

Scoping Requirements  
Hexham Wind Farm  
Environment Effects Statement  
*Environment Effects Act 1978*

September 2024



**VICTORIA**  
State  
Government

Department  
of Transport  
and Planning

OFFICIAL

## Acknowledgement



The Victorian Government acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of the land and acknowledges and pays respect to their Elders, past and present.

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## List of abbreviations

CHMP	Cultural heritage management plan
DCCEEW	Department of Climate Change, Energy, Environment and Water (Cwlth)
DELWP	Department of Environment, Land, Water and Planning
DTP	Department of Transport and Planning
DEECA	Department of Energy, Environment and Climate Action
EES	Environment effects statement
EMF	Environmental management framework
EPA	Environment Protection Authority (Victoria)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i>
ha	hectares
km	kilometre
MNES	Matters of national environmental significance
TRG	Technical reference group



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# 1. Introduction

In light of the potential for significant environmental effects, on 16 March 2022 the Minister for Planning determined under the *Environment Effects Act 1978* that Hexham Wind Farm Pty Ltd (the proponent) is to prepare an environment effects statement (EES) for the proposed Hexham Wind Farm (the project). The purpose of the EES is to provide a sufficiently detailed description of the project, assess its potential effects on the environment<sup>1</sup> and assess alternative project layouts, designs and approaches to avoid and mitigate effects. The EES will inform and seek feedback from the public and stakeholders. The Minister for Planning (the Minister) will issue an assessment of the project's environmental effects under the Environment Effects Act to conclude the EES process. The Minister's assessment will then inform statutory decision-makers for the project.

These *Scoping Requirements for the Hexham Wind Farm Environment Effects Statement* set out the specific matters to be investigated and documented in the EES. These scoping requirements were finalised following consideration of submissions received during the public exhibition of the draft scoping requirements in July 2023.

While the scoping requirements are intended to cover all relevant matters, the EES will also need to address other issues that emerge during the EES investigations, especially potential impacts and environmental issues relevant to statutory decisions that will be informed by the assessment.

## 1.1 The project and setting

The project is a proposed wind farm located between the townships of Hexham, Caramut and Ellerslie in the Moyne Shire local government area of south-west Victoria. The project area is approximately 15 kilometres (km) west of Mortlake and 15 km north-east of Woolsthorpe. Hexham is the nearest settlement, approximately 3 km north-east of the project area (Figure 1). There are several existing and proposed wind farms in the region.

The project area covers approximately 16,000 hectares of relatively flat private and public land and is bound by the Hamilton Highway to the north, Woolsthorpe-Hexham Road and Hexham-Ballengeich Road to the east, Gordons Lane to the south and Warrnambool-Caramut Road to the west. Agriculture is the predominant land use in the project area consisting mostly of livestock grazing along with some cropping.

The project proposes a total capacity of approximately 741 MW and annual production of approximately 2,850 GWh of electricity. The operational life of the project is anticipated to be 25 years.

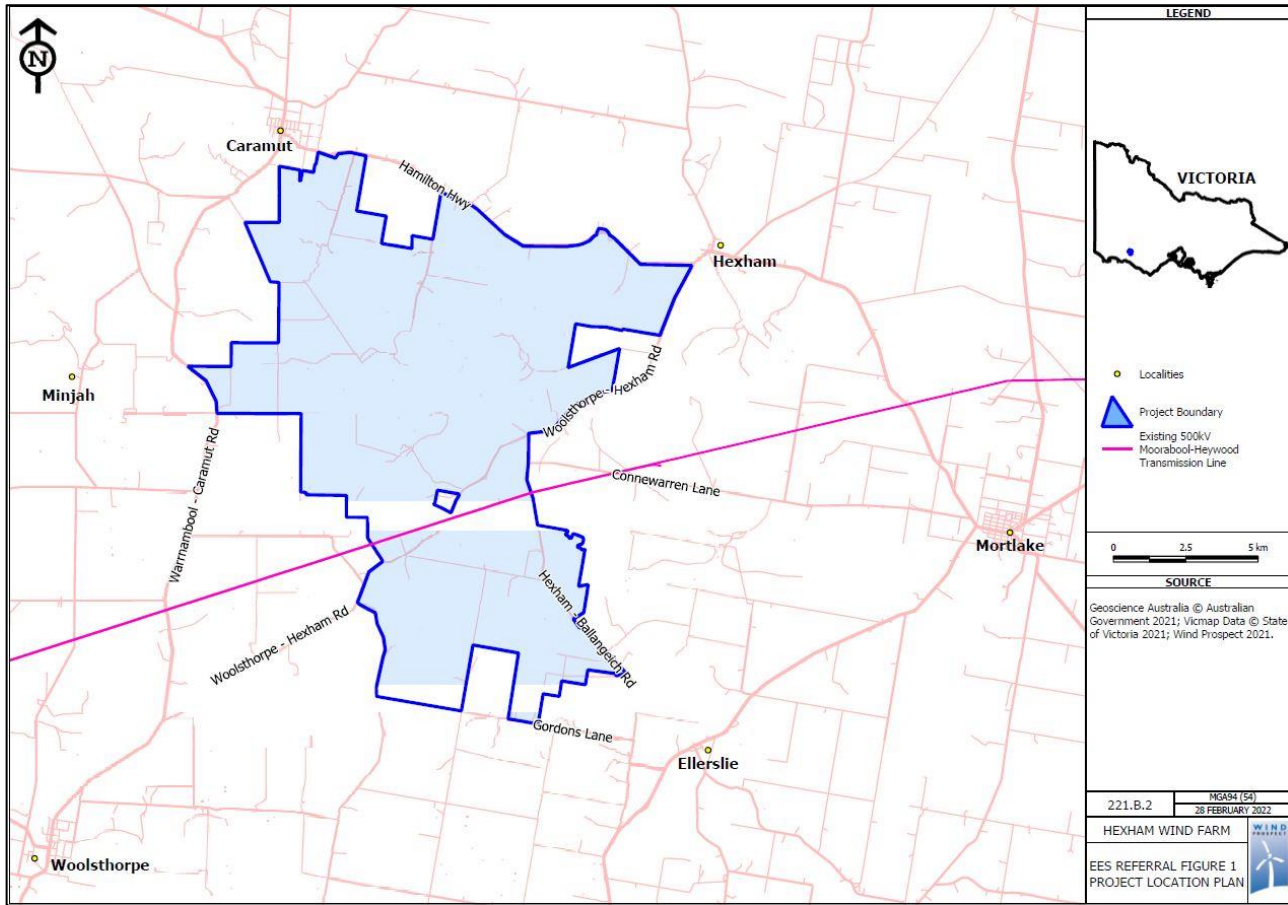
The project proposes up to 109 wind turbines with a maximum blade tip height of up to 260 m, each of which would connect to the on-site terminal station through a combination of approximately 142 km of underground cabling and 40 km of overhead powerlines. The terminal station is located next to the existing Moorabool to Heywood 500 kV transmission powerline.

A battery storage facility would be established on the site. The project also proposes approximately 128 km of new access tracks, and upgrades to approximately 29 km of existing tracks.

Temporary infrastructure associated with construction of the project would include a construction compound (with office facilities, parking and toilet facilities), laydown areas, concrete batching plants and potentially an on-site quarry.

