

Scoping Requirements for VIC Offshore Wind Farm Project Environment Effects Statement

Environment Effects Act 1978

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OFFICIAL



Environment,
Land, Water
and Planning

Queries about the VIC Offshore Wind Farm Project should be directed to the proponent:

VIC Offshore Windfarm Pty Ltd
Email: info@offshorewindfarm.com.au

Queries about the EES process and scoping requirements should be directed to DELWP:

Impact Assessment Unit
Telephone: (03) 8508 2441
Email: environment.assessment@delwp.vic.gov.au

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List of abbreviations

CHMP	Cultural Heritage Management Plan
DELWP	Department of Environment, Land, Water and Planning
EE Act	<i>Environment Effects Act 1978</i>
EES	Environment effects statement
EMF	Environmental management framework
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i>
GDE	Groundwater dependent ecosystem
MNES	Matters of national environmental significance
MW	Megawatt
TRG	Technical reference group

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1. Introduction

On 1 August 2021, the Victorian Minister for Planning determined under the *Environment Effects Act 1978* (EE Act) that VIC Offshore Windfarm Pty Ltd is to prepare an environment effects statement (EES) for the proposed VIC Offshore Windfarm project. The purpose of the EES is to provide a sufficiently detailed description of the project, assess its potential effects on the existing environment¹ and assess alternative project layouts, designs and approaches to sufficiently avoid and mitigate effects to an acceptable level.

The EES will inform and seek feedback from the public and stakeholders. At the conclusion of the EES process, the Minister will issue an assessment of the project's environmental effects under the EE Act. The Minister's assessment will be considered by statutory decision-makers when deciding whether and how the project approval should proceed including the Commonwealth Minister for the Environment's decision on whether to approve the project under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

These *Scoping Requirements for the VIC Offshore Wind Farm EES* set out the proposed matters to be investigated and documented in the EES. 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

The project is proposed on Gunditjmarra Country in southwest Victoria and comprises an offshore wind farm in Discovery Bay, approximately 5.5 kilometres off the coast of Portland (Figure 1), supporting electricity transmission assets required to transfer energy generated by the wind farm to the existing electricity transmission network, and modifications to ports and harbours required to support the construction and operation of the wind farm. The project life is proposed to be at least 30 years.

The key components of the project are:

- Offshore wind assets consisting of up to 62 (8-15 MW) wind turbines and a network of buried or mechanically protected subsea cables.
- An offshore substation platform installed on foundations and an offshore export cable.
- A landfall site with a transition joint pit connecting the marine cables from the offshore substation to the onshore cables that will run to an onshore substation.
- An onshore substation, which may include further transformers.
- A new transmission line supplying energy generated from the windfarm to the National Electricity Market, with additional equipment as required, which may include battery storage for fast frequency response to provide stability to the grid.
- Existing ports and harbour will be used to support project construction and operations.

1.2 Minister's requirements for this EES

In light of the potential for a range of significant and complex environmental effects that warrant rigorous assessment, the Minister decided that an EES is required for this project, to examine potential environmental effects and determine their acceptability. The Minister published procedures and requirements applicable to the preparation of the EES, in accordance with section 8B(5) of the EE Act (see Appendix A).

The investigations and assessments are to include relevant alternatives as well as associated avoidance, mitigation, and management measures. In particular the EES needs to address:

- effects on biodiversity and ecological values within and near the project area including native vegetation, communities and species (flora and fauna) listed under the *Flora and Fauna Guarantee Act 1988* and *Environment Protection and Biodiversity Conservation Act 1999*;
- effects on ecological character and conservation values of Glenelg Estuary and Discovery Bay Ramsar Site and Discovery Bay Marine National Park;

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).

- effects on freshwater, coastal and marine ecosystems, including changes to marine and coastal processes as a result of construction, operation and decommissioning of infrastructure, as well as any modifications to ports, harbours and channels;
- effects on Aboriginal cultural heritage values;
- effects on the socioeconomic environment, at local and regional scales, including on fisheries, tourism, traffic and other direct and indirect effects of construction;
- effects on landscape values; and
- cumulative effects, including for conservation areas, threatened flora and fauna, as well as social and landscape values, given the proximity to other windfarms proposed in the region.

