Draft Scoping Requirements Seadragon Offshore Wind Environment Effects Statement

Environment Effects Act 1978

AUGUST 2023



Department of Transport and Planning

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#### 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.

### Queries about the Seadragon Offshore Wind Project should be directed to the proponent:

Flotation Energy Pty Ltd (Australia) Telephone: 1300 765 275 Email: <u>enquiries-Australia@flotationenergy.com</u> Website: <u>https://seadragonoffshorewind.com/</u>

#### Queries about the EES process and Scoping Requirements should be directed to the department:

Impact Assessment Unit Telephone: (03) 8622 7633 Email: <u>environment.assessment@delwp.vic.gov.au</u>

## List of abbreviations

CHMP	Cultural heritage management plan	
DCCEEW	Department of Climate Change, Energy, Environment and Water (Cwlth)	
DEECA	Department of Energy, Environment and Climate Action	
DELWP	Department of Environment, Land, Water and Planning	
DTP	Department of Transport and Planning	
EES	Environment effects statement	
EMF	Environmental management framework	
EPA	Environment Protection Authority (Victoria)	
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999	
FFG Act	Flora and Fauna Guarantee Act 1988	
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 10 April 2022 the former Minister for Planning determined under the *Environment Effects Act 1978* that Flotation Energy Pty Ltd (the proponent) is to prepare an environment effects statement (EES) for the proposed Seadragon Offshore Wind project (the project), focusing on the proposed works and effects within Victorian jurisdiction. The purpose of the EES is to provide a sufficiently detailed description of the project, assess its potential 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 *Draft Scoping Requirements for the Seadragon Offshore Wind Environment Effects Statement* set out the proposed specific matters to be investigated and documented in the EES. The draft scoping requirements presented here are for public review and comment. The Minister will issue the final scoping requirements for the EES following consideration of public comments received on this draft.

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

Flotation Energy Pty Ltd is proposing to construct an offshore wind farm in Commonwealth waters off the coast of Ninety Mile Beach (Figure 1), which will connect into Victoria's electricity network in the Latrobe Valley. The proposal includes 150 wind turbines, with an indicative generation capacity of 1.5 gigawatts, as well as development of an offshore and onshore electricity transmission network to connect to Victoria's electricity network.

Key proposed components of the project include:

- Offshore wind assets consisting of up to 150 wind turbine generators (WTGs) arranged in an optimal array layout, installed on foundations secured into the seabed (floating foundations will be considered). These assets would be within Commonwealth jurisdiction as they are beyond 3 nautical miles from the coast of Victoria.
- Up to four offshore substation platforms installed on either new-build foundations or utilising exiting oil and gas infrastructure assets. These substations will be within Commonwealth jurisdiction.
- Network of submarine array cables connecting each WTG to offshore substation platforms.
- Up to four offshore export cables (220 to 275 kV AC), directly laid on the sea floor and protected via burial or mechanical means where required. These cables will originate in Commonwealth waters and traverse into Victorian waters.
- Shore crossing in Victorian jurisdiction (location not yet determined).
- Up to two onshore substations, incorporating switching gear and reactive power, where required.
- Onshore transmission infrastructure to connect to a terminal station connection point. The proponent's preferred connection point is to the VicGrid<sup>1</sup> offshore energy terminal station in Gippsland, which is a planned future development. Other potential options to connect to the national electricity grid are outlined in the project's EES referral, including options to connect to one of the existing terminal stations in the Latrobe Valley.

It is proposed the project will use existing local and regional ports and harbours to support project construction, operation and maintenance.

The project is proposed to be constructed over three to five years and will have an operational life of up to 60 years. The project is expected to contribute to achieving Victoria's renewable energy target of net zero greenhouse gas emission by 2050 and will accelerate development of local supply chains for the benefit of other offshore wind projects.

<sup>&</sup>lt;sup>1</sup> Note the VicGrid offshore energy transmission and associated terminal station in Gippsland are currently in the early planning phase of development and would be subject to their own assessment and approvals.

