

Planning Secretary's Environmental Assessment Requirements

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

Application Number	SSD-73123714
Project	<p>Bowmans Creek Wind Farm Stage 2, which includes:</p> <ul style="list-style-type: none"> the construction, operation and decommissioning of a wind farm with an estimated capacity of 120 megawatts (MW), up to 21 turbines with a maximum height of 250 metres (to blade tip); and ancillary infrastructure including hardstands, new access tracks, upgrades to existing access tracks, access point/s from public roads, meteorological monitoring masts, electricity cabling and grid connection to the transmission network.
Location	21 kilometres east of Muswellbrook and 25 kilometres north of Singleton in the Muswellbrook Shire and Singleton Shire local government areas
Proponent	Bowmans Creek Wind Farm Pty Ltd
Date of Issue	22 May 2025
General Requirements	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the <i>Environmental Planning and Assessment Regulation 2021</i> (the Regulation) and must have regard to the Department's:</p> <ul style="list-style-type: none"> <i>State Significant Development Guidelines</i>; and Renewable Energy Planning Framework, including the <i>Wind Energy Guideline</i> and its supporting <i>Technical Supplement for Landscape Character and Visual Impact Assessment</i> and <i>Technical Supplement for Noise Assessment</i> and the <i>Benefit-Sharing Guideline</i> (most recent version as updated from time to time). <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, battery energy storage system, 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);

	<ul style="list-style-type: none"> ○ the Project Area (as per Table 1 of the SSD guidelines - preparing an environmental impact statement) and Development Footprint (disturbance area including but not limited to areas for infrastructure, road works, access tracks, defensible space, fencing and temporary laydown); ○ 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 5 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; - consolidated list and GIS data of coordinates of wind turbines, project infrastructure and relevant receivers and distances to potentially impacted receivers; and - interactions with the consent for Bowmans Creek Wind Farm (SSD 10315) including consideration of shared infrastructure; - details of the progressive rehabilitation of the site; • consistency in information presented in the EIS and all technical reports, including distances, development footprint, project design and infrastructure proposed, construction timeframes and receiver numbers; • demonstrate the suitability of the site and viability of the wind resources for the project and include high quality maps showing the wind resource; • a list of any approvals that must be obtained before the development may commence; • a model for community benefit-sharing, prepared in accordance with the <i>Benefit-Sharing Guideline</i>, including the terms of any proposed voluntary planning agreement with the relevant local council; • a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; • an assessment of the likely impacts of the development on the environment and any other significant issues identified in this risk assessment, 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 (which is commensurate with the level of impact), including the cumulative impacts of the site and existing or proposed developments in the region in accordance with the <i>Cumulative Impact Assessment Guideline</i> (DPIE, 2022), taking into consideration any relevant State and Commonwealth legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice and including the <i>Wind Energy Guideline</i>; ○ 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 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,
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	<p>including adaptive management strategies and contingency measures to address residual impacts;</p> <ul style="list-style-type: none"> • a consolidated summary of all the proposed environmental mitigation, 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: <ul style="list-style-type: none"> ○ the requirements in Section 4.15 of the <i>Environmental Planning and Assessment Act 1979</i> (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 <i>National Electricity Market, NSW's Climate Change Policy Framework, NSW's Net Zero Plan Stage 1: 2020 – 2030</i> and the greenhouse gas savings of the development; ○ feasible alternatives to the development (and its key components) including project design alternatives to avoid impacts to areas of biodiversity value, indirect impacts to any nearby national parks or nature reserves and archaeological sensitivity, opportunities for shared infrastructure with proposed developments in the region and the consequences of not carrying out 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, 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>Estimated Development Cost and Employment</p> <ul style="list-style-type: none"> • Provide the estimated development cost (EDC) of the development prepared in accordance with the relevant planning circular using the Standard Form of EDC Report; and • 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 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:</p>

- a detailed assessment of the visual impacts of all components of the project (including turbines, transmission lines, substations, battery storage and any other ancillary infrastructure) in accordance with the *Wind Energy Guideline* and supporting *Technical Supplement for Landscape Character and Visual Impact Assessment*.

Noise and Vibration – including:

- an assessment of wind turbine noise in accordance with the *Wind Energy Guideline*, including the supporting *Technical Supplement for Noise Assessment*;
- an assessment of noise generated by ancillary infrastructure in accordance with the *NSW Noise Policy for Industry* (EPA, 2017);
- an assessment of construction noise under the *Interim Construction Noise Guideline* (DECC, 2009);
- an assessment of traffic noise under the *NSW Road Noise Policy* (DECCW, 2011);
- an assessment of vibration under the *Assessing Vibration: A Technical Guideline* (DECC, 2006); and
- an 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 in accordance with Section 7.9 of the *Biodiversity Conservation Act 2016* (NSW), in accordance with the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must:
 - be prepared using the approved BDAR template;
 - document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM;
 - assess impacts associated with transport route road upgrades; o any indirect impacts to nearby conservation areas and nature reserves; and
 - be finalised by an accredited assessor as BAM-compliant within 14 days of submission;
- an assessment of the impact of the project on birds and bats from blade strikes, low air pressure zones at the blade tips (barotrauma), and alteration to movement patterns resulting from the turbines and considering cumulative effects of other wind farms in the vicinity;
- an assessment of the likely direct and indirect 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;

- a cumulative impact assessment of biodiversity values in the region from nearby developments; and
- if an offset is required, 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), identifying, describing, and assessing any impacts to any Aboriginal cultural heritage sites or values associated with the site (including impacts from any proposed earth works, construction works and road upgrades), including results of archaeological test excavations (where required), undertaken in accordance with the relevant standards and requirements;
- evidence of adequate consultation with Aboriginal communities in determining and assessing impacts, identifying and selecting options for avoidance of Aboriginal cultural heritage and identifying appropriate mitigation measures (including the final proposed measures), having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010); including the consultation process outline within; and
- an assessment of the impacts to historic heritage having regard to the *Guidelines for preparing a statement of heritage impact*.

