

APPENDIX A SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS



Planning Services

Resource and Energy Assessments

Contact: Tim Stuckey

Phone: (02) 9274 6319

Email: Tim.stuckey@planning.nsw.gov.au

Robert Hayes
Operations Manager
Maxwell Solar Pty Ltd
PMB 9
Muswellbrook NSW 2333

Dear Mr Hayes

**Maxwell Solar (SSD 9820)
Secretary's Environmental Assessment Requirements**

I have attached the Secretary's Environmental Assessment Requirements for the preparation of an Environmental Impact Statement (EIS) for the Maxwell Solar project.

The requirements are based on the information you have provided to date, and have been prepared in consultation with the relevant government agencies. The agencies comments are attached for your information (see Attachment 2).

Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and EIS for the project within the next two years.

If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will also require approval under the Commonwealth's *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act).

This approval is in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Department of the Environment in Canberra (6274 1111 or www.environment.gov.au).

Please contact the Department at least two weeks before you plan to submit the development application and EIS for the project. 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 required number of copies of the EIS.

It is important for you to recognise that the Department will review the EIS for the project before putting it on public exhibition. If it fails to adequately address these requirements, you will be required to submit an amended EIS.

Yours sincerely

Nicole Brewer

A/Director

Resource and Energy Assessments

as nominee of the Secretary

8/3/19

Environmental Assessment Requirements

State Significant Development

Section 4.12(8) and 4.12(9) of the *Environmental Planning and Assessment Act 1979* and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 9820
Proposal	Maxwell Solar Farm which includes: <ul style="list-style-type: none">• the construction and operation of a solar photovoltaic (PV) energy generation facility with an estimated capacity of 25 MW; and• associated infrastructure, including a grid connection and battery storage.
Location	Approximately 10 km south-east of Muswellbrook, in the Muswellbrook Shire Council local government area.
Applicant	Maxwell Solar Pty Ltd
Date of Issue	8 March 2019
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none">• a stand-alone executive summary;• a full description of the development, including:<ul style="list-style-type: none">– details of construction, operation and decommissioning;– a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process);– a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development;• a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved solar farms, mining developments, rural residential development and subdivision potential);• an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including:<ul style="list-style-type: none">– a description of the existing environment likely to be affected by the development;– an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts to the site and existing or proposed developments in the region (including the Drayton Mine (06_0202)), taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice;– a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development (including draft management plans for specific issues as identified below); and– a description of the measures that would be implemented to monitor and report on the environmental performance of the development;• a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and• the reasons why the development should be approved having regard to:<ul style="list-style-type: none">– relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act and how the principles of ecologically sustainable development have been

	<p>incorporated in the design, construction and ongoing operations of the development;</p> <ul style="list-style-type: none"> - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. <ul style="list-style-type: none"> • a detailed consideration of the capability of the project to contribute to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department's guidance on the matter. <p>The EIS must also be accompanied by a report from a suitably qualified person providing:</p> <ul style="list-style-type: none"> - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; and - certification that the information provided is accurate at the date of preparation. <p>The development application must be accompanied by the consent in writing of the owner/s of the land (as required in clause 49(1)(b) of the Regulation).</p>
<p>Specific Issues</p>	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> • Biodiversity – including: <ul style="list-style-type: none"> - an assessment of the biodiversity values and the likely biodiversity impacts of the project (including on Inland Grey Box woodland endangered ecological community) in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2016</i> (NSW), the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR), unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values; - the BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM; and - an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the <i>Fisheries Management Act 1994</i>, and a description of the measures to minimise and rehabilitate impacts; • Heritage – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including consultation with the local Aboriginal community in accordance with the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i>; • Land – including: <ul style="list-style-type: none"> - an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: <ul style="list-style-type: none"> o a consideration of agricultural land, flood prone land, Crown lands, mining, mineral or petroleum rights/tenements (including the Drayton Mine (06_0202)); o a soil survey to determine the soil characteristics and consider the potential for erosion to occur; and o a cumulative impact assessment of nearby developments; - an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including: <ul style="list-style-type: none"> o consideration of existing approvals, licences, titles, tenures and rehabilitation requirements for the site, including those specified under 06_0202 (as modified) and the Mine Operations Plan;