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1. For assessment of environmental effects under the EE Act, the meaning of 'environment' includes physical, biological, heritage, cultural, social, health, safety and economic aspects (Ministerial Guidelines, p. 2).



**Figure 1. Project location showing nearby settlements and existing 500 kV Transmission Line.**

Source: Wind Prospect.

## 1.2 Minister’s requirements for this EES

The former Minister for Planning decided that an EES is required to assess the potential environmental effects of the project, due to the potential for significant environmental effects. The Minister published procedures and requirements applicable to the preparation of the EES, in accordance with section 8B(5) of the Environment Effects Act (see Appendix A). The EES is to investigate and document the potential environmental effects (direct and/or indirect) of the proposed project, including for any relevant alternatives, as well as associated environmental avoidance, mitigation and management measures. In particular, the EES needs to address:

- potential effects on biodiversity and ecological values within and near the site including native vegetation, listed flora, fauna and communities through loss, degradation or fragmentation of habitat, collision with turbines, or other ecological effects;
- potential effects on water environments including wetlands, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste during construction, operation or decommissioning of infrastructure;
- effects on Aboriginal cultural heritage values;
- effects on historic heritage values;
- effects on landscape and visual amenity values;
- effects on amenity related to construction and decommissioning;
- effects on the socioeconomic environment, at local and regional scales, including on traffic, agriculture and other direct and indirect effects; and



- cumulative effects of the project, particularly on biodiversity, ecology, social and landscape values, given the proximity to other proposed, approved and operating windfarms.

These scoping requirements provide further detail on the matters to be investigated in the EES as required by the Minister's decision and the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Ministerial Guidelines).

## 2. Assessment process and required approvals

### 2.1 What is an EES?

An EES describes a project, its rationale/benefit and its potential environmental effects. It should enable stakeholders and decision-makers to understand how the project is proposed to be implemented and the likely environmental effects of doing so. An EES has two main components:

- i. The EES main report – an integrated, plain English document that assesses the potential impacts of the project and examines avoidance, mitigation or other measures reduce the environmental effects and assesses residual effects. The main report draws on technical studies, data and statutory requirements such as specific limits for surface water and groundwater quality and waste discharge to the environment and should clearly identify which components of the scope are being addressed throughout.
- ii. The EES technical reports – specialist studies, investigations and analyses that provide the basis for the EES main report. These reports will be exhibited in full, as appendices to the main report.

### 2.2 The EES process

The proponent is responsible for preparing an EES, including conducting technical studies and undertaking appropriate stakeholder consultation. The Department of Transport and Planning<sup>2</sup> (DTP) is responsible for managing the EES process<sup>3</sup>. The EES process has the following steps:

- preparation of a draft study program and draft schedule by the proponent;
- preparation and exhibition of draft scoping requirements by DTP on behalf of the Minister with public comments received during the advertised exhibition period;
- finalisation and issuing of scoping requirements by the Minister;
- review of the proponent's EES studies and draft documentation by DTP and a technical reference group;<sup>4</sup>
- completion of the EES by the proponent;
- review of the complete EES by DTP to establish its adequacy for public exhibition;
- exhibition of the proponent's EES and invitation for public comment by DTP on behalf of the Minister;
- appointment of an inquiry panel by the Minister to review the EES and public submissions received, conduct public hearings and provide a report to the Minister; and finally
- following receipt of the inquiry report, preparation of an assessment on whether the project's environmental effects are acceptable by the Minister for the consideration of statutory decision-makers.

#### Technical reference group

DTP has convened a technical reference group (TRG) of state and commonwealth government agencies, registered Aboriginal parties and local councils for this EES process to advise DTP and the proponent on:

- applicable policies, strategies and statutory provisions;
- EES scoping requirements;
- the design and adequacy of EES technical studies;
- the proponent's public information and stakeholder consultation program for the EES process;
- responses to issues arising from the EES investigations;
- the technical adequacy and completeness of draft EES documentation; and
- coordination of statutory processes.

2. Note prior to the Machinery of Government changes effective 1 January 2023 the Planning group was part of the 'Department of Environment, Land, Water and Planning'.

3. Further information on the EES process can be found at [planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria](http://planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria).

4. For critical components of the EES studies, peer review by an external, independent expert (or panel of experts) may be appropriate.

## EES consultation

The proponent is responsible for informing and engaging the public and stakeholders during the EES process, to inform them about the project, the EES process and EES studies. The proponent's EES consultation should enable feedback to be inputted on the project and its potential environmental effects, as well as respond to issues raised. Stakeholders include potentially affected parties, traditional owner groups, any interested community organisations/groups and government bodies.

Through its EES consultation plan the proponent is to undertake effective engagement that enables the public and stakeholders to understand where there are opportunities for engagement. The proponent needs to provide appropriate opportunities for input and feedback from different stakeholders on the project and EES investigations.

The proponent is responsible for preparing and implementing an EES consultation plan that sets out the approach to engagement. This plan is reviewed and amended in consultation with DTP and the TRG before it is published on the Planning website.<sup>5</sup> The consultation plan will:

- identify stakeholders;
- characterise public and stakeholders' interests, concerns and consultation needs, local knowledge and inputs;
- describe consultation methods and schedule; and
- outline how public and stakeholder inputs will be recorded, considered and/or addressed in the preparation of the EES.

## Traditional Owner engagement

The EES should be developed with acknowledgement of and respect for Traditional Owners' care for and connection to Country. Through the EES, the proponent should seek to understand the direct and indirect ways in which the project could affect these interests. To this end, the EES should be informed by engagement with Traditional Owners.

The proponent should support and enable culturally appropriate, informed and meaningful engagement with Traditional Owners, including by asking Traditional Owner groups about the engagement processes that would be suitable; endeavouring to develop good working relationships; taking into account and respecting the cultural and communication needs and protocols of communities; engaging early and providing appropriate timeframes to consider and respond to information; and genuinely seeking input and expertise.

The EES consultation plan should set out the mechanisms to be established by the proponent to support and enable Traditional Owner engagement, as well as outline how the views and expertise offered by Traditional Owners will be integrated into the EES.

## Statutory approvals and the EES process

The project will require a range of approvals under Victorian legislation if they are to proceed. DTP coordinates the EES process as closely as practicable with the approvals procedures, consultation and public notice requirements.

The key approvals required under Victorian legislation include an approved cultural heritage management plan (CHMP) under the *Aboriginal Heritage Act 2006* and a planning permit under the Moyne Planning Scheme consistent with the *Planning and Environment Act 1987*. Secondary consents and approvals include works on waterways permits under the *Water Act 1989*; permit to take, keep or move protected flora and fauna (including fish) under the *Flora and Fauna Guarantee Act 1988*. An approved work plan and work authority under the *Mineral Resources (Sustainable Development) Act 1990* will also be required if the project is to include an on-site quarry. To facilitate the integrated consideration of issues and the timely completion of required approval processes, it is recommended that the EES include a draft work plan. Other approvals may be required and will be determined throughout the course of the EES.

## 2.3 Accreditation of the EES process under the EPBC Act

The project has been referred to the Commonwealth under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). A delegate for the Commonwealth Minister for the Environment and Water determined on 31 August

5. <https://www.planning.vic.gov.au/environment-assessment/browse-projects/projects/hexham-wind-farm>





2022 that the project is a controlled action (EPBC 2022/9287), as it is likely to have a significant impact<sup>6</sup> on the following matters of national environmental significance (MNES), which are protected under Part 3 of the EPBC Act:

- listed threatened species and communities (sections 18 and 18A); and
- listed migratory species (sections 20 and 20A).

