STAR OF THE SOUTH

Commonwealth Environmental Impact Statement

Attachment V - EIS guidelines checklist

EIS guidelines checklist

Section	Guideline requirement	Section addressed
2.2 General information	(a) the title of the action	*Chapter 1 – Environmental Impact Assessment Introduction*
	(b) the full name and postal address of the designated Proponent;	
	(c) a clear outline of the objective of the action;	*Chapter 2 – Project Rationale*
	(d) the location of the action, including confirmation of: - the onshore - the offshore windfarm site and offshore transmission assets - the onshore transmission route, including action required to support shoreline crossing of transmission assets - the ports likely to be used for servicing the wind farm, and through which shipping movements to the wind farm will occur - any ancillary components likely to be required to support the Project	*Chapter 1 – Environmental Impact Assessment Introduction* *Chapter 4 – Project Description*
	(e) the background to the development of the action;	*Chapter 3 – Project Development*
	(f) how the action relates to any other actions (of which the Proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;	Whole of EIS - Volume 2
	(g) the current status of the action;	*Chapter 1 – Environmental Impact Assessment Introduction*
	(h) the consequences of not proceeding with the action;	*Chapter 2 – Project Rationale*
	(i) a brief explanation of the scope, structure and legislative basis of the EIS; and	*Chapter 5 – Commonwealth Legislative Framework*
	(j) the specific EPBC Act MNES affected by the action.	Whole of EIS
2.3 Description of the action	The construction, commissioning, operation and decommissioning components of the action should be described in sufficient detail to understand the proposed action and assist in determining the associated potential environmental impacts. This should include the precise location (including coordinates) of all works to be undertaken (including plans, concept designs, and maps), structures to be built or elements of the action that are likely to impact MNES and other social or economic impacts, these demonstrate that relevant impacts can be identified	*Chapter 4 – Project Description*

Section	Guideline requirement	Section addressed
	• The description of the action must include details on how the works are to be undertaken (including stages of development and their timing and duration) and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;	*Chapter 4 – Project Description*
	• The expected maximum life of the action, including construction, operation and decommissioning;	*Chapter 4 – Project Description*
	• details of associated works/activities, such a vessel movements, throughout different stages of development, operation and decommissioning of the offshore wind farm; and	
	• details of decommissioning, including the likely outcomes, and principles for planning and implementation (noting that full details of activities unlikely to be available)	
	• The description should include the use of aerial photographs, maps, figures and diagrams, where appropriate. A general location map should be provided that illustrates the existing and proposed infrastructure and should include the location of known potential future expansions or new developments approved or for which development applications have been submitted in the vicinity. Reference should be made to detailed technical information in appendices where relevant.	
	• The EIS must include the location, boundaries and size (in hectares) of the likely disturbance footprint and of any adjoining areas which may be indirectly impacted by the proposed action such that relevant impacts can be understood.	
	If the proponent chooses to adopt an approach to describing components of the action in the form of design parameters based within a project envelope, the EIS must also include:	*Chapter 4 – Project Description*
	• the components of the project for which parameters will be defined	
	• justification of the need for application of this approach and individual components	
	• demonstration of how parameters defined allow for likely impacts to be described during assessment	
	The EIS must fully detail parameters for components of the action necessary to ensure that for the purposes of the assessment of relevant impacts on matters protected under Part 3 of the EPBC Act, all relevant parameters are assessed, and to ensure appropriate mitigations and safeguards are included.	*Chapter 4 – Project Description*
2.4 Feasible alternatives	Any feasible alternatives to the action to the extent reasonably practicable, including:	
	• if relevant, the alternative of taking no action;	*Chapter 2 – Project Rationale*