- consideration of the zoning provisions applying to the land, including subdivision;
- completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's *Land Use Conflict Risk Assessment Guide*; and
- a description of measures that would be implemented to remediate the land following decommissioning in accordance with *State Environmental Planning Policy No 55 - Remediation of Land*.

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

- **Noise** – including an assessment of the construction noise impacts of the development in accordance with the *Interim Construction Noise Guideline* (ICNG), and cumulative noise impacts (considering other developments in the area), and a draft noise management plan if the assessment shows construction noise is likely to exceed applicable criteria;

- **Transport** – including:
 - an assessment of the peak and average traffic generation, including over-dimensional vehicles and construction worker transportation;
 - an assessment of the likely transport impacts to the site access route (including Thomas Mitchell Drive, New England Highway and Denman Road), site access point, rail safety issues, any Crown land, particularly in relation to the capacity and condition of the roads;
 - a cumulative impact assessment of traffic from nearby developments;
 - a description of any proposed road upgrades developed in consultation with the relevant road and rail authorities (if required); and
 - a description of the measures that would be implemented to mitigate any transport impacts during construction;

- **Water** – including:
 - an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including drainage channels, wetlands, riparian land, farm dams, groundwater dependent ecosystems and acid sulfate soils), related infrastructure, adjacent licensed water users and basic landholder rights, and measures proposed to monitor, reduce and mitigate these impacts;
 - details of water requirements and supply arrangements for construction and operation; and
 - a description of the erosion and sediment control measures that would be implemented to mitigate any impacts in accordance with *Managing Urban Stormwater: Soils & Construction* (Landcom 2004);

- **Hazards and Risks** – including:
 - a preliminary risk screening in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33* (DoP, 2011), and if the preliminary risk screening indicates the development is “potentially hazardous”, a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazard Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011); and
 - an assessment of all potential hazards and risks including but not limited to bushfires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure;

	<ul style="list-style-type: none"> • Socio-Economic – including an assessment of the likely impacts on the local community and a consideration of the construction workforce accommodation; and • Waste – identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
Consultation	<p>During the preparation of the EIS, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, affected landowners, exploration licence holders, quarry operators, mineral title holders.</p> <p>In particular, you must undertake detailed consultation with affected landowners surrounding the development and Muswellbrook Shire Council.</p> <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>
Further consultation after 2 years	<p>If you do not lodge a development application and EIS for the development within 2 years of the issue date of these EARs, you must consult further with the Secretary in relation to the preparation of the EIS.</p>
References	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.</p>

