acting Senior Planner
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Donnelley

Re Proposed Coleambally Solar Farm – SSD 8208

I refer to your electronic mail dated 23 January 2017 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 various Lot and DP locations north east of Coleambally.

The EPA has responsibilities for pollution control and environmental management for scheduled activities under the *Protection of the Environment Operations Act 1997* (POEO Act). Based on the information provided the proposed activity is not scheduled under the POEO Act and the proposed works do not require an Environment Protection Licence.

The EPA recommends that the proposal should be required to appropriately manage noise and air quality impacts during construction and consider waste management throughout the life of the project.

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

Yours sincerely

1/2/17

DARREN WALLETT
Head, Griffith Unit
Environment Protection Authority

PO Box 397 Griffith NSW 2680
Suite 7-9 Level 1 Griffith City Plaza 130-140 Banna Avenue Griffith
Tel: (02) 6969 0700 Fax: (02) 6969 0710
ABN 43 692 285 758
www.epa.nsw.gov.au

NSW GOVERNMENT | Office of Environment & Heritage

Your reference SSD 8208
Our reference: DOC 17/35640
Contact: Andrew Fisher
Ph. 6022 0623

Ms Elle Donnelley
A/Senior Planner - Resource Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Donnelley

RE: SEARs for proposed Coleambally Solar Farm (SSD 8208)

I refer to your email dated 23 January 2017 seeking input into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the proposed Coleambally Solar Farm (SSD 8208).

OEH has reviewed the available supporting documentation and provides SEARs for the proposed development in **Attachments A** and **B** and guidance material in **Attachment C.** Please note that both **Attachments A** and **B** include biodiversity matters that will need to be addressed. The assessment must include all ancillary infrastructure, such as transmission lines, parking facilities, equipment sheds and new vehicle tracks.

OEH recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting;
2. Aboriginal cultural heritage;
3. Water and soils; and
4. Cumulative impact.

Please note that the NSW Biodiversity Offsets Policy for Major Projects www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf is now being implemented. The policy provides a standard method for assessing impacts of major projects on biodiversity and determining offsetting arrangements. The policy is underpinned by the Framework for Biodiversity Assessment (FBA) www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf which contains the assessment methodology that is adopted by the policy to quantify and describe the impact assessment requirements and offset guidance that applies to Major Projects. The FBA must be used by a proponent to assess all biodiversity values on the development site.

Based on the information provided, the proposed site is largely cleared for cultivation but appears to contain at least seven patches of remnant vegetation. These include areas of Weeping Myall Woodland which is classified as an endangered ecological community under the *Threatened Species Conservation Act 1995.* These patches may also meet the definition of the Weeping Myall Woodland endangered ecological community under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Preliminary Assessment Report identified 16 previously recorded Aboriginal sites within ten kilometres of the proposal area with one site occurring within 200 metres of the northern boundary however current AHIMS database search results will need to be provided in the EIS to evidence this. The study also identifies that areas containing native vegetation are likely to contain previously undisturbed archaeological deposits associated with Aboriginal occupation. It is also noted in this report that an ecology field survey identified a potential heritage/scarred tree (European or Aboriginal) located within the Black Box Woodland wetland community at the Kook and Ercildoune Road junction opposite the substation. It is for these reasons that we recommend a comprehensive Aboriginal cultural heritage assessment, inclusive of any trees intended for impact, be undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal objects in NSW.* This should also be inclusive of consultation with the relevant Aboriginal parties.

PO Box 544 Albury NSW 2640
Second Floor, Government Offices
512 Dean Street Albury NSW 2640
Tel: (02) 6022 0624 Fax: (02) 6022 0610
ABN 30 841 387 271
www.environment.nsw.gov.au

We also recommend that this letter and attachments be provided to the proponent along with the SEARs as it contains additional information to support preparation of an adequate EIS. Of particular importance is the list of threatened entities identified in **Attachment B** which will require further consideration and provision of the information specified in s9.2 of the FBA.

If you have any questions regarding this matter please contact Andrew Fisher 6022 0623 or by email on andrew.fisher@environment.nsw.gov.au.

Yours sincerely

P.E 2/2/17

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

ATTACHMENT A – Standard Environmental Assessment Requirements
ATTACHMENT B – Project specific Environmental Assessment Requirements
ATTACHMENT C – Guidance Material

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed Coleambally Solar Farm are to be assessed and documented in accordance with the Framework for Biodiversity Assessment, unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995.*
Aboriginal cultural heritage
2. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the proposed Coleambally Solar Farm and document these in the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (OEH 2010), and should also be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and consultation with OEH regional officers.
3. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.
4. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
Historic heritage
5. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to *State and local heritage* including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall: a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria), c. include a statement of heritage impact for all heritage items (including significance assessment), d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and

e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.

Water and soils

6. The EIS must map the following features relevant to water and soils including:
   a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
   b. Rivers, streams, wetlands, estuaries (as described in Appendix 2 of the Framework for Biodiversity Assessment).
   c. Groundwater.
   d. Groundwater dependent ecosystems.
   e. Proposed intake and discharge locations.

7. The EIS must describe background conditions for any water resource likely to be affected by the proposed Coleambally Solar Farm, including:
   a. Existing surface and groundwater.
   b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
   c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
   d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.

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

9. The EIS must assess the impact of the proposed Coleambally Solar Farm on hydrology, including:
   a. Water balance including quantity, quality and source.
   b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
   c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.

d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
g. Identification of proposed monitoring of hydrological attributes.