Section	Guideline requirement	Section addressed
	• a comparative description of the impacts of each alternative on the MNES protected by controlling provisions of Part 3 of the EPBC Act for the action;	*Chapter 3 – Project Development*
	• where there are likely different environmental impacts associated with the options, sufficient detail to make clear why any alternative is preferred to another; and	
	• How the choice of alternatives or options ensures impacts to MNES are appropriate minimised and managed to an acceptable level.	
	Short, medium and long-term advantages and disadvantages of options must be discussed.	*Chapter 2 – Project Rationale*
2.5 Description of the environment	The EIS must include a description of the general environment of the proposal site and the surrounding areas that may be affected by the action, in both the short and long term.	Whole of EIS
	• terrestrial and aquatic ecosystems, including key vegetation communities and relevant watercourses;	*Chapter 8 - Coastal Processes and Sediment Transport* *Technical Report A - Coastal Processes and Sediment Transport* *Chapter 9 - Benthic Ecology* *Technical Report B - Benthic Ecology* *Chapter 18 - Onshore Ecology – (EPBC matters)* *Technical Report G - Onshore Ecology*
	• estuarine and coastal environments, including inshore coastal areas, vegetation, underwater ecological features and key habitats;	
	• surface water and groundwater hydrology and quality;	*Technical Report H - Groundwater* *Technical Report I - Surface Water*
	• native flora and fauna, both terrestrial and aquatic, including pest species and weeds;	*Chapter 9 - Benthic Ecology* *Technical Report B – Benthic Ecology* *Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats* *Chapter 18 - Onshore Ecology (EPBC matters)* *Technical Report G - Onshore Ecology*
	• important areas, recognised populations and habitat, aggregations of marine species and Biologically Important Areas (BIAs);	*Chapter 11 - Marine Mammals and Turtles*

Section	Guideline requirement	Section addressed
		Technical Report D - Marine Mammals and Turtles *Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas*
	• current condition of the marine environment, including its values and sensitivities, and conservation values, including information placing these features into appropriate local and regional contexts (e.g. South-east marine region);	Whole of EIS Technical reports
	• cultural heritage values, people and communities and other relevant social considerations, including the commercial use of the Gippsland Basin and Bass Strait;	*Chapter 14 - Non-Aboriginal Underwater Cultural Heritage* *Technical Report M - Non-Aboriginal Underwater Cultural Heritage* *Chapter 15 - Commercial and Recreational Fisheries* *Technical Report N - Commercial and Recreational Fisheries* *Chapter 16 - Infrastructure and Co-Existence with Other Users* *Technical Report O - Infrastructure and Co-Existence with Other Users* *Chapter 19 - Submerged Aboriginal Culture Heritage* *Technical Report Z - Submerged Aboriginal Culture Heritage* *Chapter 20 - Social* *Technical Report R - Social* *Chapter 21 - Business and Tourism* *Technical Report Q - Business and Tourism*
	• historical anthropogenic uses of the project site (if relevant) and existing condition of the overall environment within, adjacent to, downstream and upstream of the project site; and	*Chapter 14 - Non-Aboriginal Underwater Cultural Heritage* *Technical Report M - Non-Aboriginal Underwater Cultural Heritage* *Chapter 19 - Submerged Aboriginal Culture Heritage* *Technical Report Z - Submerged Aboriginal Culture Heritage*

Section	Guideline requirement	Section addressed
	• existing anthropogenic uses of the Gippsland Basin and Bass Strait.	*Chapter 15 - Commercial and Recreational Fisheries* *Technical Report N - Commercial and Recreational Fisheries* *Chapter 16 - Infrastructure and Co-Existence with Other Users* *Technical Report O - Infrastructure and Co-Existence with Other Users* *Chapter 20 - Social* *Technical Report R - Social* *Chapter 21 - Business and Tourism* *Technical Report Q - Business and Tourism*
2.6 Description of protected matters	The EIS must provide a description of the protected matters that are likely to be impacted by the proposed action.	Whole of EIS Technical reports
	The EIS must include a habitat assessment for each relevant listed marine, migratory and threatened species and community. The habitat assessment must include, but not be limited to, the habitat area (in hectares), quality, location and use specifications of known and potential suitable habitat in relation to the project disturbance area.	*Chapter 9 - Benthic Ecology* *Technical Report B – Benthic Ecology* *Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates,* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats* *Chapter 18 - Onshore Ecology (EPBC matters)* *Technical Report G - Onshore Ecology*
	The EIS must consider and discuss the value of suitable habitat present within the development envelope and how it may be impacted by the project.	
	The EIS must describe the methodology for identifying priority areas for conservation.	*Chapter 13 - Marine Protected Areas*
	The EIS must provide an analysis of the strengths, limitations and expected effectiveness of methodologies used to identify the MNES and identify any key information gaps, further studies needed and any proposals to address critical information needs.	Technical reports
2.6.1 Ramsar Wetlands	1. a description of the ecological character of the Corner Inlet Ramsar Wetlands including the following details:	*Chapter 13 - Marine Protected Areas*

