# **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	SSD 9358
Number	
Proposal	<ul> <li>Silverleaf Solar Farm Project which includes:</li> <li>the construction and operation of a photovoltaic (PV) generation facility with an estimated capacity of 120 MW; and</li> <li>associated infrastructure, including alignment of a transmission line between the solar farm site and the existing Narrabri substation on Stoney Creek Road, a grid connection and battery storage facilities.</li> </ul>
Location	• Approximately 5 km north-west of Narrabri, between the Newell Highway in the east and Logans Lane in the west, within the Narrabri Shire local government area
Applicant	ENGIE
Date of Issue	22 June 2018
General Requirements	The Environmental Impact Statement (EIS) for the development must comply with the requirements in Schedule 2 of the <i>Environmental Planning and</i> Assessment Regulation 2000.
	<ul> <li>In particular, the EIS must include:</li> <li>a stand-alone executive summary;</li> <li>a full description of the development, including: <ul> <li>details of construction, operation and decommissioning;</li> <li>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);</li> <li>a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development;</li> </ul> </li> <li>a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved solar farms, rural residential development and subdivision potential);</li> <li>an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: <ul> <li>a description of the existing environment likely to be affected by the development;</li> <li>an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed development, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice;</li> <li>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</li> <li>a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and</li> </ul> </li> </ul>

	<ul> <li>relevant matters for consideration under the <i>Environmental Planning</i> and Assessment Act 1979, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development;</li> <li>the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and</li> <li>feasible alternatives to the development (and its key components), including the consequences of not carrying out the development.</li> <li>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.</li> </ul>
	<ul> <li>The EIS must also be accompanied by a report from a suitably qualified person providing:</li> <li>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</li> <li>certification that the information provided is accurate at the date of preparation.</li> </ul>
	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).
Specific Issues	<ul> <li>The EIS must address the following specific issues:</li> <li>Biodiversity – including: <ul> <li>an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2016 (NSW)</i> 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;</li> <li>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;</li> <li>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; and</li> <li>a strategy to offset any residual impacts of the development in accordance with the Biodiversity Conservation Act 2016 (NSW);</li> </ul> </li> <li>Heritage – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including possible cumulative impacts on agricultural enterprises and landholders) and flood prone land;</li> <li>an assessment of any impacts to Crown lands (including potential transfer of Logans Lane to Narrabri Shire Council and consent requirements for activities on Crown Land);</li> <li>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 (e.g. operating mines, extractive industries, mineral or petroleum resources, exploration activities, aerial spraying, dust generation, and biosecurity risk) during operation and after decommissioning, with reference to the zoning</li> </ul>

<ul> <li>an assessment of potential land use conflicts, including completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's Land Use Conflict Risk Assessment Guide; and</li> <li>measures to remediate the land following decommissioning in accordance with State Environmental Planning Policy No 55 - Remediation of Land.</li> </ul>
• <b>Visual</b> – 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;
<ul> <li>Noise – including an assessment of the construction noise impacts of the development in accordance with the Interim Construction Noise Guideline (ICNG), operational noise impacts in accordance with the NSW Noise Policy for Industry 2017, and cumulative noise impacts (considering other operations in the area including the nearby airstrip), and a draft noise management plan if the assessment shows construction noise is likely to exceed applicable criteria;</li> </ul>
• <b>Transport</b> – including an assessment of the site access route (including Logans Lane, Kamilaroi Highway and Newell Highway), site access points, rail crossing and safety issues (including the Narrabri to North Star - Inland Rail) and likely transport impacts (including peak and average traffic generation, over-dimensional vehicles and construction worker

Rail) and likely transport impacts (including the Narrabi to North Star - Inland Rail) and likely transport impacts (including peak and average traffic generation, over-dimensional vehicles and construction worker transportation) of the development on the capacity and condition of roads (including on any Crown land), a description of the measures that would be implemented to mitigate any impacts during construction (including cumulative impacts from nearby developments), and a description of any proposed road upgrades developed in consultation with the relevant road and rail authorities (if required);

#### • Water – including:

- an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including groundwater bores, 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 (including the proposed transmission line and substation) against the International Commission on Non-Ionizing Radiation Protection (ICNIRP) *Guidelines for limiting exposure to Timevarying Electric, Magnetic and Electromagnetic Fields*; and

	• Socio-Economic – including an assessment of the likely impacts on the local community and a consideration of the construction workforce accommodation.
Consultation	During the preparation of the EIS, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers (including the Narrabri to North Star project), community groups, affected landowners, Registered Aboriginal Parties (RAPs), exploration licence holders, quarry operators and mineral title holders.
	In particular, you must undertake detailed consultation with affected landowners surrounding the development and Narrabri Shire Council.
	The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these EARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	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.

## Environmental Planning Instruments, Policies, Guidelines & Plans

Biodiversity	
	Biodiversity Assessment Method 2017 (OEH)
	Threatened Species Assessment Guidelines - Assessment of Significance (OEH)
	Biosecurity Act 2015
	Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway
	Crossings (DPI)
	Policy and Guidelines for Fish Habitat Conservation and Management (DPI)
	Fisheries Management Act 1994
Heritage	
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW)
	Code of Practice for Archaeological Investigations of Objects in NSW 2010 (OEH)
	Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW 2011 (DECCW).
	NSW Heritage Manual (OEH)
Land	
	Primefact 1063: Infrastructure proposals on rural land (DPI)
	Establishing the social licence to operate large scale solar facilities in Australia: insights
	from social research for industry (ARENA)
	Local Land Services Act 2013
	Australian Soil and Land Survey Handbook (CSIRO)
	Guidelines for Surveying Soil and Land Resources (CSIRO)
	The land and soil capability assessment scheme: second approximation (OEH)
	Land Use Conflict Risk Assessment Guide (Dol – L&W)
Noise	
	NSW Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (EPA)
	NSW Road Noise Policy (EPA)
Light	
Light	
	Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring (DPE)
Transport	
	Guide to Traffic Generating Developments 2002 (RTA)
	Austroads Guide to Road Design & relevant Australian Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
Water	
mator	Guidelines for Fresh and Marine Water Quality 2000 (ANZECC)
	Climate Change Impacts and Risk Management
	Water Quality Objectives
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Floodplain Development Manual (OEH)
	Guidelines for Controlled Activities on Waterfront Land (DPI Water)
	Water Sharing Plans (DPI Water)
	Floodplain Management Plan (DPI Water)
	Guidelines for Watercourse Crossings on Waterfront Land (DPI Water)
Hazards and	Risks
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DPE)
	Multi-Level Risk Assessment (DPE)
	Work Health and Safety (WHS) Act 2011
	State Emergency and Rescue Management Act 1989

#### Waste

Waste Classification Guidelines (EPA)

#### **Electromagnetic Interference**

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

#### Socio-Economic

Social Impact Assessment Guideline 2017 (DPE)

#### **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. 44 – Koala Habitat Protection

State Environmental Planning Policy No. 55 - Remediation of Land

Narrabri Local Environmental Plan 2012