The EES process is accredited to assess impacts on MNES under the EPBC Act through the Bilateral (Assessment) Agreement between the Commonwealth and the State of Victoria. This removes duplication, enabling a single assessment process to examine the project's likely impacts and inform statutory decisions.

The Commonwealth Minister or delegate will decide whether the project is approved, approved with conditions or refused under the EPBC Act, after having considered the Minister for Planning's assessment under the *Environment Effects Act 1978* at the conclusion of the EES process.

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6. Note that 'relevant impacts' defined in section 82 of the EPBC Act correspond to what are generally termed 'effects' in the EES process.



## 3. Matters to be addressed in the EES

### 3.1 General approach

Preparation of the EES should be consistent with a systems approach and a risk-based approach when identifying issues for assessment. The EES needs to put forward a sound rationale for the level of assessment and analysis undertaken for any environmental effect or combination of environmental effects<sup>7</sup> arising from all components and stages of the project. The EES needs to provide an analysis of the significance of the potential effects of the project, with consideration of:

- the potential effects on individual environmental assets/values – including considering magnitude, extent, duration and significance of change in the values of each asset/value;
- the likelihood of adverse effects, including those caused indirectly as a result of proposed activities, and associated uncertainty of available predictions or estimates;
- proposed avoidance or mitigation measures to reduce predicted effects;
- likely residual effects assuming the proposed measures to avoid and mitigate environmental effects are implemented;
- the significance of residual effects on local, regional, state and federal matters; and
- proposed approach to managing and monitoring environmental performance and contingency planning.

### 3.2 Content and style

Together with the Minister's reasons for decision, the published procedures and requirements and the Ministerial Guidelines, the content of the EES and related investigations is to be guided by these scoping requirements. To facilitate decisions on required approvals, the EES should address statutory requirements associated with approvals that will be informed by the Minister's assessment, including decision-making under the EPBC Act, the Planning and Environment Act and other applicable legislation. The EES should also address any other significant issues that emerge during the investigations. Ultimately, it is the proponent's responsibility to ensure that adequate studies are undertaken and reported to support the assessment of environmental effects arising from the project and that it implements effective internal quality assurance for EES documentation.

The EES should provide a clear, objective and well-integrated analysis of the potential effects of the proposed project, including proposed avoidance, mitigation and management measures, as well as feasible alternatives. Overall, the main report should include:

- an executive summary;
- a description of the project, including its objectives, rationale, key elements, resource use, associated requirements for new infrastructure and use of existing infrastructure;
- a description of the approvals required for the project to proceed, and their relationship to relevant laws, policies, strategies, guidelines and standards;
- a description of feasible alternatives capable of substantially meeting the project's objectives that may also offer environmental or other benefits including the basis for any nomination of a preferred alternative;
- a description of the scope, timing<sup>8</sup> and method for studies or surveys used to provide information on the values of the project areas, as well as any records and other data from local sources gathered and considered as appropriate;
- descriptions of the existing environment and the predicted future environment (such as projected climate change scenarios), where this is relevant to the assessment of potential effects;

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7. Effects include direct, indirect, combined, cumulative, short- and long-term, beneficial and adverse effects.

8. Surveys of assets, values and potential effects must be timed to ensure they take account of seasonal weather patterns of the area.



- appropriately detailed assessments of potential effects of the project (and feasible alternatives) on environmental assets and values, relative to the “no project” scenario, together with an estimation of likelihood and degree of uncertainty associated with predictions;
- clear, active measures for avoiding, minimising, managing and monitoring effects, including a statement of commitment to implement these measures;
- predictions of residual effects of the project assuming implementation of proposed environmental management measures;
- any proposed offset measures where avoidance and other mitigation measures will not adequately address effects on environmental values, including for relevant MNES;
- assessment of cumulative impacts with other existing and proposed developments in the region;
- documentation of the process and results of the consultation undertaken by the proponent during the preparation of the EES, including the issues raised by stakeholders or the public and the proponent’s responses to these issues, in the context of the EES studies and the associated consideration of mitigation measures;
- evaluation of the implications of legislation and policy for the project and feasible alternatives;
- evaluation against the principles and objectives of ecologically sustainable development<sup>9</sup>; and
- conclusions on the significance of impacts on local, regional and state matters.

The EES should also include an outline of a program for community consultation, stakeholder engagement and communications proposed for implementation during the construction and operation of the project, including opportunities for local stakeholders to engage with the proponent to seek responses to issues that might arise during project implementation. The EES should also outline an approach to furthering Traditional Owner engagement and partnerships during project implementation including, as appropriate, in the management of Country.

The proponent may choose to prepare a website with interactive functionality to provide an alternative way of accessing EES information, which may complement the conventional EES main report and technical reports. Such an approach should be discussed with DTP Impact Assessment Unit and DCCEEW and if integrated with the EES documentation, the digital information should be provided to the TRG for review.

The proponent must also prepare a concise, graphical-based non-technical summary document (hard copy A4, no more than 25 pages) for free distribution to interested parties. The EES summary document should also include details of the EES exhibition, public submission process and availability of the EES documentation and any digital information.

### 3.3 Project description and rationale

The EES is to describe the project in sufficient detail both to allow an understanding of all components, processes and development stages, and to enable assessment of their likely potential environmental effects. The project description should canvass the following:

- an overview of the proponent's environmental performance and track record, including experience in delivering similar projects, organisation health, safety, environmental and community engagement policies, ability to build trusted relationships with stakeholders and Traditional Owner groups and whether the proponent has been subject to any past or present proceedings under a Commonwealth, state or territory law for the protection of the environment or the conservation and sustainable use of natural resources;
- contextual information on the project, including the proponent’s objectives and rationale, their relationship to statutory policies, plans and strategies, including the basis for selecting the proposed project locations and implications of the project not proceeding;
- the project areas and surrounds, supported by plans and maps that show:
  - the location of relevant sensitive receivers including settlements and isolated residences;

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9. Ecologically sustainable development is defined within the Ministerial Guidelines, page 3.



- the extent of Crown and private land, existing and planned land uses and waterways; and
- the general layout of the proposed infrastructure and areas of disturbance, including access tracks, access points, laydown areas, construction compounds, batching plants and quarries/borrow pits (if applicable), proposed exclusion and buffer zones.
- the proposed operational life of the project and planned timing of project phases;
- other necessary works directly associated with the project, such as road upgrades and/or connections, transmission lines and infrastructure and services relocation, including visitor facilities;
- predictions of energy use and greenhouse gas emissions associated with the project, as well as renewable energy generated over the life of the project;
- risks associated with projected climate change and resilience to these risks including consideration of the *Climate Change Act 2017*'s principles of risk management and standards for risk assessment e.g. AS/NZS ISO 31000:2009;
- description of the project's components (supported by visuals and diagrams), including:
  - applicable standards and adopted specifications for infrastructure;
  - location, footprint, layout and access arrangements during construction, operation and decommissioning;
  - clearing or lopping of native vegetation for construction or operation, including, but not limited to, any such activities associated with transport routes or transmission lines;
  - design and expected construction staging and scheduling taking into consideration seasonal variation in ground conditions;
  - proposed construction methods and materials, and extent of areas to be disturbed during construction;
  - identification of proposed transport routes of project components to site, including consideration of upgrades of roads and intersections;
  - solid waste, wastewater and hazardous material generation and management during construction and operation;
  - rehabilitation of site works areas including the quarry following construction as well as during decommissioning;
  - proposed decommissioning of wind turbines and associated infrastructure;
  - proposed tenure arrangements to provide for access for maintenance or other operational purposes;
  - lighting, safety, security, and noise requirements during construction, operation and decommissioning;
  - hours of construction work, workforce requirements and a description of the expected duration of project components, including which components are temporary and which are permanent;
  - approach to incorporate sustainability principles and practices into project development and delivery; and
  - operational requirements including maintenance activities and decommissioning.

