

Planning Secretary's Environmental Assessment Requirements

**Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
Part 8, Division 2 of the *Environmental Planning and Assessment Regulation 2021***

Application Number	SSD-53293710
Project	<p>Mallee Wind Farm which includes:</p> <ul style="list-style-type: none"> the construction, operation and decommissioning of a wind farm with an estimated capacity up to 1,000 megawatts (MW), 150 turbines and a maximum height of 280 m (to blade tip); a battery with nominal storage of 300 MW / 1,200 MWh; and ancillary infrastructure including site offices, internal roads, underground and overhead cabling, substations, transmission lines and grid connection to the transmission network.
Location	Arumpo Road, approximately 16 km north-east of Buronga in the Wentworth Shire local government area.
Proponent	Spark Renewables Pty Limited
Date of Issue	17/02/2023
General Requirements	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8, Division 5 of the <i>Environmental Planning and Assessment Regulation 2021</i> (EP&A Regulation) and must have regard to the <i>State Significant Development Guidelines</i> and the NSW Wind Energy Framework.</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); plans for any buildings; high-quality 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 6 km of a proposed turbine, and any other existing, approved or proposed wind farms in the region;

- 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;
- consolidated list and GIS data of coordinates of wind turbines, project infrastructure and relevant receivers and distances to potentially impacted receivers; and
- details of the progressive rehabilitation of the site;
- 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:
 - 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 (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed developments in the region, in accordance with the *Cumulative Impact Assessment Guideline* (DPIE, 2021), taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice and including the *NSW Wind Energy Guidelines for State Significant Wind Energy Development* (2016);
 - a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development, including details of consultation with any affected non-associated landowners in relation to the development of mitigation measures and any negotiated agreements with these landowners), and 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, including adaptive management strategies and contingency measures to address residual impact;
- a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS;
- a detailed evaluation of the merits of the project as a whole having regard to:
 - the requirements in Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A 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, NSW's *Climate Change Policy Framework*, NSW's *Net Zero Plan Stage 1: 2020 - 2030* and the greenhouse gas savings of the development;
 - feasible alternatives to the development and its key components including

	<p>project design alternatives to avoid impacts to areas of biodiversity value, indirect impacts to the Mallee Cliffs National Park and areas of archaeological sensitivity, opportunities for shared infrastructure with proposed developments in the region and the consequences of not carrying out the development; and</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, including rural villages, rural dwellings, subdivisions, land of high scenic value, conservation areas (including National Parks, Conservation Areas, State Parks and Nature Reserves), state forests, mineral and coal resources, triangulation stations, tourism facilities, existing or proposed wind farms, and the capacity of the existing electricity transmission network to accommodate the development; and • a detailed consideration of the capability of the project 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>Capital Investment Value and Employment</p> <ul style="list-style-type: none"> • Provide a detailed calculation of the capital investment value (CIV) of the development, prepared by an AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor in accordance with <i>Planning Circular PS 21-020: Calculation of Capital Investment Value</i>. The calculation of the estimated CIV is to be accurate at the date of application and include details of all components and assumptions from which it is derived. • Provide an estimate of the retained and new jobs that would be created during the construction and operational phases of the development, including details of the methodology to determine the figures provided. <p>The development application must be accompanied by:</p> <ul style="list-style-type: none"> • the consent of the owner/s of the land (as required in Section 23(1) of the EP&A Regulation); and • a declaration from a Registered Environmental Assessment Practitioner that the EIS includes the information specified in the Department's <i>Registered Environmental Assessment Practitioner Guidelines</i>.
Key issues	<p>The EIS must address the following specific issues for the wind farm and associated infrastructure:</p> <p>Landscape and Visual – including 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>NSW Wind Energy: Visual Assessment Bulletin</i> (DPE, 2016), including detailed consideration of potential visual impacts on local residences (including approved developments, lodged development applications and dwelling entitlements), the amenity values of the Mallee Cliffs National Park, scenic or significant vistas and road corridors in the public domain.</p> <p>Noise and Vibration – including:</p> <ul style="list-style-type: none"> • an assessment of the wind turbine noise in accordance with the <i>NSW Wind Energy: Noise Assessment Bulletin</i> (EPA/DPE, 2016); • an assessment of the noise generated by ancillary infrastructure in accordance with the <i>NSW Noise Policy for Industry</i> (EPA, 2017);