Traffic and Transport – including:

- an assessment of the construction, operational and decommissioning traffic impacts of the development on the local and State road network;
- details of the peak and average traffic volumes (including light, heavy and over-mass / 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
- details of measures to mitigate and / or manage potential impacts (developed in consultation with the relevant road authorities) including:

- a schedule of all required road upgrades (including resulting from heavy vehicle and over mass / over dimensional traffic haulage routes),
- clear figures of proposed road upgrades (including the site access point); and
- 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 (including consultation with suppliers);
- 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); and
- demonstration of how the development minimises greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050).

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:

	<ul style="list-style-type: none"> ○ flood prone land, agricultural land, irrigated lands, Crown lands, travelling stock routes, mining, quarries, mineral or petroleum rights; ○ a soil survey to determine the soil characteristics and consider the potential for erosion to occur; ○ a cumulative impact assessment of nearby developments; ○ a preliminary investigation into potential contamination across the site, in accordance with the State Environmental Planning Policy (Resilience and Hazards) 2021 (Hazards SEPP) (as required); and ○ the development potential of that land, in accordance with the <i>Wind Energy Guideline</i>; and <ul style="list-style-type: none"> • 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"> ○ 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 <i>Land Use Conflict Risk Assessment Guide</i>; and ○ assessment of impact on agricultural resources and agricultural production on the site and region. <p>Hazards and Risks – including an assessment of the following:</p> <ul style="list-style-type: none"> • Aviation Safety – <ul style="list-style-type: none"> ○ prepare an aviation impact assessment in accordance with Appendix A of the <i>Wind Energy Guideline</i> and the <i>National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft</i>; and ○ assess the impact of the turbines on the safe and efficient aerial application of agricultural fertilisers and pesticides and emergency helicopter access (if required) 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 – 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 <i>International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields</i>; • Bushfire – <ul style="list-style-type: none"> ○ assess potential hazards and risks associated with bushfires / use of bushfire prone land, including the risk of the project causing bush/grass fires; ○ identify measures to prevent a fire occurring within the site from developing into a bushfire; ○ consider any potential impacts of the project on the aerial fighting of bushfires; and ○ demonstrate compliance with <i>Planning for Bush Fire Protection 2019</i>; • Blade Throw – assess blade throw risks, including consideration of associated dwellings, non-associated dwellings and neighbouring infrastructure; and
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	<ul style="list-style-type: none"> • <i>Dangerous Goods</i> – a preliminary risk screening completed in accordance with the State Environmental Planning Policy (Resilience and Hazards) 2021. <p>Social Impact – including an assessment of the social impacts in accordance with the <i>Social Impact Assessment Guideline</i> (DPE) and <i>SIA Guideline - Technical Supplement</i> (DPE) including consideration of any increase in demand for community infrastructure services, consideration of construction workforce accommodation.</p> <p>Economic and Benefit-Sharing – including any benefits of the economic impacts or benefits of the project for the region and the State as a whole and provide details of proposed benefit-sharing arrangements, in accordance with the <i>Benefit-Sharing Guideline</i>.</p> <p>Waste – identify, quantify, and classify the likely waste streams to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste and an assessment of sewage (if required) and provide a waste management plan.</p>
<p>Plans and Documents</p>	<p>The EIS must include all relevant plans, diagrams and relevant documentation required under Part 3 of the EP&A 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>
<p>Legislation, Policies & Guidelines</p>	<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/renewable-energy/renewable-energy-planning-framework • https://www.planning.nsw.gov.au/Policy-and-Legislation/Planningreforms/Rapid-Assessment-Framework/Improving-assessment-guidance • https://www.planningportal.nsw.gov.au/majorprojects/assessment/policies-and-guidelines; and • https://www.dcceew.gov.au/environment/epbc/publications#assessments.
<p>Engagement</p>	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners, and any exploration licence and/or mineral title holders.</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> (DPHI); 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

	<p>licence holders, quarry operators, mineral title holders and irrigation channel owners; and</p> <ul style="list-style-type: none"> • carry out detailed consultation with the following: <ul style="list-style-type: none"> - Muswellbrook Shire Council - Singleton Shire Council - NSW Aboriginal Land Council - Wanaruah Local Aboriginal Land Council - Wonnarua Nation Aboriginal Corporation - NSW Local Land Services - NSW DCCEEW – Heritage NSW Group - NSW DCCEEW – Biodiversity Conservation and Science Group - NSW DCCEEW – Water Group - NSW DCCEEW – Natural Resource Access Regulator - Environment Protection Authority - Crown Lands - Department of Primary Industries and Regional Development – NSW Resources - Department of Primary Industries and Regional Development – Agriculture division - Department of Primary Industries and Regional Development – Fisheries division - Transport for NSW - Energy Corporation of NSW (EnergyCo) - Transgrid - NSW Telco Authority - Fire & Rescue NSW - NSW Rural Fire Service - Commonwealth Department of Defence - Civil Aviation Safety Authority - Airservices Australia
Expiry Date	<p>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.</p>