### 3.4 Project development and alternatives

The EES is to document the development process for the project, including methods for the identification and evaluation of alternatives, and the basis for selecting the preferred alternative(s) examined in detail within the EES<sup>10</sup>. The EES needs to describe the process for identification and evaluation of project alternatives, including:

- alternatives considered in the project development and design process;

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<sup>10</sup> The assessment of alternatives does not include evaluating alternatives *to* the project (such as other types of electricity generation projects), but rather alternatives *for* the project which would allow project objectives to be met.

- methods and environmental criteria for identifying and comparing feasible alternatives, and for selecting preferred alternatives;
- assessment and comparison of the technical feasibility and environmental implications of alternatives, including alternative construction methods;
- the basis for selecting the preferred project layout and design, particularly where the project footprint is located in proximity to environmentally sensitive areas; and
- how information gathered during the EES process, including from consultation with stakeholders and Traditional Owner groups, was used to consider alternatives and refine the project.

The EES is to document the assessment of environmental effects of feasible alternatives, particularly where these offer a potential to avoid and/or minimise significant environmental effects whilst meeting the objectives of the project. In doing so, the assessment of environmental effects of relevant feasible alternatives (e.g. project layouts, refinements and designs) needs to address the matters set out in section 4 of these scoping requirements, as appropriate. Key aspects of the project for which the EES will need to demonstrate consideration, and where relevant assessment, of feasible alternatives, include (but is not limited to):

- number and layout of wind turbines;
- turbine models and configurations (including height, blade length and generator models);
- powerline and cable route selection process and investigations into the potentially suitable technologies, such as undergrounding;
- energy storage options such the inclusion of an on-site battery;
- access road alignments and site access points;
- crossing location and design options for access over Mustons Creek;
- sourcing of raw construction materials (e.g. on-site quarry location options if applicable); and
- transport route (e.g. for construction materials).

The depth of investigation of alternatives should be proportionate to their potential to avoid or minimise potentially significant adverse effects and to meet project objectives.

### 3.5 Applicable legislation, policies and strategies

In addition to the Environment Effects Act, the EES will need to identify relevant legislation, policies, guidelines and standards, and assess their specific requirements or implications for the project, particularly in relation to required approvals.

The proponent will also need to identify and address any other relevant policies, standards, strategies, subordinate legislation and related management or planning processes that are relevant to the assessment of potential effects of the project. These include but are not limited to the Traditional Owner Country Plans, Victorian guidelines for vegetation removal, EPBC Act policy statements, conservation advice, threat abatement plans and recovery plans for nationally listed threatened species and communities and nationally listed migratory species.

### 3.6 Evaluation objectives

Evaluation objectives are provided in Section 4 for each of the topics to be addressed in the EES. These evaluation objectives identify desired outcomes in the context of key legislative and statutory policies, as well as the principles and objectives of ecologically sustainable development, environment protection and net community benefit. In accordance with the Ministerial Guidelines, they provide a framework to guide an integrated assessment of environmental effects and for evaluating the overall implications of the project.

### 3.7 Environmental management framework

Competent management of environmental performance during project design, construction, operation and decommissioning is required to meet statutory requirements, achieve environmental outcomes, protect environmental



values and sustain stakeholder confidence. Hence, the proposed environmental management framework (EMF) in the EES should describe a transparent governance framework with clear accountabilities for complying with approvals and managing and monitoring the environmental effects and risks associated with the design, construction, operations and decommissioning phases. The EMF will set the scope for later development and review of environmental management plans for all project phases. The entities responsible for development, approval, implementation and review of environmental management plans should be specified, including relevant consultation requirements.

The EMF should reference or address the source baseline environmental conditions against which the evaluation of the residual environmental effects of the project will occur, as well as the efficacy of applied environmental management and contingency measures. The framework should include:

- regulatory context and required approvals and consents, including any anticipated requirements for related environmental management plans, whether for project phases or elements;
- environmental management system to be adopted;
- organisational responsibilities and accountabilities for environmental management;
- an approach to environmental risk assessment and management, and register of environmental risks to be maintained during project implementation;
- change management process;
- environmental management measures proposed in the EES to address specific issues, including commitments to mitigate adverse effects and enhance environmental outcomes, and how these are proposed to be given statutory weight;
- arrangements for management of, and access to, baseline and monitoring data, to ensure transparency and accountability and to contribute to the improvement of environmental knowledge;
- a proposed monitoring program including monitoring objectives, indicators and requirements (e.g. parameters, standards, methods, locations and frequency), and justification for any aspects where monitoring is not proposed;
- responsibilities and arrangements for engagement with stakeholders and communication of project information;
- complaints recording and resolution;
- environmental incident and emergency management;
- auditing and public reporting of performance, including compliance with relevant statutory conditions and standards; and
- review of the effectiveness of mitigation measures and continuous improvement.

Commitments in the EES to avoid and mitigate adverse effects and achieve environmental outcomes should be clearly described in the EMF. The EMF should describe proposed objectives, indicators and monitoring requirements, where relevant, for the range of potential environmental effects identified through the EES. A change management process is also to be included.



## 4. Assessment of specific environmental effects

Preparation of the EES and the necessary investigation of potential effects should be proportionate to the environmental risks posed by the project, as outlined in the Ministerial Guidelines (p. 23). Adopting a systems and risk-based approach to the design and depth of each of the EES studies ensures that a greater level of effort is focused on investigating and managing issues posing higher risk of adverse environmental effects, whereas approaches to examining potential impacts and issues that pose a lower level of environmental risk should involve less depth and effort. Some matters with minimal risk won't need to be analysed and can be addressed in the EES through environmental management.

Scoping requirements do not set the specific approaches or effort to be adopted by a proponent for investigating different effects for their EES. These scoping requirements do, however, provide clarity on the risk-based approach to environmental assessment for the EES, and what the potentially significant effects and priority themes for investigations are. This helps the proponent (in consultation with the department and TRG) tailor their approach to EES studies, investigations and integration, to concentrate primarily on the potentially significant effects and priority themes, which are most important for an adequate EES and subsequent decision-making.