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

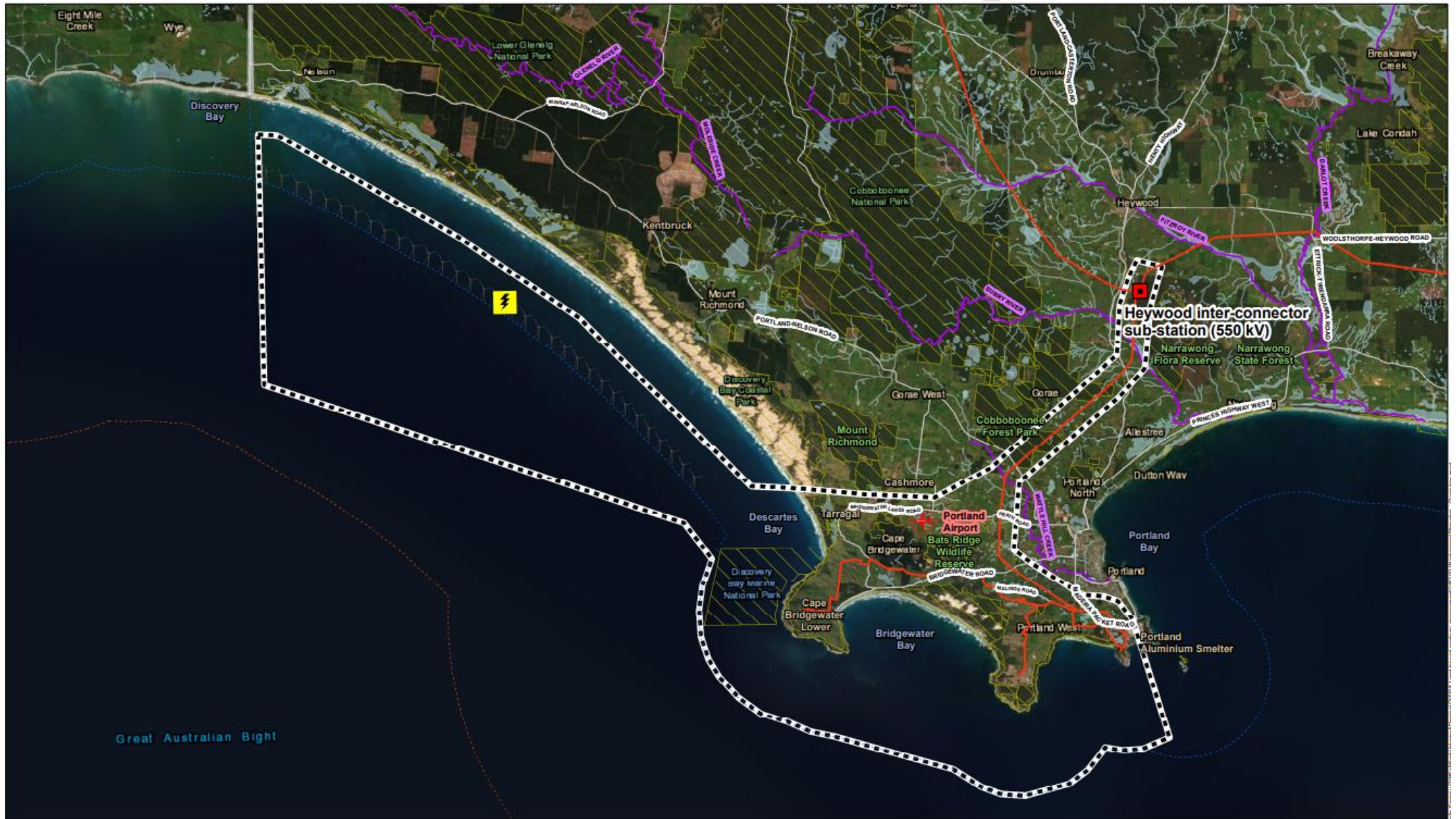


Figure 1: Location of the project (source: Arup).

2. Assessment process and required approvals

2.1 What is an EES?

An EES describes a project, its rationale 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:

1. The EES main report – an integrated, plain English document that assesses the potential impacts of the project and examines avoidance, mitigation or other measures to reduce the environmental effects. The main report draws on technical studies, data, statutory requirements and policy relevant 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.

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 Environment, Land, Water and Planning (DELWP) is responsible for managing the EES process². The EES process has the following steps:

- preparation of a draft study program and draft schedule by the proponent (completed);
- preparation and exhibition of draft scoping requirements by DELWP on behalf of the Minister with public comments received during the advertised exhibition period (completed);
- finalisation and issuing of scoping requirements by the Minister (this document);
- review of the proponent's EES studies and draft documentation by DELWP and a technical reference group³;
- completion of the EES by the proponent;
- review of the complete EES by DELWP to establish its adequacy for public exhibition;
- exhibition of the proponent's EES and invitation for public comment by DELWP on behalf of the Minister;
- appointment of an inquiry 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

DELWP has convened a technical reference group (TRG) of government agencies, registered Aboriginal parties and local councils. The TRG will be used for the EES process to facilitate the provision of advice from relevant agencies to DELWP and the proponent on:

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

Consultation plan

The proponent is responsible for informing and engaging the public and stakeholders to identify and respond to their issues and keep them informed of the EES studies. Stakeholders include potentially affected parties and members of the community, interested community organisations, Traditional Owners and government

2. Further information on the EES process can be found at planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria.

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

bodies. Under its consultation plan the proponent informs the public and stakeholders about the EES investigations and provides opportunities for engagement. The engagement needs to provide appropriate opportunities for input and feedback on the EES investigations. The consultation plan is reviewed and amended in consultation with DELWP and the TRG before it is published on the planning website⁴. The final 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.

Statutory approvals and the EES process

The project will require a range of approvals under Victorian legislation if it is to proceed. DELWP coordinates the EES process as closely as practicable with relevant statutory approvals processes and procedures, including consultation and public notice requirements.

The key approvals required under Victorian legislation are: planning approval, via planning permit(s) or a planning scheme amendment, for use and development of land and native vegetation removal under the *Planning and Environment Act 1987*, an approved Cultural Heritage Management Plan under the *Aboriginal Heritage Act 2006*, a consent to use and develop marine and coastal Crown Land under the *Marine and Coastal Act 2018* and leases/licences under the *Crown land (Reserves) Act 1978* and/or the *Land Act 1958*.

Other approvals that may be required will be identified through the EES process.

2.3 Accreditation of the EES process under the EPBC Act

The project was referred to the Commonwealth under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). A delegate for then the Australian Government Minister for the Environment determined on 5 July 2021 that the project is a controlled action as it is likely to have a significant impact⁵ on the following matters of national environmental significance (MNES), which are protected under Part 3 of the EPBC Act (see Appendix B):

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

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.

The 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*.

⁴ The EES Consultation Plan will be available at: planning.vic.gov.au/environment-assessment/browse-projects/projects/vic-offshore-wind-farm

⁵ 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 the principles of a systems approach and a risk-based approach to the identification of 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 effects⁶ 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 – magnitude, extent and duration of change in the values of each asset – having regard to intended avoidance and mitigation measures;
- the likelihood of adverse effects, including those caused indirectly as a result of proposed activities, and associated uncertainty of available predictions or estimates⁷;
- proposed avoidance or mitigation measures to reduce predicted effects;
- likely residual effects and their significance, including significant residual impacts on MNES, that are likely to occur assuming the proposed measures to avoid and mitigate environmental effects are implemented; 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*, *Marine and Coastal Act 2018*, *Aboriginal Heritage Act 2006* and other applicable legislation. This should include the content required to support a Marine and Coastal Act application. 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 the EES has effective internal quality assurance in place.

Close consultation with DELWP and the TRG during the investigations and preparation of the EES will be necessary to minimise the need for revisions prior to authorisation of the EES for public exhibition.

