

Wind Energy Framework

Standard Secretary's Environmental Assessment Requirements

December 2016

Environmental Assessment Requirements

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

Application Number	SSD XX
Development	XX Wind Farm
Location	XX
Proponent	XX
Date of Issue	XX
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, including any proposed staging of the development or refurbishing of turbines over time; – all infrastructure and facilities, such as substations, transmission lines, construction compounds, concrete batching plants, internal access roads, and road upgrades (including any infrastructure that would be required for the development, but the subject of a separate approvals process); – site plans and maps at an adequate scale with dimensions showing: <ul style="list-style-type: none"> ○ the location and dimensions of all project components including coordinates in latitude / longitude and maximum AHD heights of the turbines; ○ existing infrastructure, land use, and environmental features in the vicinity of the development, including nearby residences and approved residential developments or subdivisions within 3 km of a proposed turbine, and any other existing, approved or proposed wind farms in the region; and ○ the development corridor that has been assessed, including any allowance for micro-siting of turbines and identification of the key environmental constraints that have been considered in the design of the development; • a list of any approvals that must be obtained before the development may commence; • the terms of any proposed voluntary planning agreement with the relevant local council • 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 using sufficient baseline data; – an assessment of the likely impacts of all stages of the development, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans, industry codes of practice and Wind Energy Guideline; – a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the development and the likely effectiveness of these measures, including details of consultation with any affected non-associated landowners in relation to the development of mitigation management measures, and any negotiated agreements with these landowners; and – a description of the measures that would be implemented to monitor and report on the environmental performance of the development, including adaptive management strategies and contingency measures to address residual impacts;

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	<ul style="list-style-type: none"> 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 incorporated in the design, construction and ongoing operations of the development; the environmental, economic and social costs and benefits of the development, having regard to the predicted electricity demand in NSW and the National Electricity Market, the Commonwealth's Renewable Energy Target Scheme, and the greenhouse gas savings of the development; the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses, including rural villages, rural dwellings, subdivisions, land of high scenic value, conservation areas, strategic agricultural land, tourism facilities, existing or proposed wind farms, and the capacity of the existing electricity transmission network to accommodate the development; and feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. <p>While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p> <p>In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified person that includes an accurate estimate of the capital investment value of the development (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>).</p>
Key issues	<p>The EIS must address the following specific issues for the wind farm and associated infrastructure:</p> <p>Landscape and Visual – the EIS must include a detailed assessment of the visual impacts of all components of the project (including turbines, transmission lines, substations, and any other ancillary infrastructure) in accordance with the <i>Wind Energy: Visual Assessment Bulletin</i> (DPE, 2016);</p> <p>Noise and Vibration – the EIS must:</p> <ul style="list-style-type: none"> assess wind turbine noise in accordance with the <i>NSW Wind Energy: Noise Assessment Bulletin</i> (EPA/DPE, 2016); assess noise generated by ancillary infrastructure in accordance with the <i>NSW Industrial Noise Policy</i> (EPA, 2000); assess construction noise under the <i>Interim Construction Noise Guidelines</i> (DECC, 2009); assess traffic noise under the <i>NSW Road Noise Policy</i> (DECCW, 2011); and assess vibration under the <i>Assessing Vibration: A Technical Guideline</i> (DECC, 2006); <p>Biodiversity – the EIS must:</p> <ul style="list-style-type: none"> assess biodiversity values and the likely biodiversity impacts of the development in accordance with the <i>NSW Biodiversity Offsets Policy for Major Projects</i> (OEH, 2014) and <i>Framework for Biodiversity Assessment</i> (OEH, 2014), unless otherwise agreed by the Office of Environment and Heritage (terrestrial biodiversity) or DPI Fisheries (aquatic biodiversity); and assess the impact of the development on birds and bats, including blade strike, low air pressure zones at the blade tips (barotrauma), alteration to movement patterns, and cumulative impacts of other wind farms in the vicinity;

Traffic and Transport – the EIS must:

- assess the construction and operational traffic impacts of the development;
- provide details of traffic volumes (both light and heavy vehicles) and transport routes during construction and operation of the development, including traffic associated with sourcing raw materials (water, sand and gravel);
- assess the potential traffic impacts of the project on road network function (including intersection performance and site access arrangements and road safety, including school bus routes);
- assess the capacity of the existing road network to accommodate the type and volume of traffic generated by the project (including over-mass / over-dimensional traffic) during construction and operation; and
- provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades, road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority;

Hazard / Risks – the EIS must include an assessment of the following:

- **Aviation Safety:**
 - assess the impact of the development under the *National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft*;
 - provide associated height and co-ordinates for each turbine assessed;
 - assess potential impacts on aviation safety, including cumulative effects of wind farms in the vicinity, potential wake / turbulence issues, the need for aviation hazard lighting, considering, defined air traffic routes, aircraft operating heights, approach/departure procedures, radar interference, communication systems, navigation aids;
 - identify aerodromes within 30 km of the turbines and consider the impact to nearby aerodromes and aircraft landing areas;
 - address impacts on obstacle limitation surfaces, and
 - assess the impact of the turbines on the safe and efficient aerial application of agricultural fertilisers and pesticides in the vicinity of the turbines and transmission line;
- **Telecommunications** – identify possible effects on telecommunications systems, assess impacts and mitigation measures including undertaking a detailed assessment to examine the potential impacts as well as analysis and agreement on the implementation of suitable options to avoid potential disruptions to radio communication services, which may include the installation and maintenance of alternative sites;
- **Health** – consider and document any health issues having regard to the latest advice of the National Health and Medical Research Council, and identify potential hazards and risks associated with electric and magnetic fields (EMF) and demonstrate the application of the principles of prudent avoidance;
- **Bushfire** – identify potential hazards and risks associated with bushfires / use of bushfire prone land, including the risks that a wind farm would cause bush fire and any potential impacts on the aerial fighting of bush fires and demonstrate compliance with *Planning for Bush Fire Protection 2006* (if located on bushfire prone land); and
- **Blade Throw** – assess blade throw risks.

Heritage – the EIS must:

- assess the impact on Aboriginal cultural heritage (archaeological and cultural) in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011) and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010);
- provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010); and
- assess the impact on historic heritage having regard to the *NSW Heritage Manual*.

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	<p>Water and Soils – the EIS must:</p> <ul style="list-style-type: none"> quantify water demand, identify water sources (surface and groundwater), including any licensing requirements, and determine whether an adequate and secure water supply is available for the development; access potential impacts on the quantity and quality of surface and groundwater resources, including impacts on other water users and watercourses; where the project involves works within 40 metres of the high bank of any river, lake (including wetlands) or estuary (collectively waterfront land), identify likely impacts to the waterfront land, and how the activities are to be designed and implemented in accordance with the DPI Water Guidelines for Controlled Activities (2012); and describe the measures to minimise surface and groundwater impacts, including how works on steep gradient land or erodible soils types would be managed and any contingency requirements to address residual impacts. <p>Waste – the EIS must:</p> <ul style="list-style-type: none"> 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 and Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>However, you must:</p> <ul style="list-style-type: none"> establish a Community Consultative Committee for the project in accordance with the <i>Community Consultative Committee Guidelines for State Significant Projects</i>, and consult with the committee during the preparation of the EIS; and carry out detailed consultation with the following: <ul style="list-style-type: none"> (only listed parties where mandatory consultation is warranted). <p>The EIS must include a description of what consultation was carried out during the preparation of the EIS, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.</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 SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.</p>