The Minister's decision requiring the EES (Appendix A) articulates the rationale for the EES, including primary matters and potentially significant effects that need to be examined. This in combination with key statutory decision-making known for the project, establishes a framework that informs the necessary scope, depth, and desired outcomes of the assessment of environmental effects via the EES. The scope of environmental matters needing to be investigated and documented within the EES are set out below in the subsequent sections. The table below is informed by the Minister's decision and reasons for an EES, organized by investigation theme. Importantly, it also points to pertinent legislation associated with the key statutory decision-making known for the project and the effects and matters that relate to each of those

**Table 1.** Investigation themes, potentially significant effects and key statutory decision-making known for the project

Theme	Minister's reasons and decision	Relevant statutory decisions and legislation
<b>Key matters with potentially significant effects</b>		
Biodiversity and habitat	Potential effects on biodiversity and ecological values including native vegetation, listed flora, fauna and communities.	<p>Planning approval under the <i>Planning and Environment Act 1987</i>.</p> <p>Approval under <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</p> <p>Permits under the <i>Flora and Fauna Guarantee Act 1988</i> and <i>Wildlife Act 1975</i>.</p>
Catchment values and hydrology	Potential effects on water environments including wetlands and creeks, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste.	Permit or consents under the <i>Water Act 1987</i> .
Landscape and visual	Potential effects on visual and landscape values	Planning approval under the <i>Planning and Environment Act 1987</i> .



Theme	Minister's reasons and decision	Relevant statutory decisions and legislation
Cultural heritage	Potential effects on Aboriginal and historic cultural heritage values.	Approval of Cultural Heritage Management Plans under the <i>Aboriginal Heritage Act 2006</i> . Permit and/or consent under <i>Heritage Act 2017</i> to interfere with a heritage place or object listed on the Victorian Heritage Register, Victorian Heritage Inventory or an archaeological site not listed on the Victorian Heritage Inventory.
Land use and socioeconomic	Potential effects on the socioeconomic environment and land-uses, at local and regional scales, including agriculture.	Planning approval under the <i>Planning and Environment Act 1987</i> .
Cumulative effects	Particularly biodiversity/ ecology, social and landscape values, given the proximity to other proposed, approved and operating windfarms	Planning approval under the <i>Planning and Environment Act 1987</i> .
<b>Other matters</b>		
Amenity (related to construction, operation and decommissioning), including shadow flicker, EMI.		Planning approval under the <i>Planning and Environment Act 1987</i> .
Safety, transport/ traffic, roads		Consents or agreements under <i>Road Management Act 2004</i> to undertake works in, on or under a road.  Planning approval under the <i>Planning and Environment Act 1987</i> .  Lease or licence under <i>Crown Land reserves Act 1978</i> and/or <i>Land Act 1958</i>

The matters to be investigated and documented within the EES are presented in the sections below, grouped by investigation theme. Each theme is presented with an evaluation objective. The following structure sets out how the EES should document its assessment of effects for each evaluation objective.

1. **Identify key issues and risks** that the project poses to the achievement of the evaluation objective.
2. **Characterise the existing environment** and identify relevant environmental values to underpin impact assessments, having regard to the systems and risk-based approach.
3. **Identify the potential effects** of the project on the environment (pre-mitigation) considering aspects such as magnitude, extent, duration, likelihood and significance.





4. **Present design refinement and mitigation measures** that could achieve avoidance, substantial reduction and/or mitigation of the potential effects. Apply the mitigation hierarchy with justification of why higher order measures cannot be applied.
  - a. Avoidance: measures taken to avoid creating adverse effects from the outset, such as careful spatial or temporal placement of infrastructure or disturbance.
  - b. Minimisation: measures taken to reduce the duration, intensity and extent of impacts that cannot be completely avoided.
  - c. Rehabilitation/restoration<sup>11</sup>: measures taken to stabilise or restore an area after disturbance to achieve previous, improved or future land uses such as ecosystems following exposure to impacts that cannot be completely avoided or minimised.
  - d. Offsets<sup>12</sup>: measures taken to compensate for any residual, adverse impacts after full implementation of the previous three steps of the mitigation hierarchy.
5. **Assess the likely residual effects** of the project (for all project phases, including construction, operation and decommissioning) on the environment and evaluate their significance taking into account the likely effectiveness of the design and mitigation measures.
6. **Propose an approach to managing performance** that should include criteria, monitoring and evaluation to check that predicted outcomes are being achieved during project implementation, as well as contingency approaches if they are needed.

The description and assessment of effects must also consider the potential of the project to impact on nearby environmental values beyond the immediate project area, including areas downstream; roads to quarry sources and ports; and transmission infrastructure. In addition, the cumulative effects of the project in combination with other existing and planned activities in the broader area/region should be assessed for all residual adverse effects and considered in design of mitigation measures and monitoring programs. Cumulative impacts should be considered particularly for biodiversity, ecology, social and landscape values, given the close proximity of other proposed, approved and operating windfarms. Where possible the EES should be informed by publicly available data on the effects of operating wind farms in the region and the successful implementation of management practices.

## 4.1 Biodiversity and habitat

### Evaluation objective

*To avoid, and where avoidance is not possible, minimise potential adverse effects on biodiversity values within and near the site including native vegetation, listed threatened species and ecological communities, and habitat for these species. Where relevant, offset requirements are to be addressed consistent with state and Commonwealth policies.*

### Key issues

- Direct loss or degradation of native vegetation and associated ecological communities, including those listed as threatened under the EPBC Act and/or the FFG Act.
- Direct loss or degradation of habitat for migratory or threatened flora and fauna listed under the EPBC Act and/or the FFG Act.
- Disturbance and/or degradation of adjacent or nearby habitat that may support listed threatened or migratory species or other protected flora, fauna or ecological communities.
- Disturbance and increased mortality risk to flora and fauna species listed under the EPBC Act and/or FFG Act.
- Indirect habitat loss or degradation resulting from other effects, such as edge effects, surface hydrological changes, groundwater drawdown, noise, vibration, light or the introduction of weeds/ pathogens.

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<sup>10 and 12</sup> The proponent is encouraged to identify opportunities to engage with Traditional Owner groups to develop and deliver rehabilitation, restoration and environmental offsets.



- Disruption to the movement of fauna between areas of habitat across the broader landscape, including between roosting, breeding and potential foraging sites for the Southern Bent-wing Bat and Grey-headed Flying-fox.
- The availability of suitable offsets for the loss of native vegetation and habitat for listed threatened species under the EPBC Act and/or FFG Act.
- Potential collision risk for protected bird and bat species with project infrastructure, including with wind turbine blades.
- Potential impacts on groundwater dependent ecosystems.
- Potential cumulative effects on relevant listed threatened and migratory species and communities of flora and/or fauna, in particular, but not limited to, Brolga, Southern Bent-wing Bat, Grey-headed Flying-fox, White-throated Needle-tail and Black Falcon from the project in combination with the construction and operations of other energy facilities.

### Existing environment

- Characterise the type, distribution and condition of biodiversity values that could be impacted by the project, including native vegetation, terrestrial and aquatic habitat and habitat corridors or linkages. This should include identifying and characterising any ephemeral wetlands/ habitat for threatened species, groundwater dependent ecosystems and communities listed under the EPBC Act and/or FFG Act. This should also include characterising the use of the site by birds and bats.
- Identify the potential for and presence of roosting, breeding and foraging sites for the Southern Bent-wing Bat and Grey-headed Flying-fox within movement distances from the project site.
- Identify Brolga breeding and flocking sites within movement distances from the project site.
- Identify the presence or likely presence of any species or communities listed under the EPBC Act and/or FFG Act that could be impacted by the project, as well as any declared weeds, pathogens or pest animals.
- Identify the presence or likely presence of any important populations of threatened species listed under the EPBC Act and/or FFG Act, as described in relevant conservation advices and national recovery plans, and how any important populations may be impacted by the project.
- Characterisation of the existing environment is to be informed by relevant databases, literature (and published data) and appropriate targeted and/or seasonal surveys and modelling of the potential and actual presence of threatened species and communities consistent with Commonwealth and state survey guidelines, conservation advices and threatened species recovery plans. Where surveys do not identify a listed species or community, but past records and/or habitat analysis suggest that it may occur, a precautionary approach to the further investigation and assessment of its occurrence should be applied.
- Characterise existing threatening processes, including those listed under the FFG Act and/or EPBC Act, that are likely to be present and could potentially be exacerbated by the project.