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Biodiversity	<u>Biodiversity Assessment Method (OEH)</u> <u>Threatened Species Assessment Guidelines - Assessment of Significance (OEH)</u> <u>Biosecurity Act 2015</u> <u>Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)</u> <u>Policy and Guidelines for Fish Habitat Conservation and Management (DPI)</u> <u>Fisheries Management Act 1994</u>
Heritage	<u>Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)</u> <u>Code of Practice for Archaeological Investigations of Objects in NSW (OEH)</u> <u>Guide to investigating, assessing and reporting on aboriginal cultural heritage in NSW (OEH).</u> <u>NSW Heritage Manual (OEH)</u>
Land	<u>Primefact 1063: Infrastructure proposals on rural land (DPI)</u> <u>Establishing the social licence to operate large scale solar facilities in Australia: insights from social research for industry (ARENA)</u> <u>Local Land Services Act 2013</u> <u>Australian Soil and Land Survey Handbook (CSIRO)</u> <u>Guidelines for Surveying Soil and Land Resources (CSIRO)</u> <u>The land and soil capability assessment scheme: second approximation (OEH)</u> <u>Land Use Conflict Risk Assessment Guide (DoI – L&W)</u>
Noise	<u>NSW Noise Policy for Industry (EPA)</u> <u>Interim Construction Noise Guideline (EPA)</u> <u>NSW Road Noise Policy (EPA)</u>
Light	<u>Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring (DPE)</u>
Transport	<u>Guide to Traffic Generating Developments (RTA)</u> <u>Austrroads Guide to Road Design & relevant Australian Standards</u> <u>Austrroads Guide to Traffic Management Part 12: Traffic Impacts of Development</u>
Water	<u>Managing Urban Stormwater: Soils & Construction (Landcom)</u> <u>Floodplain Development Manual (OEH)</u> <u>Guidelines for Controlled Activities on Waterfront Land (DPI Water)</u> <u>NSW Aquifer Interference Policy (DPI Water)</u> <u>Water Sharing Plans (DPI Water)</u> <u>Floodplain Management Plan (DPI Water)</u> <u>Guidelines for Watercourse Crossings on Waterfront Land (DPI Water)</u>
Hazards and Risks	<u>Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DPE)</u> <u>Multi-Level Risk Assessment (DPE)</u>
Waste	<u>Waste Classification Guidelines (EPA)</u>

Electromagnetic Interference

ICNIRP Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields

Environmental Planning Instruments

State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Rural Lands) 2008

State Environmental Planning Policy No. 33 - Hazardous and Offensive Development

State Environmental Planning Policy No. 44 – Koala Habitat Protection

State Environmental Planning Policy No. 55 – Remediation of Land

Muswellbrook Local Environmental Plan 2009

ATTACHMENT 2

Agency Comments



Department of Industry

OUT19/2144

Tim Stuckey
Senior Environmental Assessment Officer
Resource & Energy Assessments
NSW Department of Planning and Environment

tim.stuckey@planning.nsw.gov.au

Dear Mr Stuckey

**Maxwell Solar Project (SSD 9820)
Input into the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 15 February 2019 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries (DPI), and the following requirements for the proposal are provided:

DoI - Water

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- 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.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at <https://www.industry.nsw.gov.au/water>).

Any further referrals to Department of Industry can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

Liz Rogers
Manager, Assessments
Lands and Water - Strategy and Policy
1 March 2019



4 March 2019

Tim Stuckey
Senior Environmental Assessment Officer – Planning Services
Department of Planning & Environment
GPO BOX 39
SYDNEY NSW 2001

Your Ref: SSD 9820
Our Ref: DOC19/141024

Emailed: tim.stuckey@planning.nsw.gov.au

Dear Mr Stuckey,

Re: Maxwell Solar Farm Project (SSD 9820) – Request for Secretary’s Environmental Assessment Requirements

Thank you for the opportunity to provide advice on the Scoping Report and Draft SEARs for the Maxwell Solar Farm Project (SSD 9820). This is a response from the Department of Planning & Environment – Division of Resources & Geoscience (the Division).

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

The Division has reviewed the Draft SEARs and Scoping Report (dated 30 January 2019) for the Maxwell Solar Farm Project (SSD 9820).

Based on to current data there are no current mineral or petroleum titles or applications in the vicinity of the site. There are three coal operations within the immediate vicinity which warrant being included to consultation on this project. There is one extractive quarry for coarse aggregate. The relevant operations are:

- Maxwell Infrastructure (formerly Drayton Mine) – Held by Maxwell Ventures (Management) Pty Ltd
- Mt Arthur – Held by Mt Arthur Coal Pty Ltd & Hunter Valley Energy Coal Pty Ltd
- Savoy Hill - Dellworth Pty Limited (subsidiary of NuCoal Resources Pty Ltd)
- Wild Quarry – Wild Plant Hire Pty Ltd,



The Division has reviewed the Draft SEARs and Scoping Report for the Maxwell Solar Farm (SSD 9820). The Division specifically requires the proponent to:

- Provide evidence of authentic consultation with nominated stakeholders including DRG. If the proponent is not able to make contact for consultation with any of the nominated parties, the proponent is to contact the Division which will assist with establishing contact.

