

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 9438
Proposal	Bonshaw Solar Farm which includes: <ul style="list-style-type: none">• the construction and operation of a solar photovoltaic (PV) generation facility with an estimated capacity of 500 MW; and• associated infrastructure, including a grid connection and battery storage with 500 MWh capacity.
Location	Approximately 16 km south of Bonshaw, between the Bruxner Highway, Glenrock Road and Rocky Creek Road in the Inverell Shire Council local government area.
Applicant	Gaia Australia
Date of Issue	16 August 2018
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, 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 of the site and existing or proposed developments, 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 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 (including Crown Reserve 91645), mining, mineral or petroleum rights; 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 the zoning provisions applying to the land, including subdivision, and; o completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's <i>Land Use Conflict Risk Assessment Guide</i>; 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 Bruxner Highway, Glenrock Road and Rocky Creek 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 (including cumulative impacts from Sundown Solar Farm, Sapphire Solar Farm and White Rock Solar Farm);
 - 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 Beady River, Little Oaky Creek, Little Limestone Creek and Dumaresq River, 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; and
- **Socio-Economic** – including an assessment of the likely impacts on the local community and a consideration of the construction workforce accommodation.

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 and mineral title holders.</p> <p>In particular, you must undertake detailed consultation with affected landowners surrounding the development and Inverell 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	Biodiversity Assessment Method (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 (OEH) Code of Practice for Archaeological Investigations of Objects in NSW (OEH) Guide to investigating, assessing and reporting on aboriginal cultural heritage in NSW (OEH). 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 (DoI – L&W)
Noise	NSW Noise Policy for Industry (EPA) Interim Construction Noise Guideline (EPA) NSW Road Noise Policy (EPA)
Light	Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring (DPE)
Transport	Guide to Traffic Generating Developments (RTA) Austroads Guide to Road Design & relevant Australian Standards Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
Water	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)
Waste	Waste Classification Guidelines (EPA)
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. 44 – Koala Habitat Protection

State Environmental Planning Policy No. 55 – Remediation of Land

Inverell Local Environmental Plan 2012