Flooding

10. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic (floodways and flood storage areas).
11. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.
12. The EIS must model the effect of the proposed Coleambally Solar Farm (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
13. Modelling in the EIS must consider and document:
    a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
    b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
    c. Relevant provisions of the NSW Floodplain Development Manual 2005.
14. The EIS must assess the impacts on the proposed Coleambally Solar Farm on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Compatibility with the flood hazard of the land.
    d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.

f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B – Project specific Environmental Assessment Requirements

Biodiversity

15. Impacts on the following species, populations and ecological communities will require further consideration and provision of the information specified in s9.2 of the Framework for Biodiversity Assessment:
    - Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions
    - Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions
    - *Brachyscome papillosa* (Mossgiel Daisy)
    - *Convolvulus tedmoorei* (Bindweed)
    - *Lepidium monoplocoides* (Winged Peppercress)
    - *Maireana cheelii* (Chariot Wheels)
    - *Pilularia novae-hollandiae* (Austral Pillwort)
    - *Swainsona murrayana* (Slender Darling Pea)
    - *Lophochroa leadbeateri* (Major Mitchell's Cockatoo) - nest trees only
    - *Polytelis swainsonii* (Superb Parrot) - nest trees only
    - *Circus assimilis* (Spotted Harrier) - nest trees only
    - *Falco hypoleucos* (Grey Falcon) - nest trees only
    - *Falco subniger* (Black Falcon) - nest trees only
    - *Lophoictinia isura* (Square-tailed Kite) - nest trees only
    - *Hieraaetus morphnoides* (Little Eagle) - nest trees only
    - *Ninox connivens* (Barking Owl) - nest trees only

Attachment C – 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	www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Threatened Species Conservation Act 1995	www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Water Management Act 2000	www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
NSW Biodiversity Offsets Policy for Major Projects (OEH 2013)	www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf
Framework for Biodiversity Assessment (OEH 2013)	www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf
OEH Threatened Species Website	www.environment.nsw.gov.au/threatenedspecies/
NSW BioNet (Atlas of NSW Wildlife)	www.bionet.nsw.gov.au/
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC 2004)	www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf
Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna - Amphibians (DECCW 2009)	www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf
NSW guide to surveying threatened plants (OEH 2016)	www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
OEH threatened species survey and assessment guideline information	www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm
Fisheries NSW policies and guidelines	www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx

Title	Web address
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW 2010)	www.environment.nsw.gov.au/resources/protectedareas/080290devadjoindecc.pdf
VIS Classification - NSW Plant Community Type (PCT) database	www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm
Interim Vegetation Mapping Standard and VIS Plot	www.environment.nsw.gov.au/research/VISplot.htm
OEH data Portal (access to online spatial data)	data.environment.nsw.gov.au/
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	www.environment.nsw.gov.au/Heritage/publications/index.htm#M-O
Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)	www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010)	www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf

Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via 'The NSW Natural Resource Atlas'	www.nratlas.nsw.gov.au/
Acid Sulfate Soils Manual (Stone et al. 1998)	Manual available for purchase from: www.landcom.com.au/whats-new/the-blue-book.aspx Chapters 1 and 2 are on DPI's Guidelines Register at: Chapter 1 Acid Sulfate Soils Planning Guidelines: www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Planning%20Guidelines.pdf Chapter 2 Acid Sulfate Soils Assessment Guidelines: www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Assessment%20Guidelines.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	www.advancedenvironmentalmanagement.com/Reports/Savannah/Appendix%2015.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding	
Floodplain Development Manual	www.environment.nsw.gov.au/floodplains/manual.htm
NSW Climate Impact Profile	NSW Climate Impact Profile
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Transport
Roads & Maritime
Services

3 February 2017

SF2017/022657
SWT17/000

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

Attention: Elle Donnelly

SEAR (SSD 8208) - PROPOSED SOLAR FARM, LOT 78, 81, 82, 83, 100 & 101 DP750896 & LOT 1 DP821577, KIDMAN WAY, COLEAMBALLY.

I refer to correspondence forwarded to Roads and Maritime Services requesting the provision of Environmental Assessment Requirements to be addressed in the supporting documentation to be submitted for the subject development. The request includes a scoping report prepared by NGH Environmental dated January 2017.

From review of the information provided it is understood that the development proposal represents the establishment of a Solar Farm with an intended capacity of up to 150 Mega Watt on the subject site. The subject site is located to the north of Coleambally with frontage to Kidman Way which is a classified road and to Ercildoune Road which is classed as a local road. The frontage to both roads is located within a 100 km/h speed zone.

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.

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.

The supporting scoping report acknowledges the need for development of a Traffic Management Plan to manage the traffic generation during the construction period. Traffic should also be considered and addressed during operation of the facility. The Traffic Management 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.

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.

The supporting documentation acknowledges that access to the site can be obtained from either Kidman Way or Ercildoune Road. As access is available to the local road network the implications of State Environmental Planning Policy (Infrastructure), particularly clause 101 needs to be addressed as part of the supporting information submitted for the development. This clause also requires that the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development including any proposed access to Kidman Way. In this regard the existing road environment, speed zone and the proximity of the irrigation drain along the western side of the carriageway and nearby intersections with Kidman Way need to be considered.

Given the type and scale of the proposed development and its proximity to Kidman Way it is considered appropriate that issues relating to potential for distraction of, and for glare impacts on, passing motorist be addressed in the development 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 Kidman Way.

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:
Mr Lindsay Tanner
Regional Manager
South West Region