Section	Guideline requirement	Section addressed
	• Ramsar values (identified in the listing criteria in the Ramsar Information Sheet (RIS)), critical components, processes and services of the Corner Inlet and the Western Port Ramsar Wetlands (identified in the Draft Ecological Character Description (ECD) or final ECD if available). This includes:	*Technical Report F - Marine Protected Areas*
	a) extent and types of wetland habitats at the proposed development site and in areas that may be impacted by the development including, but not limited to, intertidal and subtidal habitats and areas;	
	b) threatened ecological community locations;	
	c) threatened and migratory species numbers, distribution and site fidelity at the Ramsar sites and in areas that may be impacted by the development, known habitat utilisation or requirements, and the predicted temporal and spatial variability in occurrence at the site;	
	d) locations of feeding and roosting habitats of threatened and migratory species at the Ramsar sites, the behavioural ecology which links these habitats, their site fidelity, temporal variability in occurrence at the site and their usage of the area in regional context, including their migratory pathways;	
	e) coastal morphology and hydrology, including the tidal regime of Corner Inlet;	*Chapter 8 - Coastal Processes and Sediment Transport* *Technical Report A - Coastal Processes and Sediment Transport* *Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas*
	f) physico-chemical status of the wetland (levels of turbidity and suspended sediment)	*Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas*
	g) water quality;	*Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas*
	h) soils and marine sediments, including acid sulphate soils (ASS) and potential acid sulphate soils (PASS); and	*Chapter 8 - Coastal Processes and Sediment Transport* *Technical Report A - Coastal Processes and Sediment Transport* *Technical Report J - Soils and Waste*
	i) Current status and condition of the Corner Inlet Ramsar Wetland, including the past and projected trends and existing threats.	*Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas*

Section	Guideline requirement	Section addressed
2.6.2 Listed marine species, migratory species, threatened species and ecological communities	2. A description of listed species, which includes listed threatened species and ecological communities (EPBC Act sections 18 & 18A), listed migratory species (EPBC Act sections 20 & 20A) and listed marine species (protected under EPBC Act sections 23 & 24A) that are likely to be present in the vicinity of the onshore or offshore components of the proposed action (and in areas that may be impacted by the project), including the following details:	*Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats* *Chapter 18 - Onshore Ecology (EPBC matters)* *Technical Report G - Onshore Ecology*
	• details of the scope, timing (survey seasons) and scientifically robust methodology for studies or surveys used to provide information on the listed species/community/habitat at the site (and in areas that may be impacted by the project);	
	• how studies or surveys are consistent with (or a justification of divergence from) relevant Departmental guidelines or policy statements, or are in accordance with best practice studies or surveys;	
	• marine, migratory and threatened species and ecological communities' abundance, distribution and site fidelity at the proposed development site and in areas that may be impacted by the development, and known habitat utilisation or requirements, including Biologically Important Areas (BIAs) and habitat critical to the survival of the species;	
	• usage of the project area by listed species in regional context including, but not limited to migratory pathway, breeding and foraging behaviours;	
	• the predicted temporal and spatial variability in occurrence of listed species within the onshore or offshore project area and in areas that may be impacted by the project;	
	• relevant identified threats to the survival, habitat utilisation, site fidelity and essential life functions of listed species, including foraging, breeding or migratory behaviours, and past and projected trends and existing threats to the condition of habitat.	
	The EIS must provide a robust assessment of the potential habitat available within, adjacent to, upstream and/or downstream of the project site for listed marine, migratory and threatened species and ecological communities, including the total amount of each type of habitat (in hectares) within, adjacent to, upstream and downstream of the project site. This must include the assessment of specific habitat requirement/s relevant to each listed marine, migratory and threatened species and ecological community (e.g. breeding, foraging, dispersal, important habitat, roosting, etc.).	Whole of EIS Technical reports
2.6.3 Commonwealth marine area	The Commonwealth marine area relevant to the action falls within the area of the South-east marine region profile (2015). The whole of the environment must be considered in the assessment of the impacts of the action on the Commonwealth marine area, including social, economic and cultural aspects of the environment. Marine protected areas are marine areas which are recognised to have a high conservation value. Actions in or near marine protected areas have a greater likelihood of significant impacts on the Commonwealth marine environment.	Whole of EIS Technical reports