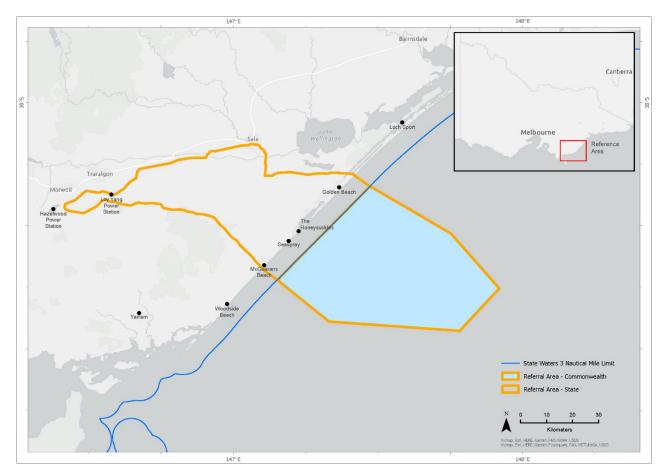


Figure 1. Proposed project area of interest showing nearby settlements. *Source: Flotation Energy.* 

## 1.2 Minister's requirements for this EES

The Minister for Planning decided that an EES is required for the project, due to its potential for significant effects, in relation to the Victorian jurisdiction. The Minister published procedures and requirements applicable to the preparation of the EES, in accordance with section 8B(5) of the Environment Effects Act (Appendix A). This included the core requirement that "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 needs to address:

- potential effects on biodiversity and ecological values including native vegetation, listed flora, fauna and communities through loss, degradation or fragmentation of habitat or other ecological effects;
- potential effects on marine and freshwater environments such as the Ninety Mile Beach Marine National Park and the Gippsland Lakes Ramsar site, as well as related values, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste;
- effects on Aboriginal cultural heritage values;
- effects on onshore and offshore historic heritage values;
- effects on existing landscape and visual amenity values;
- effects on or related to soils, groundwater and contamination;
- effects on amenity related to construction and decommissioning;
- effects on the socioeconomic environment, at local and regional scales, including on recreation, tourism, traffic 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 windfarms and major projects."

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

## 1.3 Commonwealth requirements and alignment of assessment processes

The project was also referred under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to the Commonwealth Minister for the Environment in March 2022. A delegate for the former Minister for the Environment determined on 22 April 2022 that the project is a controlled action requiring assessment and approval, as it is likely to have a significant impact on the following matters of national environmental significance, which are protected under Part 3 of the EPBC Act:

- Ramsar wetlands (sections 16 & 17B);
- Listed threatened species and communities (sections 18 and 18A);
- Listed migratory species (sections 20 and 20A); and
- Commonwealth marine areas (sections 23 and 24A).

As the project is located both within Victoria and outside Victorian waters (in Commonwealth waters) the Commonwealth cannot accredit the EES process as the sole means for assessing EPBC Act matters. As such, the former Commonwealth Minister for the Environment's delegate determined the project will be assessed under the EPBC Act by an environmental impact statement (EIS). EIS Guidelines will be issued by the Commonwealth which will outline the content required for the EIS.

The Victorian Department of Transport and Planning (DTP) and the Commonwealth Department of Climate Change, Energy, Environment and Water (DCCEEW) have agreed to coordinate and align the administration of the two assessment processes – i.e. the EES under the Victorian legislation and the EIS under the Commonwealth legislation. DTP and DCCEEW will work together and use administrative means to maximise the alignment of specific aspects/stages of the statutory processes and remove duplication wherever possible, including alignment of timing of public comment on the draft scopes exhibited by each department and facilitating preparation of a single set of assessment documentation which covers the requirements of both the EES and EIS. The coordinated approach also includes coordinated engagement with government agencies and regulators during the development of the EES and EIS. That will utilise the technical reference group (TRG) established and chaired by DTP for the EES. Figure 2 shows the different project components and key legislation considered under applicable jurisdictions.

The proponent has agreed to integrate its technical studies and EES/EIS documentation as much as possible, in order to prepare a single package of documents to address EES and EIS requirements. This consolidated manner of examining environmental matters and consulting will assist stakeholders to access and engage with the project, its issues, potential impacts and mitigation, and help minimise duplication of process.

The formal statutory environmental assessment required under state and commonwealth legislation will need to meet respective requirements, including exhibition of the EES and EIS.

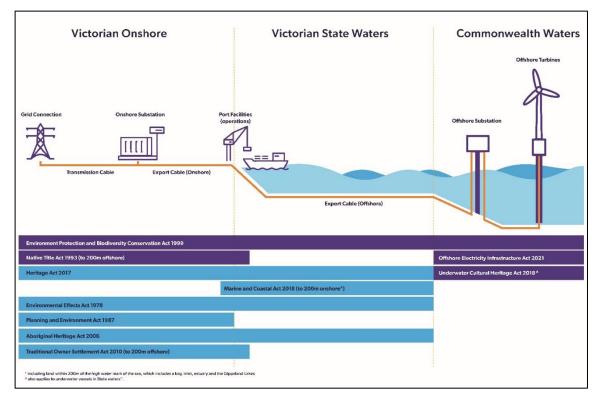


Figure 2: Schematic diagram of project components and key legislation for each jurisdiction *Source: Flotation Energy.* 

# 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:

- 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.
- 2. 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.