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

- an executive summary of the potential environmental effects of the project, including potential effects on identified MNES;
- a description of the entire project, including its objectives, rationale, key elements, associated requirements for new infrastructure, resource use and use of existing infrastructure;
- a description of the proponent and their environmental performance credentials, including experience in developing and operating projects and their health, safety and environmental policies;
- 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 (as well as the basis for the choice where a preferred alternative is nominated);
- description of the scope, timing and method for studies or surveys⁸ used to provide information on the values of the project areas, as well as records and other data from local sources gathered and considered as appropriate;

⁶ Effects include direct, indirect, combined, facilitated, consequential, cumulative, short and long-term, beneficial and adverse effects.

⁷ When sufficient quality data is not able to guide final decision-making, then the precautionary principle should be applied.

⁸ Surveys should be undertaken by suitably qualified persons and adhere to relevant Commonwealth and DELWP survey guidelines.

- descriptions of the existing environment and future climate change scenarios, where this is relevant to the assessment of potential effects;
- appropriately detailed assessments⁹ 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 the identified 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 against the principles and objectives of ecologically sustainable development¹⁰; and
- conclusions on the significance of impacts of the project on local, regional, state and federal matters.

The EES should also include an outline of a program for community consultation, stakeholder engagement and communications proposed for implementation during the construction, operation and decommissioning 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 proponent may choose to prepare a website with interactive functionality to provide an alternative form of access to EES information, which may complement the conventional EES chapters and technical documents. Such an approach should be discussed with DELWP Impact Assessment Unit and if it is integrated with the EES package, 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 include details of the EES exhibition, public submission process and availability of the EES documentation.

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 cover the following:

- objectives and rationale for the project, including its relationship to statutory policies, plans and strategies, and implications of the project not proceeding.
- existing and planned land uses and marine area uses in the vicinity of the proposed project, supported by plans and maps;
- the proposed operational life of the project and expected timeframes of all stages, including construction, commission, operation and any decommissioning and rehabilitation arrangements; and
- other necessary works proposed for the project, such as road upgrades and/or connections, and infrastructure and services upgrades and relocation.

Description of the project's components (supported by visuals and diagrams) should detail:

- applicable standards and adopted specifications for infrastructure, including but not limited to the rotor cycle velocity ranges during operation, the number, scale and dimensions of the wind turbines, and the dimensions of each tower and the rotor blades;
- configuration of wind turbines within the project area, particularly their alignment with prevailing wind;
- location, footprint, layout and access arrangements during construction and operation;
- design and expected construction staging and scheduling;
- proposed construction methods and materials, and extent of areas to be disturbed during construction;

9. Assessments of assets, values and potential effects must be adequately timed to ensure they are accurately representative of seasonal weather patterns of the area.

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

- solid waste, wastewater and hazardous material generation and management during construction, operation and from decommissioning of project components;
- rehabilitation of site works areas;
- proposed tenure arrangements to provide for access for maintenance or other operational purposes;
- lighting, safety, security, and noise requirements during construction and operation;
- workforce accommodation facilities (if required) including location, size and required services;
- hours of operation and workforce requirements (total workforce);
- details of planned vessel movements and transport requirements (including aircraft) during all project stages;
- hours of construction work and a description of the expected duration of project components, including which components are temporary and which are permanent; and
- operational requirements including maintenance activities and decommissioning.

3.4 Project alternatives

The EES should document the proponent's identification and assessment of alternatives, including the preferred alternative(s) and form of the project as presented in the EES. The EES will need to include the proponent's explanation and criteria for evaluating potential alternatives, and why specific alternatives were selected for detailed evaluation within the EES, including with regards to consideration of minimising environmental impacts.

Full consideration should be given to alignment of proposed transmission works with existing infrastructure and the EES should investigate the use of existing transmission line(s) or co-location with other existing/proposed projects in an effort to reduce overall impacts in the region.

The EES needs to assess the likely environmental effects of feasible alternatives, particularly where these offer a potential to avoid or minimise adverse environmental effects whilst meeting the objectives of the project, including:

- description of alternatives considered in the project design process, including alternative transmission line alignments, alternative shoreline crossing locations, alternative turbine and substation technologies and locations;
- identification of methods and environmental criteria for identifying alternatives, comparison of alternatives and for selection of short-listed and preferred alternatives (for both alternatives considered pre-EES and during the EES process);
- assessment and comparison of the technical feasibility and environmental implications of feasible alternative options considered;
- the basis for selecting the preferred project layout and design, particularly where project components are located in proximity to environmentally sensitive areas or receptors;
- description of how information gathered during the EES process was used to refine the preferred transmission corridor alignments and consider other project alternatives; and
- description of how the outcomes of consultations with relevant stakeholders have been considered in the process of identification and analysis of alternatives.

Key aspects of the project, for which the EES will need to demonstrate consideration of feasible alternatives, include:

- siting and layout of the proposed offshore infrastructure, including wind turbines and the offshore substation;
- potential corridors and alignments for the offshore marine cables and the onshore transmission network, including criteria for excluding corridors, alignments and proposed construction techniques from further consideration;
- siting of the proposed shoreline crossing, as well as the construction techniques proposed;
- siting of any infrastructure required for the onshore transmission infrastructure (e.g., onshore substation, transition joint pit), and the extent to which selection of these sites influence the choice of preferred alignment;
- the rationale for the preferred mode of construction across the transmission line alignment (overhead or underground);
- the rationale, siting and design for any proposed battery storage technology;
- selection of supporting ports and harbours (and any modifications required to ports, harbours and channels) to support project construction and operations; and

- other feasible alternatives raised through feedback from the technical reference group, community or other stakeholders.

Where appropriate, the assessment of environmental effects of site selection, alignment and design alternatives must address the matters set out in these scoping requirements. The depth of investigation of alternatives and their impacts should be proportionate to their potential to minimise potentially significant adverse effects and to meet project objectives.

The implications of the “no project” option also need to be outlined.