The nominated stakeholders are:

- Maxwell Ventures (Management) Pty Ltd
Malabar Coal Limited
Level 26, 259 George Street
Sydney NSW 2000
 - Mt Arthur Coal Pty Limited
Private Mailbag No 8
Muswellbrook NSW 2333
 - Hunter Valley Energy Coal Pty Ltd
Private Mail Bag No 8
Muswellbrook NSW 2333
 - Dellworth Pty Ltd
Glen Lewis
PO Box 2155
Greenhills NSW 2323
 - Wild Plant Hire Pty Ltd
- Provide a date stamped and referenced map from Minview to record the title tenure details at the time of consultation. Current mining and exploration titles and applications can be viewed through the Division's MinView map viewer at:

<http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/geoscience-information/services/online-services/minview>
 - Show on a map the relationship of existing coal titles to the project boundary (including ancillary infrastructure).
 - Detail any proposed interaction with the proposed solar farm, mining titles and any rehabilitation requirements for the site under the Mine Operations Plan.

Queries regarding the above information should be directed to the Division of Resources & Geoscience - Land Use team at landuse.minerals@geoscience.nsw.gov.au.



Planning &
Environment

Yours sincerely

Andrew Helman
Acting Manager – Land Use

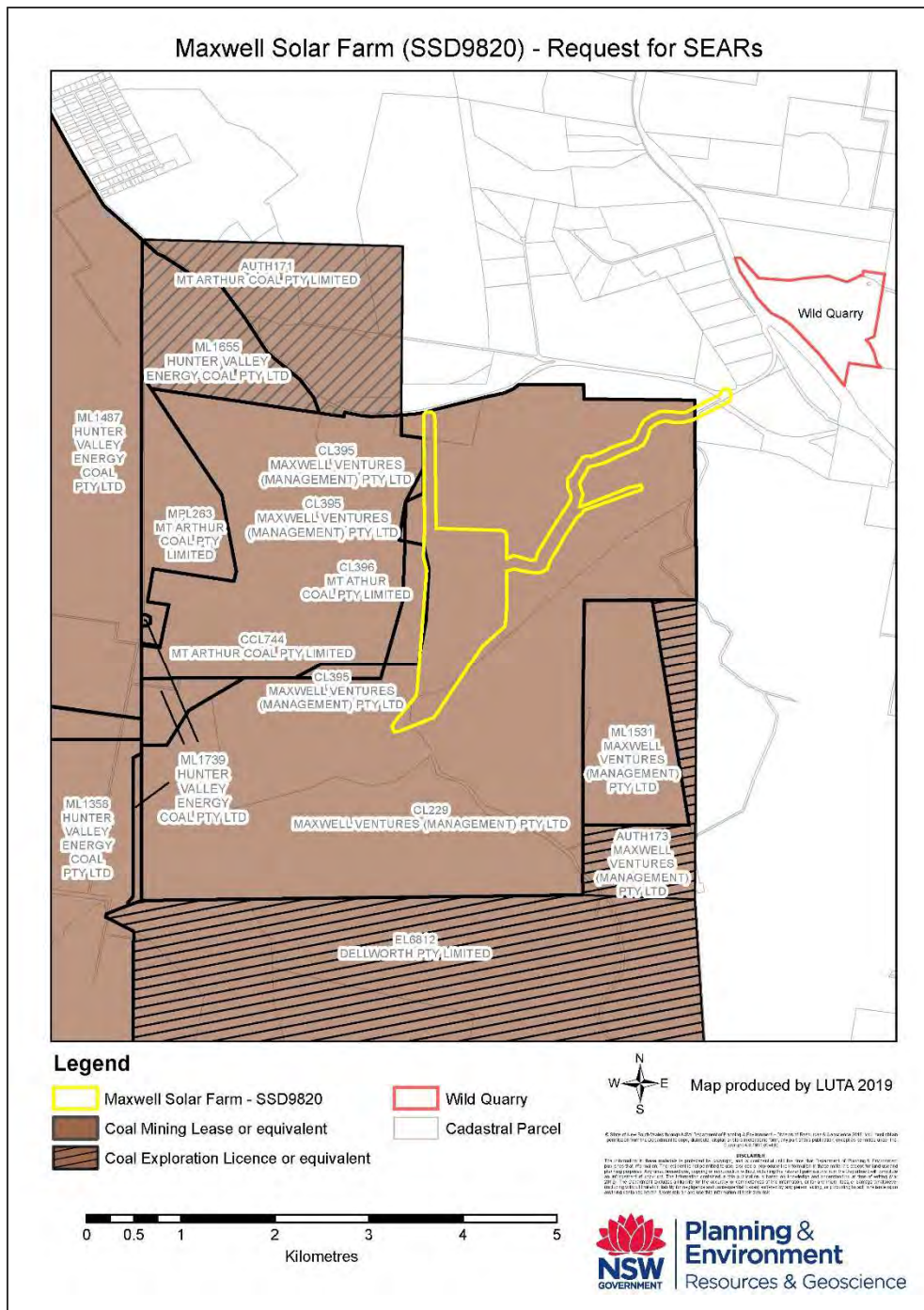
A handwritten signature in black ink, appearing to read "Paul Dale".