Given the multi-jurisdictional requirements for assessment of this project, ultimately, these two main components of the EES are expected to be presented by the proponent in combination with other aspects to fulfill its EIS requirements under the EPBC Act.

## 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.

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<sup>2.</sup> 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'.

<sup>3.</sup> Further information on the EES process can be found at <a href="https://www.planning.vic.gov.au/environmental-assessments/environmental-assessment-guides/environmental-assessments-environmental-assessment-guides/environmental-assessment-guides/environmental-assessment-guides/environmental-assessments/environmental-assessment-guides/environmental-assessment-guides/environmental-assessment-guides/environmental-assessments/environmental-assessment-guides/environmental-assessment-guides/environmental-assessments/environmental-assessment-guides/environmental-assessment-guides/environmental-assessment-guides/environmental-assessments/environmental-assessment-guides/environmental-assessment-guides/environmental-assessments/environmental-assessment-guides/environmental-assessment-guides/environmental-assessments/environmental-assessments/environmental-assessments/environmental-assessment-guides/environmental-assessment

<sup>4.</sup> 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 raise awareness 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 it is 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 are expected to include: a Planning Scheme Amendment under the *Planning and Environment Act 1987*, an approved Cultural Heritage Management Plan under the *Aboriginal Heritage Act 2006* and a consent to use and develop marine and coastal Crown Land under the *Marine and Coastal Act 2018*. Other approvals may be required and will be determined throughout the course of the EES.

<sup>5.</sup> https://www.planning.vic.gov.au/environment-assessment/browse-projects/projects/seadragon-offshore-wind



# 3 Matters to be addressed in the EES

While this section refers to 'the EES', it is understood that the proponent is proposing a single or combined package of assessment documents to address assessment requirements of the two jurisdictions. Therefore, it is envisaged that items specified in this section required for the EES will be presented within combined documentation prepared by the proponent.

## 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>6</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 *Planning and Environment Act 1987* 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;

<sup>6.</sup> Effects include direct, indirect, combined, cumulative, short- and long-term, beneficial and adverse effects.



- a description of the scope, timing<sup>7</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;
- 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 (including other approved or proposed wind farms and transmission lines);
- 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>8</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

<sup>7.</sup> Surveys of assets, values and potential effects must be timed to ensure they take account of seasonal weather patterns of the area.

<sup>8.</sup> Ecologically sustainable development is defined within the Ministerial Guidelines, page 3.



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;
  - 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 submarine array cables, offshore export cables, shore crossing, onshore transmission cables, cable connection points, access tracks, site access points, laydown areas, construction compounds, batching plants, proposed exclusion and buffer zones as applicable.
- the proposed construction, operations and decommissioning phases of the project and planned timing each phase;
- 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;
  - 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, operation and decommissioning;
  - rehabilitation of site works areas following construction as well as during decommissioning;
  - 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;
  - operational requirements including maintenance activities; and
  - decommissioning requirements.



## 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>9</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 including alternative transmission line/cable alignments and substations;
- 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 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 of feasible alternatives, include (but is not limited to):

- potential corridors and alignments for the onshore and offshore transmission/cable network, including criteria for excluding corridors and alignments from further consideration;
- the rationale for the preferred mode of construction for the onshore transmission network;
- siting of the proposed shore crossing;
- siting of onshore substations, and the extent to which selection of these sites influence the choice of preferred alignment;
- transportation options and routes for construction;
- timing and method of construction activities (both onshore and offshore); and
- other feasible alternatives raised through feedback from the TRG, community or other stakeholders.

The depth of investigation of particular alternatives should be proportionate to their potential to avoid or minimise potentially significant adverse effects while still meeting project objectives.

The EIS Guidelines will outline the requirements for assessment of alternatives for components of the project within Commonwealth waters.

## 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. Particular attention is drawn to the recent changes in the:

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<sup>&</sup>lt;sup>9</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.



- Environment Protection Act 2017 which came into effect on 1 July 2021, and any subsequent updates to subordinate legislation; and
- Flora and Fauna Guarantee Amendment Act 2019 which came into effect on June 1, 2020.

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.

## 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

Appropriate management of environmental performance is required for projects 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 approval conditions and managing and monitoring the environmental effects and risks for each project phase.

The EMF should outline the approach to development and review of environment management plans for the project. The entities responsible for development, approval, implementation and review of the 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;
- 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.



Management measures proposed in the EES to address specific issues, including commitments to mitigate adverse effects and enhance environmental outcomes should be clearly described in the EMF. The EMF should outline monitoring requirements and contingency measures, where relevant, for the range of potential environmental effects identified though the EES.