3.5 Applicable legislation, policies and strategies

In addition to the EE Act and the EPBC 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 other relevant policies, strategies, subordinate legislation and related management or planning processes that may be relevant to the assessment of the project. These include but are not limited to the Victorian guidelines for vegetation removal¹¹, *Environment Protection Act 2017* and subordinate legislation, conservation advice, threat abatement plans and recovery plans for nationally listed threatened species and communities.

3.6 Evaluation objectives

Evaluation objectives are provided in Section 4 for each of the topics to be addressed in the EES. The proposed 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 and environment protection, including 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 and appropriate governance of the environmental performance is needed for project construction and operation, to achieve predicted environmental outcomes, meet statutory requirements and sustain stakeholder confidence. Hence an environmental management framework (EMF) is needed to articulate clear accountabilities for managing and monitoring environmental effects and risks associated with all project elements and phases. The entities responsible for development of and approval of environmental plans should be specified.

The EMF should reference (or address) the baseline environmental conditions to allow evaluation of the residual environmental effects of the project, as well as the efficacy of applied environmental management and contingency measures.

The EMF needs to include the following:

- required approvals and consents, including any anticipated requirements for related environmental management plans, whether for project phases or elements;
- organisational responsibilities and accountabilities for environmental management;
- the environmental management and contingency measures proposed in the EES to address specific issues, including commitments to avoid and mitigate adverse effects and enhance environmental outcomes, with regard for the general environmental duty under the *Environment Protection Act 2017*;
- a register of environmental risks associated with each phase of the project which would need to be maintained during project implementation;
- 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, locations, frequency and auditing). Justification needs to be provided for any aspects where monitoring is not proposed.

11. Including the DELWP *Procedure for the removal, destruction or lopping of native vegetation on Crown land* (2018)

The EMF needs to propose a program for community consultation, stakeholder engagement and communications for all stages of the project. This will include opportunities for local stakeholders to engage with the proponent to seek responses to issues that might arise during project implementation and a process for complaints recording and resolution.

The EMF should set the scope for later development and review of environmental management plans for all project phases.

The EMF also needs to include an adaptive management approach, internal and external auditing and reporting requirements to review and continuously improve the effectiveness of environmental management and to ensure compliance with statutory conditions.

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 describe proposed objectives, indicators and monitoring requirements, including for (but not limited to) managing or addressing:

- biodiversity values, including any mitigation or offsetting measures;
- landscape and visual amenity values;
- water values (including marine, intertidal, estuarine, wetland, waterway and groundwater);
- protection of Ramsar wetlands;
- protection of human health;
- noise and vibration;
- air quality during construction;
- Aboriginal cultural heritage values;
- historic heritage values
- soil stability including erosion;
- bushfire risk;
- disruption of, and hazards to, existing infrastructure;
- hazards and risks associated with disruption/damage of project infrastructure;
- hazards and risks impacting the environment, including oil spills and marine pest incursions;
- electromagnetic interference;
- business and industry values, including fisheries, tourism, shipping and agriculture;
- socioeconomic and land use values, including landowners, residents and visitors to neighbouring public land reserves; and
- transport network function, particularly during construction, including managing temporary disruption and changed accessibility.

4. Assessment of specific environmental effects

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 articulates the primary matters and potentially significant effects that need to be examined in the EES. A systems and risk-based 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. For any potential effects that can be demonstrated to have low levels of risk of environment effects, the EES should describe and analyse these impacts at a level of detail commensurate with that level of environmental risk.

The following structure sets out how the EES should document assessment of the project's effects for each evaluation objective.

1. **Identify key issues or 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 existing environment (pre-mitigation).
4. **Present design and mitigation measures** that could substantially reduce and/or mitigate the likelihood, extent and/or duration of potential effects. All design and mitigation measures must apply the mitigation hierarchy with justification of why higher order measures cannot be applied.
 - a. Avoidance: measures taken to avoid creating adverse effects on the environment 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: measures taken to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimised.
 - d. Offsets: measures taken to compensate for any residual, adverse impacts to matters protected under Victorian and Commonwealth legislation after full implementation of the previous steps of the mitigation hierarchy.
5. **Assess the likely residual effects** of the project on the existing environment and evaluate their significance. This assessment should include consideration of the predicted effectiveness of the proposed mitigation measures.
6. **Propose performance criteria and management** to evaluate whether the project's effects are minimised as far as practicable and propose contingency approaches if they are not.

The description and assessment of the project's effects must not be confined to the immediate area of the project but also consider the potential of the project to impact on other environmental values, in proximity or downstream, including areas potentially impacted by offsite components of the project. This includes the Glenelg Estuary and Discovery Bay Ramsar site, Discovery Bay Marine National Park and Piccannie Ponds Karst Wetlands Ramsar Site. In addition, the cumulative effect of the project in combination with existing activities and projects (approved and proposed) in the broader area/region should be assessed for all significant adverse effects.

4.1 Biodiversity and ecological values

Evaluation objectives

Avoid, and where avoidance is not possible, minimise potential adverse effects on terrestrial, avian, 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 and Commonwealth policies.