for Paul Dale

Director – Land Use & Titles Advice

NSW Department of Planning and Environment
DIVISION of RESOURCES & GEOSCIENCE
PO Box 344 Hunter Region Mail Centre NSW 2310
Tel: 02 4063 6500
ABN 38 755 709 681

Figure 1: Maxwell Solar Farm Project (SSD 9820) indicating current coal titles in relation to project boundary.



Tim Stuckey

From: Fire Safety <FireSafety@fire.nsw.gov.au>
Sent: Friday, 1 March 2019 8:54 AM
To: Tim Stuckey
Subject: Review and request for agency comments for the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Maxwell Solar Project (SSD 9820)

Dear Tim

In regards to your email correspondence dated the 8th of February 2019, Fire & Rescue NSW confirms receipt of the request for agency input for Secretary's Environmental Assessment Requirements (SEARs) for the proposed Maxwell Solar Project (SSD 9820).

It is FRNSW experience that small and large scale photovoltaic installations present unique electrical hazard risks to our personnel when fulfilling their emergency first responder role. Due to the electrical hazards associated with large scale photovoltaic installations and the potential risk to the health and safety of firefighters, both FRNSW and the NSW Rural Fire Service must be able to implement effective and appropriate risk control measures when managing an emergency incident at the proposed site.

FRNSW recommends the following conditions of consent:

1. That a comprehensive ERP is developed for the site.
2. That the ERP specifically addresses foreseeable on-site and off-site fire events and other emergency incidents (e.g. fires involving solar panel arrays, bushfires in the immediate vicinity) or potential hazmat incidents.
3. That the ERP detail the appropriate hazard control measures that would need to be implemented to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards). Such measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the photovoltaic and battery storage systems (either totally or partially, as determined by risk assessment).
4. Other risk control measures that may need to be implemented in a fire emergency (due to any unique hazards specific to the site) should also be included in the ERP.
5. That two copies of the ERP (detailed in recommendation 1 above) be stored in a prominent 'Emergency Information Cabinet' located in a position directly adjacent to the site's main entry point/s.
6. Once constructed and prior to operation, that the operator of the facility contacts the relevant local emergency management committee (LEMC). The LEMC is a committee established by Section 28 of the State Emergency and Rescue Management Act 1989. LEMCs are required to be established so that emergency services organisations and other government agencies can proactively develop comprehensive inter agency local emergency procedures for significant hazardous sites within their local government area. The contact details of members of the LEMC can be obtained from the relevant local council.