Section	Guideline requirement	Section addressed
	Further, the EPBC Act defines the environment as including heritage values, people and communities, including their social, economic and cultural aspects. Indigenous heritage values are also defined in section 528 of the EPBC Act, as "a heritage value of the place that is of significance to indigenous persons in accordance with their practices, observances, customs, traditions, beliefs or history".	
	The description of the Commonwealth Marine Area in the MNES section must describe the environment of the commonwealth marine area (please note definition of the environment in section 528 of the EPBC Act) addressing the following:	*Chapter 24 - EIS Summary and Conclusions*
	a) ecosystems and their constituent parts, including people and communities;	*Chapter 9 - Benthic Ecology* *Technical Report B - Benthic Ecology* *Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Chapter 15 - Commercial and Recreational Fisheries* *Technical Report N - Commercial and Recreational Fisheries* *Chapter 16 - Infrastructure and Co-Existence with Other Users* *Technical Report O - Infrastructure and Co-Existence with Other Users* *Technical Report E - Offshore Ornithology and Bats* *Chapter 18 - Onshore Ecology (EPBC matters)* *Technical Report G - Onshore Ecology* *Chapter 20 - Social* *Technical Report R - Social* *Chapter 21 - Business and Tourism* *Technical Report Q - Business and Tourism*
	b) natural and physical resources;	*Chapter 8 - Coastal Processes and Sediment Transport*

Section	Guideline requirement	Section addressed
		Technical Report A - Coastal Processes and Sediment Transport
	c) the qualities and characteristics of locations, places and areas including Key Ecological Features (identified in the South-east marine region profile (2015)), and Australian Marine Parks (see Australian Marine Parks (parksaustralia.gov.au)), addressing:	*Chapter 9 - Benthic Ecology* *Technical Report B - Benthic Ecology* *Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats* *Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas* *Chapter 23 - Commonwealth Environmental Management Framework*
	i. Distance from the proposed action	
	ii. Conservation values	
	iii. Status, condition and the threats to identified values that are relevant to the Action	
	iv. Relevant management arrangements (e.g. management plans) and strategies and any separate approvals requirements for activities within or which may affect Australian marine parks.	
	iv. Relevant management arrangements (e.g. management plans) and strategies and any separate approvals requirements for activities within or which may affect Australian marine parks.	*Chapter 23 - Commonwealth Environmental Management Framework*
	d) heritage values of places;	*Chapter 14 - Non-Aboriginal Underwater Cultural Heritage* *Technical Report M - Non-Aboriginal Underwater Cultural Heritage* *Chapter 19 - Submerged Aboriginal Heritage* *Technical Report Z - Submerged Aboriginal Cultural Heritage*
	e) the social, economic and cultural aspects of a thing mentioned in paragraph (a), (b), (c) or (d), including consideration of the characterised visual impact of the action.	*Chapter 14 - Non-Aboriginal Underwater Cultural Heritage* *Technical Report M - Non-Aboriginal Underwater Cultural Heritage* *Chapter 15 - Commercial and Recreational Fisheries* *Technical Report N - Commercial and Recreational Fisheries*

Section	Guideline requirement	Section addressed
		Chapter 16 - Infrastructure and Co-Existence with Other Users *Technical Report O - Infrastructure and Co-Existence with Other Users* *Chapter 17 - Shipping and Navigation* *Technical Report P - Shipping and Navigation* *Chapter 19 - Submerged Aboriginal Heritage* *Technical Report Z - Submerged Aboriginal Cultural Heritage* *Chapter 20 - Social* *Technical Report R - Social* *Chapter 21 - Business and Tourism* *Technical Report Q - Business and Tourism*
2.7 Relevant Impacts	Relevant impacts are impacts that the action will have or is likely to have on a matter protected by a controlling provision as listed in the preamble of this document. Impacts during the construction, commissioning, operational and the decommissioning phases of the project should be addressed, and the following information provided: • a detailed assessment of the nature, extent, severity/intensity and duration of the likely short-term and long-term relevant impacts; • a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible • analysis of the significance of the relevant impacts; and • any technical data and other information used or needed to make a detailed assessment of the relevant impacts, including:	Whole of EIS Technical reports
	a) ornithological baseline study results presented with sufficient detail to allow a quantified comparison between the pre-development state of the environment and changes to the environment attributed to the project during implementation.	*Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats*
	b) modelling collision risk of avifauna at the offshore wind farm is applicable to specific listed migratory and threatened Offshore ornithology and bats that are likely to be encountered at the wind farm site;	