# 4 Assessment of specific environmental effects

As with Section 3, this section refers to 'the EES' while it is understood a single package of assessment documents is planned to address assessment requirements of the two jurisdictions in which the project occurs (Victoria and the Commonwealth). Items specified in this section required for the EES under the Environment Effects Act are expected to be presented within combined assessment documentation, consistent with the approach outlined in Section 1.3.

Preparation of the EES and the necessary investigation of effects should be proportional to the environmental risks posed by the project, as outlined in the Ministerial Guidelines (p. 14). The Minister's decision requiring an EES (Appendix A) articulates the primary matters/potentially significant effects that need to be examined in the EES. A systems and riskbased approach should be adopted during the design of EES studies, so that a greater level of effort is directed at investigating and managing those matters that pose relatively higher risk of adverse effects as outlined in the Ministerial Guidelines (p. 14). For those effects that can be demonstrated to have lower levels of risk of environment effects, the EES should describe and analyse these impacts at a level of detail commensurate with their level of environmental risk.

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 and describe 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>10</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>11</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 on the environment (for all project phases, including construction, operation and decommissioning) and evaluate the significance of each effect taking into account the likely effectiveness of the design and mitigation measures.
- 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.

Residual environmental effects need to be clearly described for each project phase, including construction, operation and decommissioning. 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. In addition, the

<sup>&</sup>lt;sup>9 and 11</sup> The proponent is encouraged to identify opportunities to engage with Traditional Owner groups to develop and deliver rehabilitation/restoration measures as well as environmental offsets.



cumulative effects of the project in combination with other past, 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 and habitats, socioeconomic and landscape/visual amenity values, given the close proximity of other proposed windfarms.

## 4.1 Biodiversity and ecological values

#### **Evaluation objective**

Avoid, and where avoidance is not possible, minimise adverse effects on terrestrial, aquatic and marine biodiversity and ecology, including native vegetation, listed threatened species and ecological communities, other protected species and habitat for these species, and to address offset requirements consistent with state policies.

#### Key issues

- Loss or degradation of native vegetation or other habitat values due to construction or operational maintenance requirements.
- Direct or indirect loss, disturbance and/or degradation of habitat for migratory or threatened flora and fauna.
- Potential initiation or exacerbation of listed threatening processes under the FFG Act.
- Potential impacts on protected areas, such as national parks, state parks or other conservation reserves.
- Potential for indirect effects on terrestrial and aquatic flora and fauna including those effects associated with changes in coastal processes, noise and vibration (aboveground and underwater), electromagnetic fields, vessel movements and water quality.
- Disruption to movement of fauna between areas of habitat across the broader landscape, for example, through construction of project infrastructure or access roads.
- Potential cumulative effects on listed threatened flora and fauna species, and their habitats, from the project in combination with other projects.

#### **Existing environment**

- Characterise the type, distribution and condition of biodiversity values within a suitable study area, comprising the project site and its environs, including native vegetation, terrestrial, aquatic and marine habitat and habitat corridors, linkages or known migratory pathways that could be impacted by the project.
- Describe the key values of protected areas, such as national parks, state parks or other conservation reserves potentially affected by the project.
- Describe the biodiversity values that could be directly or indirectly affected by the project, including:
  - o native vegetation and any ecological communities listed under the FFG Act; and
  - presence of, or suitable habitats for, protected flora and fauna species, in particular those species listed under the FFG Act.
- Describe any existing threats to biodiversity values, including:
  - historical or ongoing disturbance or alteration of habitat conditions (e.g. habitat fragmentation, severance of wildlife corridors or habitat linkages, changes to water quantity or quality, fire hazards, etc.);
  - o potentially threatening processes listed under the FFG Act;
  - potential additional pressures on habitats and species identified within DEECA's Feature Activity Sensitivity Tool (FeAST)<sup>12</sup>; and
  - the presence of any declared weeds, pathogens and pest animals within and in the vicinity of the project area.
- Describe any trends observed in existing biodiversity values, including historical or ongoing increases or declines in populations or communities, including their reasons where known.
- Inform characterisation of the existing environment by relevant databases, literature (and published data), community observations (including citizen science and information from residents and landholders in or adjacent to the area of

<sup>&</sup>lt;sup>12</sup> https://www.marineandcoasts.vic.gov.au/marine-and-coastal-knowledge/feature-activity-sensitivity-tool



interest), appropriate targeted and/or seasonal surveys and modelling of the potential and actual presence of threatened species and communities consistent with relevant guidelines, conservation advices and threatened species recovery plans or action statements. 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.