### Likely effects

- Assess the direct and indirect effects of the project and feasible alternatives on native vegetation, listed ecological communities, and listed threatened, migratory and other protected flora species.
- Assess the direct and indirect effects of the project and feasible alternatives, on listed threatened, migratory and other protected fauna species under the EPBC Act and/or FFG Act, including, but not limited to, Brolga, Grey-headed Flying-fox, White-throated Needle-tail, Black Falcon and Southern Bent-wing Bat through collisions with turbines and/or overhead powerlines.
- Assess the direct and indirect effects of the project, including access roads and transmission lines, on biodiversity values, including:
  - direct removal of individuals or destruction of habitat;
  - disturbance or alteration of habitat conditions (e.g., habitat fragmentation, severance of wildlife corridors or habitat linkages, changes to water quantity or quality, changes to wetland function, fire hazards etc.);
  - on the ability of wetlands to support listed species and communities;
  - on the health and viability of groundwater dependent ecosystems;

- threats to mortality of listed threatened fauna; and
- the presence and potential spread of any declared weeds, pathogens and pest animals within and in the vicinity of the project area.
- Assess the potential cumulative effects on listed species of fauna, in particular, but not limited to, Brolga, Grey-headed Flying-fox, White-throated Needle-tail, Black Falcon and Southern Bent-wing Bat from the project in combination with other nearby approved or operating wind energy facilities. Planned projects are also to be considered where possible.

### Design and mitigation

- Identify, describe and compare potential alternatives and proposed design options and mitigation measures, which could avoid and/or minimise significant effects on any flora, fauna and/or ecological communities listed on the EPBC Act and/or FFG Act, and provide a clear justification for which avoidance and/or mitigation measures will be committed to.
- Justify and describe the assumptions and level of uncertainty associated with the proposed measures achieving their desired outcomes.
- Identify staging or timing options for works that could help to avoid or minimise adverse effects on seasonal values (e.g., migratory species, breeding behaviour).
- Describe the application of the three-step approach to avoiding the removal of native vegetation, minimising impacts from removal of native vegetation that cannot be avoided and providing offsets to compensate for the biodiversity impact from the removal of native vegetation.

### Performance

- Describe and evaluate proposed commitments to manage residual effects of the project on biodiversity values, including an offset strategy and outline of an offset management plan that sets out how state and Commonwealth offset policies and requirements will be satisfied, including demonstrating how appropriate offset(s) will be secured.
- Describe the approach to monitor impacts on biodiversity and habitat values with specific, measurable, attainable, relevant, time-based indicators for monitoring and thresholds for action.
- Describe contingency measures to be implemented in the event unforeseen adverse residual effects on flora and fauna values are identified requiring further management.
- Identify any further commitments proposed to monitor and manage risks and effects on biodiversity values and native vegetation.

## 4.2 Catchment values and hydrology

### Evaluation objective

*To maintain the functions and values of aquatic environments, surface water and groundwater quality and stream flows and avoid adverse effects on protected environmental values.*

### Key issues

- Potential for the project to have a significant effect on hydrology and affect existing sedimentation and erosion processes leading to land and aquatic habitat degradation.
- Potential for the project to have a significant effect on surface water and/or groundwater and its environmental values and use, including through the temporary on-site quarry.
- Potential for the project to have significant impact on wetland systems, including, but not limited to, Seasonal Herbaceous Wetlands (EPBC Act listed community), and the ability for wetland systems to support habitat for flora species listed under the FFG Act and EPBC Act.



### Existing environment

- Characterise the groundwater (including depth quality and availability to licence/ use) and surface water environments and drainage features in the project area.
- Characterise the wetland systems in and around the project site and the type, distribution and condition of wetlands that could be impacted by the project, having regard to terrestrial and aquatic habitat and habitat corridors or linkages.
- Characterise geology, geomorphology, landforms and soil types, structures and chemistry in the study area and identify the potential location of acid sulphate soils, including hydrological requirements and their acceptable limits for change.

### Likely effects

- Assess the potential effects of the project on surface water and groundwater environments and associated environmental values and use, including on permanent and ephemeral wetland systems (both on-site and adjacent to the proposal), and surface water and groundwater flow and quality. This needs to include consideration of effects associated with establishment of project roads and transmission lines.
- Identify and assess potential effects of the project on soil stability, erosion and the exposure and disposal of any waste or hazardous soils.

### Design and mitigation

- Identify proposed measures to mitigate any potential effects, including any relevant design features or preventative techniques to be employed during construction.

### Performance

- Describe proposed measures to manage and monitor effects on catchment values and identify likely residual effects and identify if further management is required.
- Describe contingency measures for responding to unexpected impacts on catchment values and hydrology, including resulting from the potential for accidental spills and disturbance of acid sulphate soils.

## 4.3 Landscape and visual

### Evaluation objective

*Avoid and, where avoidance is not possible, minimise and manage potential adverse effects on landscape and visual amenity.*

### Key issues

- Potential for nearby residents / communities to be exposed to significant effects to the visual amenity, including blade glint and shadow flicker, from project infrastructure.
- Potential effects on landscape, including significant volcanic and other landforms, through removal or covering of features or reshaping of surfaces.
- Potential cumulative impacts of other operating and approved wind farms on landscape values of the region.

### Existing environment

- Characterise the landscape character, features and values of the project area.
- Identify public and private view sheds to and from the project and characterise visual values of the area, including dark skies.
- Identify existing built features within the landscape (e.g. Salt Creek Wind Farm, Dundonnell Wind Farm, Mortlake South Wind Farm, 500 kV powerlines and other transmission lines) and their impact on the existing landscape and visual setting.
- Identify the components of the project that may result in a significant visual amenity effect.



### Likely effects

- Assess the landscape and visual effects of the project, including on public and private views, and effects of blade glint and shadow flicker on neighbouring dwellings and communities. Use photomontages, maps and other visual techniques to support the assessment.
- Assess the potential for cumulative impacts associated with the development of the project in the context of existing built infrastructures and nearby proposed/approved wind farm developments.

### Design and mitigation

- Outline and evaluate any potential design and siting options that could avoid and minimise potential effects on landscape and visual amenity of neighbouring residences and communities and additional management strategies that may further minimise potential effects.

### Performance

- Describe proposed measures to monitor residual effects on landscape and visual amenity values, including in the context of potential rehabilitation and restoration work post-construction and following decommissioning.
- Describe contingency measures to be implemented in the event unforeseen adverse residual effects on landscape and visual amenity are identified requiring further management.