Section	Guideline requirement	Section addressed
	c) modelling of changes to existing hydrodynamic conditions (e.g. marine water currents, wave climate) and knock-on consequences for coastal processes (e.g. the extent and severity of any change in coastal geomorphology and its effect on tidal regimes) at Corner Inlet Ramsar site due to the physical presence of offshore infrastructure;	*Chapter 8 - Coastal Processes and Sediment Transport* *Technical Report A - Coastal Processes and Sediment Transport*
	d) further to the item above, predictions (including modelling) of any changes to the physico-chemical status of Corner Inlet Ramsar site (including turbidity and suspended sediment changes) during the construction, operation and decommissioning stages of the action;	*Chapter 8 - Coastal Processes and Sediment Transport* *Technical Report A - Coastal Processes and Sediment Transport* *Chapter 13 - Marine Protected Areas* *Technical Report F - Marine Protected Areas*
	e) characterising potential changes to the quality of waters, sediments and biota at the Corner Inlet Ramsar sites and within the Commonwealth marine area;	
	f) characterising the risk of barrier effects of the physical presence of offshore infrastructure on migratory shorebirds and marine bird migration and/or foraging behaviour;	*Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats*
	g) modelling (or other scientifically sound method for predicting impacts) of underwater noise, vibrations and electromagnetic disturbance during the construction, operation and decommissioning stages of the action;	*Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles*
	h) characterising the impact and extent of light pollution on marine fauna during construction and operation of the wind farm; and	*Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles*
	i) predictions of the extent, severity and persistence of impacts of the action on existing marine benthic habitats and communities and the biota they support (e.g. mammals, reptiles, marine plants, fish and invertebrates), and evaluating how these impacts affect marine ecological integrity and functioning, for the CMA as well as any marine protected areas that may be affected;	*Chapter 9 - Benthic Ecology* *Technical Report B - Benthic Ecology* *Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles*
	j) the extent, severity and persistence of potential impacts to underwater cultural heritage (European and indigenous);	*Chapter 14 - Non-Aboriginal Underwater Cultural Heritage* *Technical Report M - Non-Aboriginal Underwater Cultural Heritage*

Section	Guideline requirement	Section addressed
		Chapter 19 - Submerged Aboriginal Heritage *Technical Report Z - Submerged Aboriginal Cultural Heritage*
	k) the extent, intensity and duration of impacts of the action on existing users of the marine environment (e.g. commercial and recreational fishers, marine tourism, shipping and navigation, commercial and defence aircraft);	*Chapter 15 - Commercial and Recreational Fisheries* *Technical Report N - Commercial and Recreational Fisheries* *Chapter 16 - Infrastructure and Other Users* *Technical Report O - Infrastructure and Other Users* *Chapter 17 - Shipping and Navigation* *Technical Report P - Shipping and Navigation*
	l) characterising the visual impact of the wind farm from sensitive viewpoints on the Victorian coast.	*Chapter 22 - Seascape, Landscape and Visual* *Technical Report U - Seascape, Landscape and Visual*
2.7.1 General impacts	• discuss the effects of the overall action on the functioning of the marine environment, including effects to the marine environment surrounding the proposed development; • identify the source of potential impacts, e.g. ship-movements, artificial lighting, noise; • discuss potential impacts which may arise through the transportation, storage and use of dangerous goods (if any), fuels and chemicals, such as accidental spills; • consider the application of a waste management hierarchy (e.g. reduce, reuse, recycle, treat, dispose) and potential impacts caused by the need for waste disposal and management of emissions, refuse, effluent and hazardous waste (if any); • in discussing potential impacts, consider how the interaction of extreme environmental events and any related safety response may impact on the environment; and • consider potential impacts throughout the life of the proposed Star of the South	Whole of EIS