### Likely effects

- Assess the direct and indirect effects of the project including transport route upgrades and other ancillary activities, on native vegetation, listed ecological communities, and listed threatened and other protected flora species.
- Assess the direct and indirect effects of the project on listed threatened and other protected fauna species under the FFG Act or their habitats.
- Assess indirect loss of vegetation or habitat quality that may support any listed species or other protected fauna, resulting from changes to the local hydrology and marine processes, edge effects, habitat fragmentation, loss of connectivity, changed shipping activities or other disturbance impacts arising from construction or operation, above and below water, including from noise, vibration, changes in electromagnetic fields and lighting.
- Assess the direct and indirect effects of the project during construction, operation and decommissioning on biodiversity values, including:
  - disturbance or alteration of habitat conditions (e.g. habitat fragmentation, severance of wildlife corridors or habitat linkages, displacement due to avoidance of project infrastructure, changes to water quantity or quality, fire hazards, etc.);
  - o disturbance through noise, vibration, electromagnetic fields and heat;
  - o disturbance through changed vessel movements/activities due to the project;
  - o direct removal of individuals or destruction of habitat;
  - threats of injury and mortality of listed threatened or other protected fauna (including site and species-specific risk-factors); and
  - the presence and potential spread of any declared weeds, pathogens and pest animals, including marine species, within and in the vicinity of the project area.
- Assess the potential effects on listed threatened or other protected fauna species having considered issues and
  experiences with similar projects elsewhere in the world, as well as being cognisant of unique values existing in
  this locale.
- Assess potential effects on marine community structure and ecosystem function resulting from the creation of new habitats through the installation of infrastructure and subsequent decommissioning.
- Assess the potential effects on habitat connectivity of listed or other protected species, both onshore and offshore, including but not limited to migratory species.
- Assess potential effects on the conservation values of protected areas, such as national parks, state parks or other conservation reserves.
- Assess the potential cumulative effects on listed threatened or other protected fauna species, and their habitats, from the project in combination with other projects.

### **Design and mitigation**

- Identify and describe potential alternatives, proposed design options and mitigation measures and their expected
  effectiveness in avoiding or reducing significant effects on flora, fauna and ecological communities native to
  Victoria, including those listed under the FFG Act. Provide clear statements noting which avoidance and/or
  mitigation measures will be committed to.
- 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).
- Justify and describe the assumptions and level of uncertainty associated with the proposed measures achieving their desired outcomes.



- 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.
- Include an offset strategy and draft plan that sets out how the state offset policies and requirements will be satisfied, including demonstrating how appropriate offset(s) will be secured.

### Performance

- Describe the program for monitoring project effects on biodiversity, ecology and related environmental values, including how the effectiveness of measures implemented to mitigate impacts will be evaluated as part of an adaptive management framework.
- Describe contingency measures to be implemented in the event of unintended adverse residual effects.

## 4.2 Water and catchment values

#### **Evaluation objective**

Avoid and, where avoidance is not possible, minimise adverse effects on land and water (including groundwater, surface water, waterway, wetland, and marine) quality, movement and availability.

#### Key issues

- The potential for adverse effects on coastal and marine ecosystems, including changes to marine and coastal processes as a result of construction, operation and decommissioning of infrastructure.
- The potential for adverse effects on the functions, and environmental values of surface water environments, such as interception or diversion of flows or changed water quality or flow regimes.
- The potential for adverse effects on the functions and values of groundwater due to the project's shore crossing, cable trenching or other construction activities.
- The potential for adverse effects on nearby and downstream water environments due to changed flow regimes, floodplain storage, run-off rates, water quality changes, or other waterway conditions, including in the context of climate change projections.
- The potential for disturbance of contaminated, saline, dispersive or acid sulphate soils.
- The potential for adverse effects from disturbance of the seabed.
- The potential for adverse effects to coastal landforms, including changes to hydrodynamic and sediment transport as a result of the project.
- Potential effects to environmental values through spills, disturbance of contaminated materials or the introduction of or spread of invasive species.

#### Existing environment

- Describe marine, estuarine, intertidal and freshwater waters and their environmental values that could be affected by the project, such as from changed water quality, or water movement.
- Characterise the area's hydrodynamics and coastal processes.
- Characterise the local groundwater quality and behaviour, including the environmental values and any groundwater dependent ecosystems that might be affected by the project.
- Characterise geology, geomorphology, landforms and soils in the project area and identify potential locations where dispersive, acid sulphate, saline or potentially contaminated soils, or soils with other special characteristics that could be disturbed by the project.