Key issues

- Potential for adverse impacts on the ecological character and conservation values of Glenelg Estuary and Discovery Bay Ramsar Site and Discovery Bay Marine National Park.
- Potential for significant impacts on biodiversity and ecological values within and near the project area, including marine and non-marine species, as a result of construction, operation and decommissioning activity, including acoustic impacts, potential collisions and impacts on migratory pathways or behaviour due to avoidance of project infrastructure.
- Impacts on native vegetation and ecological communities and species (flora and fauna) listed under the *Flora and Fauna Guarantee Act 1988* (FFG Act) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), including but not limited to the following:
 - Antarctic Blue Whale (*Balaenoptera musculus*), Pygmy Blue Whale (*Balaenoptera musculus brevicauda*), Southern Right Whale (*Eubalaena australis*) and Humpback Whale (*Megaptera novaeangliae*)
 - Listed marine and migratory bird species, including White-throated Needletail (*Hirundapus caudacutus*), Swift Parrot (*Lathamus discolor*), Orange-bellied Parrot (*Neophema chrysogaster*), Black-faced Cormorant (*Phalacrocorax fuscescens*), Crested Tern (*Thalasseus bergii*), Kelp Gull (*Larus dominicanus*), Pacific Gull (*Larus pacificus*) and Silver Gull (*Larus novahollandiae*)
 - Seabirds that regularly use the near shore environment, including Fluttering Shearwater (*Puffinus gavia*), Hutton's Shearwater (*Puffinus huttoni*) and Sooty Shearwater (*Puffinus griseus*)
 - Bats, including Southern Bent-wing Bat (*Miniopterus orianae bassanii*) and Grey-headed Flying Fox (*Pteropus poliocephalus*)
 - Seals and their habitat, including Long-nosed Fur Seal (*Arctocephalus forsteri*), Australian Fur Seal (*Arctocephalus pusillus*) and seal colonies at Cape Bridgewater
 - Little Penguins (*Eudyptula minor*) and their habitat, including breeding colonies at Dean Maar (Lady Julia Percy Island) and Cape Nelson
 - Important breeding sites for species that are present or utilise the area, including Australasian Gannet (*Morus serrator*), Cape Gannet (*Morus capensis*), Short-tailed Shearwater (*Puffinus tenuirostris*), Common Diving-Petrel (*Pelecanoides urinatrix*) and Fairy Prion (*Pachyptila turtur*)
 - Terrestrial birds at risk of collision with transmission lines, such as Brolga (*Grus rubicunda*) and Australasian Bittern (*Botaurus poiciloptilus*)
 - Threatened ecological communities, such as the Giant Kelp Marine Forests of South East Australia, and the Karst Springs and Associated Alkaline Fens of the Naracoorte Coastal Plains Bioregion.
- Potential for indirect effects on ecosystems and other biodiversity values, including but not limited to those effects associated with changes in hydrodynamics and coastal processes.
- Potential impacts on the environment of the Commonwealth Marine Area, including values associated with the Bonney Coast Upwelling such as the diverse marine fauna and seabirds that utilise the area
- Potential for significant impacts on marine habitats resulting from pollution events, including sediment mobilisation, increased turbidity, accidental or unintended leaks or spills during construction works or operational activities, or introduction of exotic species, such as *Undaria pinnatifida*.
- Cumulative impacts on biodiversity, listed species and communities and habitat with other approved or proposed developments.
- The availability of suitable offsets for the loss of native vegetation and habitat for listed threatened species, communities and migratory species.

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, biologically important areas, terrestrial and aquatic/marine habitat and habitat corridors or linkages in the area that could be impacted by the project and associated works.
- Identify the existing or likely presence of any protected species and ecological communities, including those listed under the EPBC Act or FFG Act, as well as environmental weeds, pathogens and pest animals and potentially threatening processes. This should include, but not be limited to, consideration of the species and ecological communities listed above (Key Issues).
- Characterise the environmental values of the Glenelg Estuary and Discovery Bay Ramsar Site and Discovery Bay Marine National Park
- Characterise the location of feeding and roosting habitat for threatened species, including within the Ramsar sites, national parks and marine areas, the behavioural ecology linking these habitats, their site

fidelity, temporal variability in occurrence at the sites and their usage of the area in a local, regional, and national context, including their movement and migratory pathways

- Characterise the existing environment of the Commonwealth Marine Area, such as those identified in the South-east marine region profile (2015) and including the Bonney Coast Upwelling.
- Characterisation of the existing environment is to be informed by suitable available literature and data (especially, where relevant, data that is less than 5 years old) and is to be supported by seasonal or targeted surveys, conducted in accordance with relevant Commonwealth and DELWP guidelines, and where necessary incorporating all seasons within a year¹².
- Details of the scope, timing and method for studies or surveys used to provide information on the ecological values at the site (and in other areas that may be impacted by the project) should be outlined. Records and other data from local sources should also be gathered and considered, as appropriate.

Likely effects

- Assess likely direct and indirect effects of the project and alternatives on native vegetation, ecological communities, protected flora and fauna species and their habitat, including threatened or migratory species listed under the EPBC Act and FFG Act, including but not limited to the species listed above at Key Issues. This assessment should consider potential effects relative to existing hazards and risks, with regard to conservation or listing advice, action statements, recovery plans and threat abatement plans,
- Assess likely direct and indirect impacts of the project on the ecosystems and ecological values of the marine environment including potential impacts to relevant marine flora and fauna and values associated with the Bonney Coast Upwelling and the Commonwealth Marine Area.
- Assess likely direct and indirect effects of the project on the ecosystems and ecological values through the introduction of exotic marine organisms and disturbance of the seabed.
- Conduct a collision risk assessment to assess likely direct and indirect effects of potential avifauna and marine mammal collision with project infrastructure, equipment, or machinery. Collision risk modelling must include:
 - key factors affecting collision risk modelling for avifauna such as morphology, sensorial perception, behaviour, abundance, flight paths, flight and heights in differing weather conditions, food availability, and weathering conditions relevant to the project area
 - details of assumptions and uncertainty.
- Indirect loss of vegetation or habitat quality that may support any listed species or other protected fauna, resulting from changes to the local hydrology (terrestrial) or hydrodynamics (marine), edge effects, barrier effects from offshore infrastructure on foraging, breeding and migratory pathways, habitat fragmentation, loss of connectivity, changed shipping activities or other disturbance impacts arising from construction or operation, including from noise (underwater and airborne), vibration, changes in electromagnetic fields and lighting.
- Assess likely direct and indirect effects of the project on the ecological character and habitat values of the Glenelg Estuary and Discovery Bay Ramsar Site, Discovery Bay Marine Park and the Piccaninnie Ponds Karst Wetlands Ramsar Site, including but not limited to effects of sediment mobilisation and changes in water quality, potential changes in the hydrological regime of the wetland, potential introduction of exotic organisms, noise (underwater and airborne), vibration and lighting, including potential effects on the lifecycle of species present in the Ramsar sites.
- Assess likely cumulative effects on biodiversity-related values that might result from the project in combination with other projects or actions taking place or proposed nearby.
- 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 the project area.
- Assess the potential impacts on habitat connectivity of listed or other protected species, both onshore and offshore, including but not limited to migratory species.