## 4.4 Amenity

### Evaluation objective

*To minimise and manage adverse air quality and noise and vibration effects on residents and local communities as far as practicable during construction, operation and decommissioning having regard to applicable limits, targets or standards.*

### Key issues

- Potential for adverse effects to air quality at sensitive receptors and on other sensitive land uses during construction of wind turbines, associated infrastructure and potential use of an on-site quarry.
- Potential for adverse effects on noise and vibration amenity at sensitive receptors during construction, operation and decommissioning (including for the potential on-site quarry).

### Existing environment

- Characterise current local conditions in relation to air quality using data collected from existing local monitoring stations, or project-installed monitoring equipment.
- Characterise the ambient noise environment in adjacent established residential, farming zone, commercial and open space areas and at other sensitive land use locations.
- Identify sensitive receptors that may be subject to effects to amenity from the project including, but not limited to, all dwellings within 3 km of wind turbines, associated infrastructure and potential on-site quarry.

### Likely effects

- Assess the potential effects of construction, operation and decommissioning activities on air quality in accordance with *EPA Publication 1961 Guideline for assessing and minimising air pollution in Victoria*, *EPA Publication 1834 Civil construction, building and demolition guide*, and *EPA Publication 1823.1 Mining and quarrying – guide to preventing harm to people and the environment*.
- Assess the potential dust, noise and vibration impacts from the potential on-site quarry in accordance with the requirements of *EPA Publication 1823.1 Mining and quarrying: Guide to preventing harm to people and the environment*.
- Assess the potential effects of the project on noise and vibration amenity at sensitive receptors, including information that addresses:



- how the noise associated with construction of the wind farm and project infrastructure will be managed in accordance with relevant guidelines, such as *EPA Publication 1820.1: Construction – Guide to preventing harm to people and the environment*, *EPA Publication 1834: Civil Construction, Building and Demolition guide*, *EPA Publication 1695: Assessing and controlling risk: a guide for business*, and having regard to the environmental values for ambient sound defined in the environmental reference standard (ERS) established under the *Environment Protection Act 2017*;
  - how the operational wind turbine noise will be managed in accordance with Division 5 of Part 5.3 of the Environment Protection Regulations 2021 and relevant guidelines, including *DELWP Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria (2021)*, *EPA Wind Energy Facility Turbine Noise Regulation Guidelines* and *NZS 6808:2010 Acoustics – Wind Farm Noise for the turbines*; and
  - how operational noise from other relevant project infrastructure such as the on-site terminal station and battery storage facility, and from other potential commercial, industrial and trade premises to be developed as part of the project such as the potential on-site quarry and potential concrete batching plants will be managed in accordance with Division 3 of Part 5.3 of the Environment Protection Regulations 2021, *EPA Publication 1826.4: Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues* as well as relevant guidelines such as *EPA Commerce Industry and Trade Noise Guidelines* and *Publication 1996: Noise guideline - Assessing low frequency noise*.
- If a quarry is to be developed as part of the project, assess the potential noise and vibration (ground and airborne) effects from the proposed on-site quarry activities on sensitive receptors in accordance with guidelines, including, but not limited to, the Earth Resources *Guidelines for Ground Vibration and Airblast Limits for Blasting in Mines and Quarries*.

#### Design and mitigation

- Describe and propose siting, design, mitigation and management measures to control emissions to air from construction activities, including measures to minimise greenhouse gas emissions.
- Describe and evaluate both potential and proposed design responses and/or other mitigation measures (e.g. staging/scheduling of works) which could minimise noise and vibration during construction, operation and decommissioning.

#### Performance

- Describe proposed measures to manage and monitor effects on amenity values and identify likely residual effects, including compliance with standards and proposed trigger levels for initiating contingency measures.
- Describe contingency measures for responding to unexpected impacts to amenity values resulting from the project during construction, operation and decommissioning.

## 4.5 Cultural heritage

#### Evaluation objective

*Protect, avoid, or minimise where avoidance is not possible, adverse effects on historic heritage values, and tangible and intangible Aboriginal cultural heritage values, in partnership with Traditional Owners.*

#### Key issues

- Destruction or disturbance of sites or places of Aboriginal cultural heritage.
- Potential for indirect impacts on sites or places of Aboriginal significance close to the project areas, both known and unknown.
- Potential impacts on intangible Aboriginal cultural heritage values associated with the project areas and surrounds.
- Potential for direct or indirect impacts to sites or places of historical heritage significance.



## Existing environment

- Review and assess previous studies, registers, landform and land use history to identify areas of known Aboriginal cultural heritage and prepare predictive models of areas with potential to contain Aboriginal cultural heritage.
- Review land use history, previous studies and registers to identify areas of known historical cultural heritage values and assess the potential for the projects to contain unregistered historical cultural heritage sites.
- Describe the extent, nature and significance of any Aboriginal cultural heritage sites or areas of sensitivity potentially impacted by the project through consultation and investigations to the satisfaction of the relevant Registered Aboriginal Parties and First Peoples – State Relations, ensuring adequate field assessments are conducted to verify the findings of any desktop studies.
- Using Heritage Victoria's *Guidelines for Conducting Archaeological Surveys (2020)*, identify and document any known and previously unidentified places and sites of historical cultural heritage significance within the project areas and their vicinity, including any necessary field investigations to supplement past studies.
- Identify intangible Aboriginal cultural heritage values associated with the project areas.

## Likely effects

- Assess the potential direct and indirect effects of the projects on Aboriginal cultural heritage values, within the project area, and whether they can be avoided.
- Assess the potential direct and indirect effects of the projects on sites and places of historical cultural heritage significance.
- Assess the potential direct or indirect effects on any intangible Aboriginal cultural heritage values associated with the project areas.

## Design and mitigation

- Describe and evaluate potential and proposed design, construction and operation mitigation methods to avoid adverse effects on Aboriginal and historical cultural heritage, and where avoidance is not possible, to minimise adverse effects.
- Develop a Cultural Heritage Management Plan and chance finds procedure.
- Develop archaeological management plans (where required) to manage historical heritage investigation/excavation etc.

## Performance

- Outline how implementation of proposed commitments to mitigate and manage residual effects on sites and places of historical heritage significance will be monitored, including site investigation and recording procedures.
- Outline how compliance with conditions of any required statutory approvals (i.e. consents/permits/ CHMPs) will be managed and monitored.
- Outline and evaluate the need for additional management and/or monitoring measures, further to those presented in the draft CHMPs, to manage risks of effects on sites and places of Aboriginal cultural heritage significance, as part of the EMF.

## 4.6 Land use and socioeconomic

### Evaluation objective

*To avoid and minimise adverse effects on land use (including agricultural and residential), social fabric of the community (with regard to wellbeing and community cohesion), local infrastructure, electromagnetic interference, aviation safety and to neighbouring landowners during construction, operation and decommissioning of the project.*



## Key issues

- Significant disruption to existing and/or proposed land uses, with associated economic and social effects on households and businesses.
- Potential adverse effects of wind turbines and associated infrastructure from an aviation perspective, including but not limited to impacts on aerial safety, air traffic control equipment, obstruction and turbulence.
- Potential interference with communication systems that use electromagnetic waves as the transmissions medium (e.g. television, radio, mobile reception).