#### Likely effects

• Assess potential effects of the project on groundwater, waterway, wetland, and marine waters, with appropriate consideration of climate change scenarios and cumulative effects.



- Assess potential effects of the project on soil stability, erosion and the exposure and disposal of contaminated or hazardous soils (e.g., acid sulphate soils).
- Assess potential effects resulting from the generation, storage, treatment, transport and disposal of solid and liquid wastes, including soil.
- Assess potential effects on hydrodynamic and sediment transport as a result of the project.
- Apply a systems-based assessment where appropriate to examine interacting effects on marine and catchment values, for example, integrated marine water quality, hydrodynamics, marine ecology and resource use studies.

#### **Design and mitigation**

- Identify and evaluate aspects of project works and operations, and proposed design refinement options or measures, that could avoid or minimise significant effects on groundwater, waterway, wetland, estuarine, intertidal and marine waters.
- Describe further potential and proposed design options and measures that could avoid or minimise significant effects on groundwater, waterway, wetland, and marine waters during the project's construction and operation, including response measures for environmental incidents.
- Describe potential and proposed design options and measures that could avoid or minimise significant effects on soil and land stability and rehabilitation.
- Describe available options for the management of the various categories of solid and liquid wastes generated by the project including in relation to the waste hierarchy, that is avoidance, reuse, and then treatment and disposal.

#### Performance

- Describe the program for monitoring project effects on marine and catchment values, including how the effectiveness of measures implemented to mitigate impacts will be evaluated as part of an adaptive management framework.
- Describe contingency measures to be implemented in the event of unintended adverse residual effects.

## 4.3 Cultural heritage

#### **Evaluation objectives**

Protect, avoid and where avoidance is not possible, minimise adverse effects on historic values as well as tangible and intangible Aboriginal cultural heritage values.

Key issues

- Potential for adverse effects on Aboriginal cultural heritage values including underwater Aboriginal cultural heritage, tangible and intangible, both known and unknown.
- Potential for adverse effects on historic cultural heritage values including underwater cultural heritage and archaeology, both known and unknown.

#### **Existing environment**

- Review land use history, previous studies and relevant registers to identify areas with known or potential Aboriginal cultural heritage value (including underwater Aboriginal cultural heritage, tangible and/or intangible).
- Informed by meaningful engagement with the Registered Aboriginal Party and other relevant Traditional Owner groups, identify and characterise Aboriginal cultural heritage sites, areas of sensitivity, cultural landscapes, or other intangible cultural heritage potentially impacted, both directly and indirectly, by the project.
- Review land and sea use history, previous studies, relevant registers and available seafloor survey data to identify and document known, potential and previously unidentified places, sites, objects and/or artefacts of historic cultural heritage significance potentially impacted by the project, including any areas of significant archaeological potential or value, on land and underwater, in accordance with Heritage Victoria guidelines.

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Likely effects

- Assess the potential direct and indirect effects of the project (including feasible alternatives) on Aboriginal cultural heritage values, within the project area, and whether they can be avoided.
- Assess the potential direct or indirect effects on any intangible Aboriginal cultural heritage values associated with the project area.
- Assess the potential effects on sites and places of historic cultural heritage significance (including underwater heritage and archaeology) including mapping site extents in relation to proposed works. Assessments are to be undertaken in accordance with the *Heritage Act 2017*, the Commonwealth *Underwater Cultural Heritage Act 2018*, Heritage Victoria's *Guidelines for Conducting Archaeological Surveys* (2020) or updates and other guidance documents. Maps of site extents showing their proximity to proposed works should be provided.

## **Design and mitigation**

- Describe any plan(s) or partnerships with Traditional Owners, including any opportunities to respond to their Country Plan and to protect intangible cultural heritage.
- Describe and evaluate proposed design, management or site protection measures that could avoid or mitigate potential adverse effects on known or unknown Aboriginal or historical cultural heritage values.
- For Aboriginal cultural heritage, develop management and contingency measures in accordance with the requirements for a Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act 2006*.
- For historical heritage, develop management and contingency measures with consideration of the need for an Archaeology Management Plan addressing requirements of the Heritage Act and Commonwealth Underwater Cultural Heritage Act.

## Performance

- Describe the program for monitoring project effects on historic heritage and Aboriginal cultural heritage values, including how the effectiveness of measures implemented to mitigate impacts will be evaluated, including site investigation and recording procedures where required.
- Outline how compliance with conditions of any required statutory approvals (i.e. consents/permits/ CHMPs) will be monitored and evaluated.
- Describe contingency measures to be implemented in the event of unintended adverse residual effects.
- Describe the approach to providing opportunities for ongoing Traditional Owner participation in project implementation.