Mitigation measures

- Identify potential and proposed design options and measures that could avoid, minimise, mitigate or manage significant direct and indirect effects on biodiversity values, including native vegetation, any listed ecological communities or flora and fauna species and their habitat, the ecological character of the Ramsar sites and marine parks, and habitat values within and adjacent to the onshore transmission corridor.

12. This should include, but not be limited to, seal and seabird surveys, whale surveys, habitat use surveys, marine benthic flora surveys and, where appropriate, underwater noise surveys, unless existing data is shown to be adequate to inform impact assessment.

- Evaluate the efficacy of proposed species monitoring (including detection and avoidance technology) including an evaluation of its applicability in detecting all target species. The evaluation should include the identification of residual risks and uncertainties associated with proposed monitoring programs, and how risk and uncertainty will be addressed.
- Best practice guidelines and standards must be considered when designing mitigation measures.
- Develop hygiene controls for vehicle, machinery and vessel movement to minimise the spread of pathogens and invasive species.
- 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).
- Identify operations phase mitigation measures, such as curtailment options, to avoid and minimise adverse effects on birds and bats.
- 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.

Performance objectives

- Describe and evaluate proposed measures to manage residual effects of the project on biodiversity values, including an offset strategy that sets out and includes evidence of the offsets that can be secured or are proposed to satisfy Commonwealth and Victorian offset policy or guideline requirements. Proposed EPBC Act offsets (if required) must meet the requirements of the *EPBC Act Environmental Offsets Policy* (October 2012).¹³
- Describe and evaluate the approach to monitoring and the proposed contingency measures to be implemented in the event of adverse residual effects on biodiversity values requiring further management.
- Identify any further methods proposed to manage risks and effects on other biodiversity values and native vegetation to form part of the EMF (see Section 3.7).
- As part of the offset strategy, describe how the offsets will be secured, managed and monitored, including thresholds for management actions, responsibility, timing, performance measures and the specific environmental outcomes to be achieved (e.g., as part of offset management plans to be prepared).

4.2 Marine and catchment values

Evaluation objectives

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

Key issues

- The potential for adverse effects on freshwater, coastal and marine waters and associated environmental values, including changes to marine and coastal processes as a result of construction, operation and decommissioning of infrastructure and any modifications to ports, harbours and channels.
- The potential for adverse effects on the functions and 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 environmental values of groundwater due to the project's shore crossing construction and any underground assets onshore, including transmission assets.
- The potential for adverse effects to coastal landforms, including changes to hydrodynamic and sediment transport as a result of the project.
- 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.
- Potential effects to environmental values through sediment mobilisation, spills of fuels or chemicals or the introduction of invasive species.

Existing environment

- Describe marine, estuarine, intertidal and freshwater waters and their environmental values that could be affected from changed water quality, sediment or water movement, due to the project.

13. environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy

- Characterise the area's hydrodynamics and coastal processes and modelling techniques utilised to do so.
- Characterise the local groundwater quality and behaviour, including the protected environmental values and identifying any groundwater dependent ecosystems (GDEs) that might be affected by the project during construction.
- Characterise soil types and structures in the project area and identify the potential location and disturbance of dispersive, acid sulphate, saline or potentially contaminated soils, or soils of other special characteristics that could affect or be affected by the project.

Likely effects

- Identify and evaluate effects of the project on groundwater, surface water, waterways, estuarine, intertidal and marine waters potentially affected by project works, including the likely extent, magnitude and duration (short and long term) of changes to water quality and hydrodynamics with appropriate consideration of climate change scenarios and possible cumulative effects.
- Assess likely direct and indirect impacts of the project on the Commonwealth Marine Area including ocean processes and potential impacts from pollutants, chemical and toxic substances.
- Assess the impacts of the construction and operation of the project on the Ramsar site, particularly potential substantial and/or measurable changes to the hydrological regime, in the context of ecological character description and acceptable limits for change.
- Identify and assess potential residual effects of the project on soil stability, erosion and the exposure and disposal of contaminated or hazardous soils (e.g. acid sulphate soils).
- Ensure a systems-based assessment where necessary, with marine water quality, hydrodynamics and marine ecology studies undertaken together.

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 environmental values of groundwater, waterway, wetland, estuarine, intertidal 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 stability.
- Describe available options for treatment or disposal of the various categories of solid and liquid wastes generated by the project.

Performance criteria

- Describe and evaluate the approach to monitoring and the proposed contingency measures to be implemented in the event of adverse residual effects on groundwater, waterway, wetland, estuarine, intertidal and marine waters requiring further management.
- Describe contingency measures for responding to unexpected but foreseeable impacts such as disturbance of acid sulphate soils.

4.3 Cultural heritage

Evaluation objectives

Avoid and, where avoidance is not possible, minimise potential adverse effects on Aboriginal and historic cultural heritage, including Traditional Owner values and uses.

Key issues

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

Existing environment

- Review and analyse geophysical and geotechnical environmental data, land use history, previous studies and relevant registers to identify areas with known or potential Aboriginal cultural heritage value in onshore and offshore project areas.
- Characterise and assess the physical nature of the seafloor within the offshore project area to identify submerged landforms likely to be sensitive for Aboriginal tangible or intangible cultural heritage.
- Identify and characterise Aboriginal cultural heritage, areas of cultural heritage sensitivity, and intangible cultural heritage values potentially impacted by the project in consultation with the Registered Aboriginal Party.
- Review land and sea use history, previous studies, relevant registers and available remote sensing data to identify and document known and potential places, sites, objects and/or artefacts of historic cultural heritage significance potentially impacted by the project, including underwater cultural heritage and any areas of significant archaeological interest on land and underwater, in accordance with Heritage Victoria guidelines.
- Characterise the cultural values of the existing environment of the Commonwealth Marine Area as they relate to Traditional Owners and other stakeholders, including any locations and descriptions of underwater cultural heritage sites and artefacts, determined using appropriate resolution for underwater surveys by a suitably qualified expert with a background in Australian underwater cultural heritage.