Section	Guideline requirement	Section addressed
	Offshore Wind Farm Project from construction and operations through to decommissioning.	
2.7.2. Underwater disturbance (noise, vibrations and electromagnetic fields)	The EIS must include an assessment of the potential direct and indirect impacts to listed marine, migratory, threatened species and communities, and including impacts to prey species, arising from underwater noise, vibrations and electromagnetic fields generated during the construction, operation and decommissioning of the offshore wind farm. The following will be required to be characterised: • details of the noise, vibrations and electromagnetic fields to be generated during all stages of the action (construction, operation and maintenance, and decommissioning) including: a) The intensity, duration, frequency and extent of underwater noise generated from construction activities including cumulative impacts from all noise generating activities; b) the magnitude, duration and frequency of any vibration; c) the strength of electromagnetic fields generated around subsea cables or other infrastructure; d) the expected geographic extent of disturbance, and the length of the disturbance period. • baseline monitoring during pre-construction, construction and operation, to gather sufficient data to provide a baseline for later studies or monitoring as required (including in relevant plans) to verify that environment outcomes have been met; • details of the results of baseline monitoring of noise and vibration in the proposed vicinity of the development; • the locations of sensitive sites must be identified on a map at a suitable scale; • the impacts of noise, vibrations and electromagnetic fields associated with the construction and ongoing operations of the action on all MNES, including: a) an assessment of short-term and long-term impacts, compared with measured background noise levels; and b) the consequences for the disruption of migration, resting, breeding or foraging behaviours of listed species as a result of underwater disturbance including consideration of requirements in relevant statutory documents	*Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles*

Section	Guideline requirement	Section addressed
	c) the potential for the activity to impede the recovery of a listed species	
2.7.3. Light pollution	The EIS must include an assessment of the potential direct and indirect impacts to protected matters (including impacts to prey species) arising from light pollution as a result of construction, operation and decommissioning of the offshore wind farm consistent with the National Light Pollution Guidelines for Wildlife 2020. The following will be required to be characterised: • details of the lighting to be used during all stages of the action (including night operations and maintenance and increased vehicle traffic) including: a) modelling of the levels and expected extent of light pollution (direct and sky glow) disturbance and the length of the disturbance period presented in relevant wavelengths for light sensitive species including shorebirds and seabirds • the significance of impacts to MNES (including but not limited to seabirds and turtles), including: a) the consequences of disrupting migration, breeding or foraging behaviours of listed species as a result of light pollution must be addressed.	*Chapter 10 - Fish and Invertebrates* *Technical Report C - Fish and Invertebrates* *Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats*
2.7.4. Avifauna and marine mammal collision	The EIS must include a collision risk assessment, to understand the significance of the impact on listed threatened, migratory and marine birds resulting from collision with turbines during the operation of the wind farm. The EIS must also include an assessment on the impact on listed threatened and migratory marine mammals as a result of collision with water vessels. The following will be required to be characterised: • the use of the wind farm area by listed threatened, migratory and marine birds, taking into account potential temporal variation in occurrence, including: a) characterising the numbers, migratory pathways and foraging behaviours of avifauna species likely to occur in the vicinity of the wind farm, which will require scientifically robust studies over different seasons, including at-sea observations; b) characterising the listed migratory shorebird and seabird use of the offshore area including key factors that affect collision risk such as morphology, sensorial perception, behaviour, abundance, flight paths, food availability and weather conditions relevant to the project site.	*Chapter 11 - Marine Mammals and Turtles* *Technical Report D - Marine Mammals and Turtles* *Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats*