Further to the above recommendations, Fire & Rescue NSW requests to be consulted with respect to the operational compatibility of the proposed fire and life safety systems and their configuration at the project's preliminary and final design phases.

FRNSW requests the opportunity to review and comment on the EIS report once completed.

While there is currently no requirement for a fire safety study, FRNSW may request one be undertaken at a later stage should information be provided such it is deemed that the development poses unique challenges to the response to and management of an incident.

If you have any further queries regarding this matter, please contact the Fire Safety Branch on 9742 7434 quoting your reference number FRN19/692- BFS19/568.

Regards,



Administration Officer
Fire Safety Administration Unit
Community Safety Directorate | Fire and Rescue NSW

T: (02) 9742 7434
1 Amarina Ave, Greenacre, NSW 2190 | Locked Bag 12, Greenacre, NSW 2190

PREPARED FOR ANYTHING.

www.fire.nsw.gov.au



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This message has been scanned for viruses.



**muswellbrook
shire council**

Enquiries

Please ask for Sharon Pope

Direct 02 6549 3868

Our reference

Your reference SSD 9820

1 March 2019

**Senior Environmental Assessment Officer
Resource and Energy Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001**

Dear Mr Stuckey,

Maxwell Solar Project (SSD 9820)
Request for Input into Secretary's Environmental Assessment Requirements

I refer to your email dated 15 February 2019, requesting Council's input to the Secretary's Environmental Assessment Requirements (SEARs) for the above project. Council thanks you for the opportunity to provide comments.

Council makes the following submission based on the review of the applicant's Scoping Report:

1. **Traffic** - A traffic impact assessment should be prepared in relation to the project, which investigates the effect of additional traffic movements associated with the construction, operational and decommissioning phases of the project on the local and regional road network.
2. **Soils and Land Degradation** – Council understands that there are erosion issues in the area, low soil fertility, high salinity and structural issues. Detailed assessment of the soils and geology of the site, and areas that will receive stormwater flows from the site, will need to be included in the application to establish mechanisms for erosion and sediment control, inform the site's management during operation, and intended rehabilitation strategies once the solar array is decommissioned.
3. **Rehabilitation** – Council has a keen interest in ensuring that the rehabilitation of mine sites is completed to high standards, in line with industry best practice and to support post mining land uses. This site is currently in the post mining rehabilitation phase. The application should identify what further rehabilitation is proposed prior to construction of the solar array. The application should also include information on the intended rehabilitation for the site when the solar array is decommissioned. It is requested that consideration be given to the employment of micro-relief to the site, in line with the principles of Geofluc design, to ensure long-term site stability and erosion control, and to create a more natural looking landscape post development.
4. **Economic Opportunities** – Council is interested in ensuring the local community would be the beneficiaries of reported economic and employment opportunities. Accordingly it is requested that the application considers measures that can be put in place to ensure that the project supports local jobs and businesses and results in

opportunities for local people to gain skills in the construction and maintenance of solar arrays. Apprenticeships for local young people would be welcomed.

The above comments are not intended as an exhaustive list of assessment considerations or Council comments in relation to the project, but to guide the preparation of the studies required for the project.

Council appreciates the opportunity to comment and would be pleased to provide additional information if requested.

Yours faithfully

A handwritten signature in blue ink, appearing to be 'SP', is located below the closing text.