## 4.4 Land use, agriculture, fisheries and socioeconomic

### **Evaluation objective**

Avoid and, where avoidance is not possible, minimise adverse effects on agriculture, fisheries, other land uses, social fabric of communities, and local infrastructure, businesses and tourism.

### Key issues

- Potential interaction with and interruption to fisheries, agricultural areas and infrastructure.
- Loss of productive land either due to loss of access or via soil disturbance, easements, construction traffic and poor reinstatement of land after construction.
- Potential disruption to existing and/or proposed land uses, with associated economic and social effects, including cumulative effects.
- Potential effects on social cohesion resulting from disruption of existing networks or effects on community services or facilities and recreational activities.
- Potential economic and social effects from the project, such as through disruption of business, industry (including agriculture and fisheries) or tourism (including recreational users), including cumulative effects.



#### **Existing environment**

- Describe the project area and its environs in terms of land use (existing and proposed), land capability, residences, zoning and overlays, public and private land, including any land subject to native title and Indigenous Land Use Agreements, properties affected and infrastructure that supports current and strategic patterns of economic and social activity.
- Describe agricultural and primary production enterprises and practices.
- Describe the local community and social setting, including community services and facilities, recreational activities, businesses and industry within the area, such as agriculture, forestry, shipping and fisheries.
- Describe regional planning and economic development strategies.
- Characterise tourism and recreational use of the project area and its surroundings, including water bodies, national parks and reserves.
- Describe relevant commercial and recreational users of the marine environment.
- Describe existing biosecurity issues for the area.

#### Likely effects

- Assess potential long and short-term effects from the project on existing and potential public infrastructure and land uses, including agricultural land use and associated businesses, taking into account interruption to agricultural practices, loss of productive land, biosecurity, water supply, access, drainage, and any other issues identified through the assessments.
- Assess potential social impacts from the project, including through interference with current use of private and public land and community services and facilities in the area.
- Assess potential economic effects of the project, considering direct and indirect consequences on employment, housing, local and regional economy and industries in the area, including agriculture, forestry, fisheries, and shipping.
- Assess potential impacts from workforce requirements such as additional demand on housing and public services in the area.
- Assess potential impact on tourism and tourist attractions within the project area and surrounding natural reserves.

#### Design and mitigation

- Demonstrate whether the project is consistent with relevant planning scheme provisions and other relevant policies.
- Outline measures to avoid and minimise potential adverse effects of the project and enhance benefits to the community, businesses, industry and land uses.
- Describe approach to engaging with landowners and business operators during design, construction and operation to minimise disruption to landowner and business activities.

#### Performance

- Describe the program for monitoring project effects on land use, fisheries and socioeconomic values, including how the effectiveness of measures implemented to mitigate impacts will be evaluated as part of an adaptive management framework.
- Describe contingency measures to be implemented in the event of unintended adverse residual effects.

## 4.5 Amenity, health, safety and transport

### **Evaluation objective**

Avoid, or minimise where avoidance is not possible, adverse effects on amenity, health and safety, with regard to noise, vibration, air quality (including dust), greenhouse gas emissions, the transport network, fire risk and electromagnetic fields.



Key issues

- Potential for adverse effects resulting from project-related noise, vibration, air pollution and electromagnetic fields at sensitive receivers.
- Managing transport disruptions for residents, businesses and travellers.
- Potential damage to local and regional road surfaces along transport routes and increased risk to road safety on transport routes.
- Potential impacts on vessel movements and navigation.
- Implications of the project for fire risk, including from any changes to fire management activities and fire ignition risks arising from the project.

#### Existing environment

- Describe the existing approved or planned transport network in and around the project, including proposed construction transport route options, in terms of capacity, condition, accessibility and potentially sensitive users.
- Describe existing vessel movements in the vicinity of the marine areas of the project, and any existing safety, vessel traffic or navigational issues that may be exacerbated by the project.
- Characterise background air quality and ambient noise and vibration near the project in established residential, farming, commercial and open space areas and at other sensitive land use and high amenity locations.
- Identify sensitive receptors that could be affected by noise, dust, odour or electromagnetic fields.
- Characterise the fire risks and existing fire management activities in the project area and its surrounds.