Section	Guideline requirement	Section addressed
	• the determination of listed avifauna collision risk at the wind farm, underpinned by scientifically robust modelling, noting that the assumptions, calibration, validation and related uncertainty of any model predictions must be provided; and • the significance of the impact on listed avifauna from collision with the wind farm infrastructure, which must address: a) disruption of migration, breeding or foraging behaviours of listed species as a result of collision impact; and b) long-term decreases in population sizes of listed species as a result of mortality due to collision and the likely effects of decreases on population viability, and in the case of listed species, on population recovery. • the use of the wind farm area by listed threatened and migratory marine mammals, taking into account potential variation in occurrence, including: a) characterising the numbers, migratory pathways and foraging behaviours of the marine mammals likely to occur in the vicinity of the wind farm, which will require scientifically robust studies over different seasons, including at-sea observations; • the determination of listed threatened and migratory marine mammal collision risk from vessel movement, underpinned by scientifically robust modelling, noting that the assumptions, calibration, validation and related uncertainty of any model predictions must be provided; and • the significance of the impact on listed marine mammals from collision with vessels, which must address: a) disruption of migration, breeding or foraging behaviours of listed species as a result of the collision impact; and b) long-term decreases in population sizes of the listed species as a result of mortality due to collision	
2.7.5. Barrier effects of offshore infrastructure	The EIS must explore the barrier effects of offshore infrastructure on bird migratory pathways, and the impact of potential barriers to migration on listed threatened, migratory and marine bird species. The following will be required to be characterised: • the listed threatened, migratory and marine birds likely to migrate through the area, their migratory pathways and the numbers of their occurrence in the vicinity	*Chapter 12 - Offshore Ornithology and Bats* *Technical Report E - Offshore Ornithology and Bats*

Section	Guideline requirement	Section addressed
	of the wind farm area, taking into account temporal variability. This will require scientifically robust studies over different seasons, including at sea observations; and • the significance of the impact of migration barriers arising from the presence of offshore infrastructure on listed threatened, migratory and marine bird species, which must address: a) disruption of migration, breeding or foraging behaviours of listed species as a result of barrier effects from offshore infrastructure. b) An evaluation of the potential for population level impacts and subsequent consequences for population viability and in the case of threatened species, population recovery.	
2.7.6. Potential adverse effects for the community with regard to landscape and visual amenity	The EIS must explore the visual impact of the offshore infrastructure on the landscape. The following will be required: • describe the visible components of the project, and the viewshed of the project based on the dimensions of the project components; • assess the statutory context including identification of any significant landscapes in the vicinity that have statutory protection; • assess key landscape characteristics in the vicinity of the action; • assess the potential for nearby communities to be exposed to changes to the visual amenity, including views and blade glint from project infrastructure; • identify sensitive viewpoints with focus on important tourism sites; • assess the potential visual impact from viewpoints within the public and private domain. • prepare visual exposure and visual sensitivity mapping (viewshed maps that model the visual connectivity (visual exposure) of the development envelope from sensitive viewpoints of the Victorian coast), taking into account topographies and viewscreens. • understand any cumulative visual impacts of the project with other existing or approved developments and any proposals for which development applications have been submitted and define management measures. • undertake a seen area analysis to understand the areas from which the wind turbines are visible.	*Chapter 22 - Seascape, Landscape and Visual* *Technical Report U - Seascape, Landscape and Visual*

Section	Guideline requirement	Section addressed
	• 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, which will require further consultation.	
2.7.7. Routine vessel discharges and unplanned spills	The EIS must identify and evaluate the potential impact of routine vessel discharges and spills on MNES, including the ecological character of the Corner Inlet Ramsar site, the following will be required to be characterised: • the project-associated vectors for introduction of invasive species. • risk to MNES associated with introducing invasive species to the proposed action site; and • the effectiveness of suite of control measures which will be implemented to manage the risk of invasive marine species to MNES to an acceptable level.	Technical reports
2.7.8. Introduction of invasive species	The EIS must explore the risks and impacts of introduced invasive species, including marine species on MNES, including the ecological character of the Corner Inlet Ramsar site, listed marine migratory and threatened species and ecological communities. The following will be required to be characterised: • the potential direct and indirect impacts to MNES associated with introducing invasive species, including weeds, diseases and pathogens to the development envelope; and • the effectiveness of suite of control measures which will be implemented to ensure significant impacts to MNES as a result of introduced invasive species are either avoided or reduced.	Technical reports
2.7.9. Waste	The EIS must describe and assess the potential impacts of all wastes to be generated by the proposed development (during construction, operation and decommissioning) and provide details of each waste in terms of: • the potential level of impact on MNES; • operational handling and fate of all wastes including storage; • on-site treatment methods proposed for the wastes (including grey-waste); • methods of disposal (including the need to transport wastes off-site for disposal) proposed to be used for any trade wastes, liquid wastes and solid wastes; • proposed discharge/disposal criteria for liquid and solid wastes;	Technical reports