Sharon Pope
Assistant Director Environment and Community Services
sharon.pope@muswellbrook.nsw.gov.au

DOC19/130370-1
SSD 9820

Tim Stuckey
Senior Environmental Assessment Officer
Resource and Energy Assessments
Department of Planning and Environment
tim.stuckey@planning.nsw.gov.au

Dear Tim

Input into Secretary's Environmental Assessment Requirements – Maxwell Solar Farm Project – Muswellbrook – Muswellbrook LGA (SSD 9820)

I refer to your e-mail dated 15 February 2019 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Maxwell Solar Farm Project proposal, located within part of the rehabilitated area of the old Drayton mine off Thomas Mitchell Drive (Lot 6 and Lot 14 in DP 701496, Lot 21 in DP 545087, and Lot 64 in DP 8500818) approximately 10 kilometres south of Muswellbrook. The proposed development is within the Muswellbrook local government area.

The Office of Environment and Heritage (OEH) understands that the project is the construction and operation of a photovoltaic array of about 25 megawatt capacity, with potential battery storage, that would feed electricity into the adjacent Ausgrid powerlines. The photovoltaic array would be located at the Maxwell Infrastructure area on the rehabilitated waste dump of the Drayton Mine. OEH understands that the proposal is a State Significant Development (SSD 9820) project under the *Environmental Planning and Assessment Act 1979*.

OEH has reviewed the Scoping Report prepared by ngh environmental (dated January 2019) and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

With respect to Aboriginal cultural heritage, OEH notes that any Aboriginal cultural heritage assessment undertaken prior to 2010 is unlikely to meet current OEH Aboriginal cultural heritage guidelines for the assessment of Aboriginal cultural heritage in NSW. The OEH 2011 *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* should be referenced in this instance.

If you have any further questions in relation to this matter, please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 02 4927 3154 or by e-mail at rog.hcc@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to be 'S. Cox', with a long horizontal flourish extending to the right.

STEVEN COX

**Senior Team Leader - Planning
Hunter Central Coast Branch
Conservation and Regional Delivery Division**

Enclosure: Attachments A, B, C

27 February 2019

Attachment A – Standard Environmental Assessment Requirements

<p>Biodiversity</p> <ol style="list-style-type: none"> 1. Biodiversity impacts related to the proposed development (SSD 9820) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and Biodiversity Assessment Method. 2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. 3. The BDAR must include details of the measures proposed to address the offset obligation as follows; <ul style="list-style-type: none"> • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired; • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; • Any proposal to fund a biodiversity conservation action; • Any proposal to conduct ecological rehabilitation (if a mining project); • Any proposal to make a payment to the Biodiversity Conservation Fund. <p>If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</p> 4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.
<p>Aboriginal cultural heritage</p> <ol style="list-style-type: none"> 5. The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers. 6. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR. 7. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

Historic heritage
<p>8. 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:</p> <ol style="list-style-type: none"> 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
<p>9. The EIS must map the following features relevant to water and soils including:</p> <ol style="list-style-type: none"> a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method). c. Wetlands as described in s4.2 of the Biodiversity Assessment Method. d. Groundwater. e. Groundwater dependent ecosystems. f. Proposed intake and discharge locations.
<p>10. The EIS must describe background conditions for any water resource likely to be affected by the development, including:</p> <ol style="list-style-type: none"> 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.

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

12. The EIS must assess the impact of the development on hydrology, including:
- a. Water balance including quantity, quality and source.
 - b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
 - c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
 - d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
 - e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
 - f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
 - g. Identification of proposed monitoring of hydrological attributes.

Flooding and coastal erosion

13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
- a. Flood prone land.
 - b. Flood planning area, the area below the flood planning level.
 - c. Hydraulic categorisation (floodways and flood storage areas).

14. 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.

15. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
- a. Current flood behaviour for a range of design events as identified in 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.

16. 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.