## Existing environment

- Describe the project area in terms of land use (existing and proposed), land capability, residences and accommodation, zoning and overlays under the Moyne Planning Scheme and public infrastructure that support current patterns of economic and social activity.
- Describe community attitudes, identified through consultation activities, to the existing environment and the potential changes and opportunities brought by the project.
- Identify and describe the nearest aerodromes, air navigation and air traffic management services, transiting air routes, and designated airspace such as Danger, Restricted or Prohibited areas.
- Characterise current use of aerial spraying by district farmers and aerial firefighting that could be affected by the project (including any significant water resource that may be used for aerial firefighting in the region).
- Characterise current local television and radiocommunication services within the project area and surrounding areas.
- Identify and describe any existing infrastructure, including the existing transmission lines, in the area.

## Likely effects

- Identify potential long and short-term effects of the project on existing and potential land uses (such as aerial spraying and other agricultural activities), public infrastructure (such as roads, transport routes) and fire and emergency management (such as aerial firefighting).
- Identify the potential impacts on agriculture in the region as a result of the project.
- Identify the potential social and economic effects, taking into account direct and indirect consequences of the project on employment, housing availability for workers and existing economic land uses within the area.
- Identify the potential effects and risks to aviation safety from the project.
- Identify the potential for electromagnetic interference to radio-communications services from the project.
- Identify the potential effects on existing infrastructure, including transmission lines, particularly risks to infrastructure integrity, operation and associated public safety issues.

## Design and mitigation

- Demonstrate whether the project is consistent with relevant provisions of the Moyne Planning Scheme and other relevant strategies made under Victorian legislation.
- Outline measures to minimise potential adverse land use and socio-economic effects, including potential risks to agricultural activities, and enhance benefits to the community and local businesses.
- Describe consultation undertaken with Airservices Australia, Civil Aviation Safety Authority and Country Fire Authority regarding potential issues and merits of mitigation measures and propose design responses and/or other mitigation measures to reduce potential effects to aviation safety.
- Describe and evaluate potential design responses and/or other mitigation measures (e.g. installation of additional transmitter masts) to reduce potential electromagnetic interference to radio-communications services.
- Outline the proposed approach for site reinstatement where relevant, including the on-site quarry
- Outline measures to minimise potential effects to existing infrastructure including appropriate separation distances, and electrical mitigation to reduce potential electrical hazards.



## Performance

- Describe any further measures that are proposed to mitigate, offset or manage social, land use and economic outcomes for communities living within or in the vicinity of the project area, as well as proposed measures to enhance beneficial outcomes.
- Outline and evaluate any proposed measures designed to manage and monitor residual electromagnetic interference and effects to aviation safety and describe contingency measures for responding to unexpected impacts.

## 4.7 Traffic and roads

### Evaluation objective

*To avoid and minimise adverse effects on roads and road users during construction, operation and decommissioning of the project.*

### Key issues

- Managing traffic disruptions for residents, businesses and travellers during the construction of the project.
- Potential damage to local and regional road surfaces along transport routes and increased risk to road safety on transport routes.

### Existing environment

- Describe the existing road network surrounding the project area, including proposed construction transport route options, in terms of capacity, condition, accessibility, potentially sensitive users and travel (including seasonal agricultural use).
- Describe the source and predicted volumes of construction materials for wind turbines and associated infrastructure.

### Likely effects

- Assess the potential effects of construction activities on existing traffic, preferred traffic routes and road conditions. This assessment should take account of amenity and accessibility impacts on adjoining residents and in nearby townships, environmental effects arising from such works and physical impacts on the road infrastructure. Effects with and without an on-site quarry should be considered.
- Identify any additional road works / upgrades (including for internal access tracks) required to accommodate the project traffic during the construction stage (including having consideration of the type of vehicles) and any significant environmental effects arising from such works.
- Assess the potential effects to traffic and roads during operation and decommissioning of the project.

### Design and mitigation

- Identify the required road upgrades to accommodate construction traffic and additional road maintenance regime to address adverse impacts from project construction (including with reference to potentially limited construction windows due to project area's climate).
- Describe and evaluate the proposed traffic management and safety principles to address changed traffic conditions during construction of the project, covering (where appropriate) road safety, temporary or permanent road diversions, different traffic routes, site access points, hours of use, vehicle operating speeds, types of vehicles and emergency services provisions.
- Describe consultation undertaken with Moyne Shire Council and VicRoads, to coordinate scheduled roadworks and upgrades and additional roadworks and upgrades required for project traffic.

## Performance

- Outline and evaluate proposed measures designed to manage and monitor residual effects on road users and describe contingency measures for responding to unexpected impacts.



## Appendix A Procedures and Requirements

### Procedures and requirements under section 8B(5) of the Environment Effects Act 1978

The procedures and requirements applying to the EES process, in accordance with both section 8B(5) of the Act and the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Ministerial Guidelines), are as follows:

- (i) The EES is to document investigations of potential environmental effects of the proposed project, including any relevant alternatives, and the feasibility of associated environmental mitigation and management measures. In particular the EES should address:
  - a) potential effects on biodiversity and ecological values including native vegetation, listed flora, fauna and communities through loss, degradation or fragmentation of habitat, collision with turbines, or other ecological effects;
  - b) potential effects on water environments including wetlands and Mustons Creek, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste during construction, operation or decommissioning of infrastructure;
  - c) effects on Aboriginal cultural heritage values;
  - d) effects on historic heritage values;
  - e) effects on landscape and visual amenity values;
  - f) effects on amenity related to construction and decommissioning;
  - g) effects on the socioeconomic environment, at local and regional scales, including on traffic, agriculture and other direct and indirect effects; and
  - h) cumulative effects of the project, particularly on biodiversity, ecology, social and landscape values, given the proximity to other proposed, approved and operating windfarms.
- (ii) The matters to be investigated and documented in the EES will be set out more fully in scoping requirements prepared by the Department of Environment, Land, Water and Planning (DELWP). Draft scoping requirements will be exhibited for public comment over 15 business days, before final scoping requirements are issued by the Minister for Planning.
- (iii) The proponent is to prepare and submit to DELWP an adequate draft EES study program to inform the preparation of scoping requirements.
- (iv) The level of detail of investigation for the EES studies should be consistent with the approach set out in the scoping requirements and be adequate to inform a robust and objective assessment of the significance and acceptability of its potential environmental effects, including for any feasible relevant alternatives, in the context of the Ministerial Guidelines.
- (v) DELWP will convene an inter-agency technical reference group (TRG) to advise DELWP and the proponent on the scoping requirements, the design and adequacy of the EES studies, and coordination with statutory approval processes.
- (vi) The proponent is to prepare and implement an EES Consultation Plan for consulting the public and engaging with stakeholders during preparation of the EES. Once completed to the satisfaction of DELWP, the EES consultation plan is to be implemented by the proponent, having regard to advice from DELWP and the TRG.
- (vii) The proponent is also to prepare and submit to DELWP its proposed schedule for the completion of studies and preparation and exhibition of the EES, following confirmation of the scoping requirements. This schedule is to enable effective management of the EES process and EES' development based on an agreed alignment of the proponent's and DELWP's timeframes, including for TRG review of technical studies for the EES and the main EES documentation.



- (viii) The proponent is to apply appropriate peer review and quality management procedures to enable the completion of EES studies to a satisfactory standard.
- (ix) The EES is to be exhibited for a period of 30 business days for public comment, unless the exhibition period spans the Christmas–New Year period, in which case 40 business days will apply.
- (x) An inquiry will be appointed under the Environment Effects Act to consider environmental effects of the proposal.