- assessment of the construction noise under the *Interim Construction Noise Guideline* (DECC, 2009) and a draft noise management plan if the assessment shows construction noise is likely to exceed applicable criteria);
- assessment of the traffic noise under the *NSW Road Noise Policy* (DECCW, 2011);
- an assessment of vibration under the *Assessing Vibration: A Technical Guideline* (DECC, 2006);
- assess the noise impacts on amenity / recreational use of the Mallee Cliffs National Park (including walking tracks, campgrounds and lookouts) considering comparable noise amenity levels in the *NSW Noise Policy for Industry* (EPA, 2017); and
- assessment of the cumulative noise impacts (considering other developments in the area).

Biodiversity – including:

- an assessment of the biodiversity values and the likely biodiversity impacts of the project, including impacts associated with transport route road upgrades and indirect impacts on the Mallee Cliffs National Park and surrounding conservation areas in accordance the *Biodiversity Conservation Act 2016* (NSW), the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR), including a detailed description of the proposed regime for avoiding, minimising, managing and reporting on the biodiversity impacts (including on grasslands) of the development over time, and a strategy to offset any residual impacts of the development in accordance with the BC Act;
- an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the *Fisheries Management Act 1994*, and a description of the measures to minimise and rehabilitate impacts;
- an assessment of the impacts 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;
- a cumulative impact assessment of biodiversity values in the region from nearby developments; and
- if an offset is required, include details of the measures proposed to address the offset obligation.

Heritage – including:

- an assessment of the impact to Aboriginal cultural heritage items (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), including results of archaeological test excavations (if required);
- 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
- an assessment of the impacts to historic heritage having regard to the *NSW Heritage Manual*.

Transport – including:

- an assessment of the construction, operational and decommissioning traffic impacts of the development on the local and State road network;
- provide details of the peak and average traffic volumes (including light, heavy and over-mass and over-dimensional vehicles / heavy vehicles requiring escort and construction worker transportation) and transport and haulage routes during construction, operation and decommissioning, including traffic associated with sourcing raw materials (water, sand and gravel);
- an assessment of the potential traffic impacts of the project on road network function including intersection performance, site access arrangements, site access and haulage routes, and road safety, including school bus routes and school zones;
- an assessment of 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 haulage routes from port) during construction, operation and decommissioning;
- an assessment of the likely transport impacts to the site access and haulage routes, site access point, any rail safety issues, any Crown Land particularly in relation to the capacity and conditions of the roads and use of rail level crossings (and rail safety assessment if required), and impacts to rail underbridges and overbridges;
- a cumulative impact assessment of traffic from nearby developments; and
- provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades (including resulting from over mass / over dimensional traffic haulage routes), road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road and / or rail authority.

Water and Soils – including:

- a site water balance for the development, 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;
- an assessment of the likely impacts of the development (including flooding and flood modelling) on surface water and groundwater resources traversing the site and surrounding watercourses (including their Strahler Stream Order), 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;
- where the project involves works within 40 metres of the high bank of any river, lake or wetlands (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 Guidelines for Controlled Activities on Waterfront Land* (2018) and (if necessary) *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (DPI 2003); and *Policy & Guidelines for Fish Habitat Conservation & Management* (DPI, 2013); and
- a description of the measures to minimise surface and groundwater impacts, including how works on erodible soil types would be managed and any contingency requirements to address residual impacts in accordance with the

Managing Urban Stormwater: Soils and Construction series of guidelines;

Air Quality – including an assessment of risks of dust generation and propose mitigation measures designed in accordance with *the Approved Methods and Guidelines for the Modelling and Assessment of Air Pollutants in New South Wales* (DECC, 2005).