17. The EIS must assess the impacts on the proposed development on flood behaviour, including:

- a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
- b. Consistency with Council floodplain risk management plans.
- c. 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 of 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 - nil
Aboriginal cultural heritage - nil
Historic heritage - nil
Water and soils - nil
Flooding and coastal erosion - nil

Attachment C – Guidance material

Title	Web address
Relevant legislation	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Coastal Management Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Fisheries Management Act 1994</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
<i>Marine Parks Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
<i>Wilderness Act 1987</i>	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
NSW Guide to Surveying Threatened Plant	http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/

Title	Web address
Aboriginal cultural heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/comconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and coastal erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf



22 February 2019

Department of Planning & Environment
Resource and Energy Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Tim Stuckey

**SSD 9820 - SEARS REQUEST – MAXWELL SOLAR PROJECT, THOMAS MITCHELL DRIVE
MUSWELLBROOK**

Reference is made to Department of Planning and Environment's email dated 15 February 2019, requesting Roads and Maritime Services' (Roads and Maritime) requirements under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

Transport for NSW and Roads and Maritime's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Roads and Maritime have reviewed the Maxwell Solar Farm Scoping Report, prepared by NGH Environmental and dated January 2019. It is understood that the proposal be for the development of a solar farm which would be accessed from Thomas Mitchel Drive, located on the northern boundary of Maxwell Infrastructure.

Roads and Maritime response & requirements

Roads and Maritime recommends that the Environmental Impact Statement (EIS) should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:

- Road and Related Facilities within the Department of Planning EIS Guidelines, and,
- Section 2 Traffic Impact Studies of Roads and Maritime's *Guide to Traffic Generating Developments 2002*.

Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject properties.

- Current traffic counts for all of the traffic routes and intersections.
- The anticipated additional vehicular traffic generated from both the construction and operational stages of the project.
- The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation.
- Consideration of the traffic impacts on existing and proposed intersections, in particular, the intersections of Thomas Mitchell Drive / New England Highway and Thomas Mitchell Drive / Denman Road, and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development during both the construction and operational stages. The traffic impact shall also include the cumulative traffic impact of other proposed developments in the area.
- Identify the necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Roads and Maritime and Council.
- Traffic analysis of any major / relevant intersections impacted, using SIDRA or similar traffic model, including:
 - Current traffic counts and 10 year traffic growth projections
 - With and without development scenarios
 - 95th percentile back of queue lengths
 - Delays and level of service on all legs for the relevant intersections
 - Electronic data for Roads and Maritime review.
- Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

On determination of this matter, please forward a copy of the SEARs to Roads and Maritime for record and / or action purposes. Should you require further information please contact Hunter Land Use on 4908 7688 or by emailing development.hunter@rms.nsw.gov.au.

Yours sincerely



Peter Marler
 Manager Land Use Assessment
 Hunter Region



DOC19/130291-2, EF14/500

Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Tim Stuckey

By email: tim.stuckey@planning.nsw.gov.au

26 February 2019

Dear Mr Stuckey

Maxwell Solar Project (SSD 9820)

Request for Input into Secretary's Environmental Assessment Requirements

I refer to your email to the Environment Protection Authority (EPA), dated 15 February 2019, requesting input to the draft Secretary's Environment Assessment Requirements (SEARs). I also refer to discussions between EPA's Bill George and yourself on 25 March 2019 regarding whether the proposed solar farm should remain within the existing Environment Protection Licence (EPL1323) for Maxwell Ventures (Management) Pty Ltd.

Section 1.2 and Figure 1-3 of the Maxwell Solar Farm Scoping Report indicates that the Maxwell Solar Farm will be excised or removed from Coal Lease CL 229. The proposal does not appear to involve an activity at or above the relevant threshold set out in Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act). Consequently, Muswellbrook Shire Council would be the appropriate regulatory authority for this proposal. I suggest that you contact Council regarding the draft SEARs and requirements of the preparation of the Environmental Impact Statement (EIS).

If you require any further information regarding this matter, please contact Bill George on 4908 6821 or by email to hunter.region@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'MB', followed by a horizontal line and a flourish.

MITCHELL BENNETT
Head Strategic Operations Unit – Hunter
Environment Protection Authority