Likely effects

- Assess the potential direct and indirect effects of the project on Aboriginal tangible and intangible cultural heritage within both onshore and offshore project areas.
- Assess likely direct and indirect impacts of the project on the Commonwealth Marine Area, including impacts on heritage values, including Indigenous heritage values.
- Assess direct and indirect effects of the project on sites and places of historical cultural heritage significance (including underwater cultural heritage and archaeology). 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.

Mitigation

- Describe and evaluate proposed design, management or site protection measures that could avoid, minimise or mitigate potential adverse effects on known or potential Aboriginal or historical cultural heritage values.
- Develop management conditions and contingency measures in accordance with the requirements for a Cultural Heritage Management Plan (CHMP) under the *Aboriginal Heritage Act 2006*.
- Develop an Archaeology Management Plan which includes protocols for the identification, reporting and management of previously unrecorded historical archaeological remains (including features, deposits and/or artefacts) on land and underwater.

Performance criteria

- Outline any proposed commitments to mitigate and manage residual effects on sites and places of Aboriginal cultural heritage significance (within the framework of an EES and CHMP).
- Outline any proposed commitments to mitigate and manage residual effects on sites and places of historical heritage significance, including site investigations and recording procedures.

4.4 Landscape, seascape and visual

Evaluation objectives

Avoid, minimise and manage potential adverse effects on landscape, seascape and visual amenity.

Key issues

- Potential effects on significant landscape values in the vicinity of the project, especially coastal environments, national parks, other reserves and areas formally identified for their landscape values, such as within the Glenelg Shire planning scheme, and public viewpoints along the Great South West Walk.
- Potential for nearby residents and communities to be exposed to significant effects on visual amenity from project infrastructure.

Existing environment

- Characterise the landscape, coastal and seascape character, features and values of the project area and its environs.
- Assess the statutory context including identification of any significant landscapes in the vicinity that have statutory protection.
- Identify public and private view sheds to the project and characterise visual values of the area, including dark skies.
- Identify the components of the project that may result in a significant visual amenity effect.
- Identify viewsheds in which the project site features, including from nearby residences (where permitted), public lookouts, tourist attractions, roads and key vantage points in the vicinity.
- Identify existing built features within the landscape and their impact on the existing landscape and visual setting.

Likely effects

- Assess the landscape and visual amenity effects of the project, including on public and private views. Use photomontages and other visual techniques to support the assessment, taking into account topographies and viewscreens.
- Assess the potential for nearby communities to be exposed to changes to the visual amenity, including views and blade glint from project infrastructure.
- Undertake a seen area analysis to understand the areas from which the wind turbines are visible.
- Assess the potential for cumulative impacts associated with the development of the project in the context of existing built infrastructure, as well as nearby proposed/approved developments (where such information is publicly available).
- Characterise the risk of visual impacts to industry (for example the tourism industry) and communities, including potential effects on significant state and regional landscape values and national parks.

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 criteria

- Describe proposed measures to manage residual effects on landscape and visual amenity values, including in the context of potential rehabilitation and restoration work.

4.5 Land use and socio-economic

Evaluation objectives

Avoid and minimise adverse effects on land use, social fabric of the community, local infrastructure, and local businesses and tourism during construction, operation and decommissioning of the project.

Key issues

- Potential disruption to existing and/or proposed land uses, with associated economic and social effects.
- Potential economic and social effects from the project, such as through disruption of business, industry (including agriculture and commercial fisheries), tourism opportunities, recreational fishing and land use values of the region.
- Potential effects on fisheries within or near the project area including any protected aquatic biota listed under the *Fisheries Act 1995*.
- 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 cumulative land use and social effects from the project in combination with other projects.

Existing environment

- Describe the project area and its environs in terms of land use (existing and proposed), residences, zoning and overlays and public infrastructure that support current and strategic patterns of economic and social activity.
- Describe the local community and social setting, including businesses and industry within the area such as agriculture and commercial fisheries, and recreational use of the marine area, including recreational fisheries.

- Characterise tourism usage of the project area and its surroundings, including national parks and reserves.
- 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 the social and economic values of the Commonwealth Marine area as they relate to Indigenous and other stakeholders.

Likely effects

- Identify potential long and short-term effects of the project on existing and potential land uses and public infrastructure.
- Identify potential social impacts from the project, including through changes interfering with the current usages of private land and community facilities in the area.
- Identify potential economic effects of the project, considering direct and indirect consequences on employment, local and regional economy and industries in the area, including agriculture, commercial and recreational fisheries and tourism.
- Assess likely direct and indirect impacts of the project on the Commonwealth Marine Area in relation to ecosystem services and socio-economic values.
- Identify potential impacts from workforce requirements such as additional demand on housing and public services in the immediate and broader area.
- Identify potential impact on tourism and tourist attractions within the project area and surrounding natural reserves.
- Identify the potential effects and risks to aviation safety from the project.
- Assess the potential cumulative land use and social effects from the project in combination with other projects that may have similar types of impacts.

Mitigation

- Demonstrate whether the project is consistent with relevant planning scheme provisions and other relevant policies (including approved management plans for adjacent public land).
- Identify potential and proposed design options and measures that could avoid, minimise, mitigate or manage significant direct and indirect effects on any protected aquatic biota under the *Fisheries Act 1995*.
- Describe consultation undertaken with 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.
- Outline measures to minimise potential adverse effects of the project and enhance benefits to the community and local businesses and industry.

Performance criteria

- Describe proposed measures to mitigate, offset or manage social, land use and economic outcomes for communities living, and businesses operating, within the project area and its environs as well as proposed measures to enhance beneficial outcomes.
- Outline and evaluate any proposed measures designed to manage and monitor residual effects to aviation safety and describe contingency measures for responding to unexpected impacts.