Land – including:

- a detailed justification of the suitability of the site and that the site can accommodate the proposed development having regard to its potential environmental impacts, permissibility, strategic context and existing site constraints;
- an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including:
 - the impact of the development on Mallee Cliffs National Park in accordance with the guidelines for *Development adjacent to National Parks and Wildlife Services Lands* (DPIE, 2020);
 - consideration of agricultural land, biosecurity, irrigated lands, travelling stock routes, flood prone land, Crown lands, mining, quarries, mineral or petroleum rights;
 - a soil survey to determine the soil characteristics and consider the potential for erosion to occur; and
 - 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:
 - consideration of the zoning provisions applying to the land, including subdivision (if required);
 - completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's *Land Use Conflict Risk Assessment Guide*; and
 - assessment of impact on agricultural resources and agricultural production on the site and region.

Hazards and Risks – including:

- *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 and marking, including of wind monitoring masts, considering, defined air traffic routes, aircraft operating heights, approach / departure procedures, radar interference, communication systems, navigation aids, and use of emergency helicopter access;
 - 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, including emergency telecommunications systems used by NPWS, 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, including an assessment against the *International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields*;
- **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 bushfires and demonstrate compliance with *Planning for Bush Fire Protection 2019*; and
- **Dangerous Goods** – a preliminary risk screening completed in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021* and 'Applying SEPP 33' (DoP, 2011);
- **Battery Storage**:
 - a preliminary risk screening completed in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021*;
 - a Preliminary Hazard Analysis (PHA), prepared in accordance with the *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment* (DoP, 2011). The PHA must consider all recent standards and codes and verify separation distances to on-site and off-site receptors to prevent fire propagation and compliance with *Hazardous Industry Planning Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning'* (DoP, 2011); and
- **Blade Throw** – assess blade throw risks, including consideration of battery energy storage facilities.

Social Impact – including an assessment of the social impacts in accordance with the *Social Impact Assessment Guideline* (DPIE, 2021) and consideration of construction workforce accommodation.

Economic – including any benefits of the economic impacts or benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, and details of how the construction workforce will be managed to minimise local impacts, including a consideration of the construction workforce accommodation.

Waste – identify, quantify and classify the likely waste streams to be generated throughout all stages of the project, and describe the measures to be implemented to reduce waste generation, manage, reuse, recycle and safely dispose of this waste.

Plans and Documents	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Part 3 of the Regulation. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include high quality files of maps and figures of the subject site, proposal, and proposed road upgrades.</p>
Legislation, Policies and Guidelines	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified.</p> <p>While not exhaustive, a list of some of the legislation, policies and guidelines that may be relevant to the assessment of the project can be found at:</p> <ul style="list-style-type: none"> • https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework/Improving-assessment-guidance • https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines; and • http://www.environment.gov.au/epbc/publications#assessments
Engagement	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>The EIS must:</p> <ul style="list-style-type: none"> • detail how engagement undertaken was consistent with the <i>Undertaking Engagement Guide: Guidance for State Significant Projects</i> (DPIE, 2021); and • 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>In particular you must consult with:</p> <ul style="list-style-type: none"> • the relevant local, State or Commonwealth Government authorities, service providers, community groups, affected landowners, exploration licence holders, quarry operators and mineral title holders; and • carry out detailed consultation with the following: <ul style="list-style-type: none"> – Wentworth Shire Council – NSW Aboriginal Land Council – DPE's Biodiversity, Conservation and Science Directorate – NSW National Parks and Wildlife Service – Heritage NSW – Murray Local Land Services – NSW Local Land Services – DPE Water Group – WaterNSW – Environment Protection Authority – Crown Lands – Regional NSW – Mining, Exploration & Geoscience – Department of Primary Industries – Agriculture and Fisheries divisions – Transport for New South Wales – Transgrid – Department of Customer Service – Telco Authority – Fire & Rescue NSW – NSW Rural Fire Service

	<ul style="list-style-type: none"> – Commonwealth Department of Defence – Civil Aviation Safety Authority – Airservices Australia
Expiry Date	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary 3 months prior to the expiry date.