#### Likely effects

- Assess effects of construction, operations/maintenance and decommissioning activities on the transport network, including on safety, amenity and accessibility.
- Assess effects from road upgrades and/or connections, and infrastructure and services relocation.
- Assess potential effects on vessel movement and navigation, including impact of increased vessel traffic and any changes to safety risks or navigational hazards.
- Predict likely air pollutant concentrations using an air quality assessment approach considering the *Environment Protection Act 2017* and its regulations and associated publications.
- Predict greenhouse gas emissions associated with the project.
- Assess potential effects of air pollution, noise, vibration, odour and amenity at sensitive receivers, taking into consideration relevant EPA publications guidance.
- Assess the risk of the project causing a fire that affects land and assets.
- Assess the implications of the project for fire risk management or bushfire suppression activities.
- Identify and assess potential effects of electromagnetic fields from the project on sensitive receptors.
- Identify and assess any other safety risks from the project.

#### **Design and mitigation**

- Outline any required transport infrastructure works or upgrades required to address adverse impacts of the project construction and operation, including impacts on accessibility (e.g., access road construction and upgrades).
- Describe and evaluate the proposed transport management and safety principles to address changed traffic conditions.
- Describe and propose siting, design, mitigation and management measures to control air pollutants from construction activities.
- Describe measures to minimise adverse effects on shipping and navigation from the project.
- Describe approaches and measures to minimise greenhouse gas emissions associated with the project.



- Describe and evaluate both potential and proposed design responses and/or other mitigation measures (e.g., staging/scheduling of works) that could minimise noise and vibration.
- Describe and assess potential measures for avoiding, mitigating or managing impacts of electromagnetic fields, including on human health.
- Identify measures for avoiding, managing and minimising fire risks arising from the project, having regard to planning and other policy provisions.

#### Performance

- Describe the program for monitoring project effects on environmental amenity, human health, transport and safety effects, as well as greenhouse gas emissions.
- Describe contingency measures to be implemented in the event of unintended adverse residual effects.

## 4.6 Landscape, seascape and visual amenity

#### **Evaluation objectives**

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

#### **Key issues**

- Potential effects on significant landscape and seascape values and landforms in the vicinity of the project, especially national parks, state parks or other reserves and areas identified for their landscape values, such as within relevant planning schemes.
- Potential impacts on cultural landscapes and seascapes that may have tangible or intangible cultural values.
- Potential for nearby residents or communities to experience significant effects to visual amenity from project infrastructure.

### **Existing environment**

- Characterise the landscape and seascape character, features and values of the project area and its environs.
- Characterise visual values of the area, including dark skies.
- Identify viewsheds in which the project components are visible, including from nearby residences (where permitted), public lookouts, tourist attractions, roads and key vantage points.
- Identify existing built features within the landscape and their contribution to the existing landscape and visual setting relevant to the project.

### Likely effects

- Identify the components of the project that may result in a significant landscape, seascape and/or visual amenity effect.
- Assess the landscape, seascape and visual effects of the project, including on public and private views during both day and night. Use photomontages and other visual techniques to support the assessment.
- Assess the potential for cumulative landscape, seascape or visual amenity effects in the context of existing built infrastructure, as well as proposed or approved developments (where such information is publicly available).

### **Design and mitigation**

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



Performance

- Describe the program for monitoring landscape, seascape and visual effects of the project, including how the effectiveness of measures implemented to mitigate impacts will be evaluated as part of an adaptive management framework.
- Describe contingency measures to be implemented in the event of unintended adverse residual effects.



# **Appendix A Procedures and Requirements**

### Procedures and requirements under section 88(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 needs to address:
  - a. potential effects on biodiversity and ecological values including native vegetation, listed flora, fauna and communities through loss, degradation or fragmentation of habitat or other ecological effects
  - b potential effects on marine and freshwater environments such as the Ninety Mile Beach Marine National Park and the Gippsland Lakes Ramsar site, as well as related values, as a result of direct disturbance, changes to stream flows or discharge of sediment or waste
  - c. effects on Aboriginal cultural heritage values
  - d. effects on onshore and offshore historic heritage values
  - e. effects on existing landscape and visual amenity values
  - f. effects on or related to soils, groundwater and contamination
  - g. effects on amenity related to construction and decommissioning
  - h. effects on the socioeconomic environment including land use, at local and regional scales, including on recreation, tourism, traffic and other direct and indirect effects
  - i. cumulative effects of the project, particularly on biodiversity, ecology, social and landscape values, given the proximity to other proposed windfarms and major projects.
- (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 15 business days for public comment, before final scoping requirements are issued by the Minister for Planning.
- (iii) The proponent is to prepare and submit to DELWP a draft EES study program adequate 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 submit to DELWP its proposed EES consultation plan for consulting the public and engaging with stakeholders during the 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, preparation and exhibition of the EES, following confirmation of 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 and documentation to a satisfactory standard.
- (ix) The EES is to be exhibited for a period of no less than 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 1978* to consider and report on the environmental effects of the proposal.