4.6 Amenity, safety and transport

Evaluation objectives

Avoid and minimise adverse effects on community amenity and health and safety, with regard to noise, vibration, air quality including dust, the transport network, fire risk management, soil and waste management and electromagnetic radiation.

Key issues

- Potential for adverse effects resulting from project-related noise, vibration or light at sensitive receptors during construction and operation.
- 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 during construction.
- Potential for impacts to safe navigation of vessels transiting through or adjacent to the project area.
- Implications of the project for fire risk management on surrounding land, including fire ignition risks arising from the project.
- Potential cumulative effects from the project on amenity in combination with other projects.

Existing environment

- Describe the existing, approved and committed transport network in and around the project, including proposed construction transport route options, in terms of capacity, condition, accessibility and potentially sensitive users.
- Characterise the background air quality and the ambient noise environment in and adjacent to the project in established residential, farming, commercial and open space areas and at other sensitive land use and high amenity locations.
- Compile meteorological data to support amenity impact assessments.
- Describe community attitudes to the existing environment and to the potential effects of the project.
- Identify sensitive receptors that could be affected by noise, vibration, dust or electromagnetic radiation from project construction or operation.
- Characterise the fire risks associated with the project area and its surrounds.
- Identify marine navigation routes used by commercial shipping in the vicinity of the project area.

Likely effects

- Assess the potential effects of construction activities on the transport network, including safety, amenity and accessibility impacts.
- Identify any works required to accommodate project traffic during construction (having regard to the type and dimensions of vehicles and loads) and potential environment effects.
- Predict likely air pollutant concentrations and greenhouse gas emissions, in surrounding areas during all relevant project phases using an air quality impact assessment considering the Environment Reference Standard and relevant EPA publications.
- Assess the potential effects of the project on noise and vibration amenity at sensitive receptors, considering the *Environment Protection Act 2017*, regulations and relevant EPA publications.
- Assess the risks that the project could cause a fire affecting land and assets within or outside the project area.
- Assess the implications of the project for fire risk management or bushfire suppression activities within the project area or in its vicinity.
- Identify potential effects of electromagnetic radiation from the project on sensitive receptors.
- Identify and assess risks to the project's ongoing sustainability including susceptibility to extreme weather events in the context of modelled climate change scenarios.
- Describe potential impacts on safe marine navigation, including commercial shipping, and on existing port operations resulting from the project.
- Assess the potential cumulative effects from the project on community amenity in combination with other projects that may have similar types of impacts.

Mitigation

- Identify potential and proposed design responses and/or other mitigation measures in accordance with best management practice, to avoid, reduce and/or manage significant effects for sensitive receptors, during all project phases, arising from:
 - Air pollution indicators;
 - Noise, vibration and electromagnetic radiation; and
 - Public safety hazards.
- 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 proposed traffic management and safety principles to address changed traffic conditions during construction and operation of the project.
- Outline measures to avoid, minimise or mitigate potential adverse effects on local communities.
- Identify measures for avoiding, managing and minimising fire risks arising from the project, having regard to planning and other policy provisions.

Performance criteria

- Describe proposed measures to manage and monitor effects on community amenity, health and safety, the transport network, fire risk management and electromagnetic radiation 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 community amenity, health and safety, the transport network, fire risk management and electromagnetic radiation resulting from the project during construction and operation of the project.

Appendix A: EES 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 the investigation and avoidance of potential direct and indirect environmental effects of the proposed project, including any relevant alternatives, as well as associated environmental mitigation and management measures. In particular, the EES needs to address:
 - a. effects on biodiversity and ecological values within and near the project area including native vegetation, communities and species (flora and fauna) listed under the *Flora and Fauna Guarantee Act 1988* and *Environment Protection and Biodiversity Conservation Act 1999*;
 - b. effects on ecological character and conservation values of Glenelg Estuary and Discovery Bay Ramsar Site and Discovery Bay Marine National Park;
 - c. effects on freshwater, coastal and marine ecosystems, including changes to marine and coastal processes as a result of construction, operation and decommissioning of infrastructure, as well as any modifications to ports, harbours and channels;
 - d. effects on Aboriginal cultural heritage values;
 - e. effects on the socioeconomic environment, at local and regional scales, including on fisheries, tourism, traffic and other direct and indirect effects of construction;
 - f. effects on landscape values; and
 - g. cumulative effects, including for conservation areas, threatened flora and fauna, as well as social and landscape values, given the proximity to other windfarms proposed in the region.
- (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 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 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, as appropriate, during the preparation of the EES 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 data collection, studies, preparation and exhibition of the EES, following confirmation of the draft scoping requirements. This is to enable effective management of the EES process and EES' development based on 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 not 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 environmental effects of the proposal.

Appendix B: Commonwealth Decision on VIC Offshore Windfarm project referral (EPBC 2021/8966)



Australian Government
Department of Agriculture,
Water and the Environment

Notification of REFERRAL DECISION AND DESIGNATED PROPONENT – controlled action

VIC Offshore Windfarm, off the coast of Portland, Victoria (EPBC 2021/8966)

This decision is made under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

proposed action	To construct, operate and decommission an offshore windfarm and associated infrastructure, off the coast of Portland, Victoria [See EPBC Act referral 2021/8966].
decision on proposed action	The proposed action is a controlled action. The project will require assessment and approval under the EPBC Act before it can proceed.
relevant controlling provisions	<ul style="list-style-type: none"> • Ramsar wetlands (sections 16 & 17B) • Listed threatened species and communities (sections 18 & 18A) • Listed migratory species (sections 20 & 20A) • Commonwealth marine areas (sections 23 & 24A)
designated proponent	VIC OFFSHORE WINDFARM PTY LTD ACN: 647 508 496
assessment approach	To be advised.
Decision-maker	
Name and position	Kim Farrant Assistant Secretary Environment Assessments (Vic, Tas) and Post Approvals Branch
Signature	
date of decision	5 July 2021

GPO Box 858 Canberra ACT 2601 • Telephone 02 6274 1111 • www.awe.gov.au