Section	Guideline requirement	Section addressed
	• processes of waste minimisation techniques proposed.	
2.7.10. Consequential and facilitated impacts	The EIS must provide a detailed assessment of any likely impacts that the development may facilitate on MNES at the local, regional, state or national scale. Assessment of consequential and facilitated impacts must include consideration of: • any other known development proposals which may be facilitated or impacted (either positively or negatively) by the development; • the potential to disturb contaminated land; • whether the development will result in an intensification of development or proposals in the region, or an increase in workforce or in local and regional community changes; and • any requirements for further proposals of major regional infrastructure to allow the development to go ahead.	*Chapter 20 - Social* *Technical Report R - Social* *Chapter 21 - Business and Tourism* *Technical Report Q - Business and Tourism*
2.7.11. Cumulative impacts	The assessment of cumulative impacts must include: • review and analysis of residual impacts of the proposed development and of other known proposals where there may be a spatial or temporal overlap; • consideration of the potential for cumulative impacts on the ecological character of the Corner Inlet Ramsar site, resilience of any important populations of listed marine species, migratory species, threatened species and ecological communities and on overall habitat quality and availability; • discussion of the potential for existing pressures and threats to be exacerbated by the proposed development.	*Chapter 24 - EIS Summary and Conclusions* Technical reports and EIS chapters
2.7.12. The environment of a Commonwealth marine area.	…the EIS will need to characterise impacts to the environment as described at section 528 of the EPBC Act. This includes: a) ecosystems and their constituent parts, including people and communities; b) natural and physical resources; c) the qualities and characteristics of locations, places and areas including Key Ecological Features and Commonwealth Marine Parks (identified in the South-east marine region profile (2015)), addressing: v. Distance from the proposed action vi. Status vii. Conservation value	Whole of EIS

Section	Guideline requirement	Section addressed
	viii. Management strategies d) heritage values of places, for example underwater heritage (including shipwrecks); and e) the social, economic and cultural aspects (for example sea country) of a thing mentioned in paragraph (a), (b), (c) or (d), including consideration of the characterised visual impact of the action.	
2.8. Proposed avoidance, management and mitigation measures	Management and mitigation measures must reduce the level of impact and risk to an acceptable level in consideration of the EPBC Act. This includes any practices that will reduce the impacts and risks in order to meet the performance criteria, any relevant legal requirements (related specifically to the impact/risk), internal company requirements, and any requirements that are identified through the stakeholder consultation process. In accordance with the environmental risk and impact assessment guidance above, where a risk is assessed to be low, this risk will be deemed acceptable, and no further management is required. Where the risk level is higher than low, additional management and mitigation measures are required to be considered and implemented. Specific and detailed descriptions of proposed measures must be provided and substantiated, based on best available practices and must include the following elements: • a description of each proposed avoidance, minimisation or mitigation measure in relation to the likely impacts; and • an assessment of the expected or predicted effectiveness and achievability of each proposed avoidance or mitigation measure including timeframes for achieving effectiveness. • An evaluation of whether residual impacts (following the application of mitigation measures) are consistent with the defined acceptable levels of impact relevant to the action The EIS must include a consolidated list of measures proposed to be undertaken to prevent, minimise, mitigate or compensate for the relevant impacts of the action, including: • a description of the environmental outcomes the measures are expected to achieve including details of any baseline data, environmental indicators and proposed monitoring to demonstrate progress towards achieving these outcomes;	Whole of EIS *Chapter 23 - Commonwealth Environmental Management Framework*

Section	Guideline requirement	Section addressed
	• a description of proposed mitigation measures to avoid relevant direct and indirect impacts of the action, including avoidance measures to avoid areas of high conservation value as far as possible • a description of the measures proposed to be undertaken by the proponent that have been proposed by State or local governments; • details of ongoing management of the construction, operation and decommissioning of the project, an analysis as to the effectiveness of these management measures, monitoring programs to determine the effectiveness of the measures proposed, and a framework for adaptive management including: a) management strategies that will be implemented if mitigation and management measures are insufficient and/or ineffective. b) adequate monitoring regimes and defined trigger levels that will prompt further management and/or remediation actions to prevent unacceptable impacts to protected matters occurring c) who will be responsible for such measures and the extent of their responsibility;	
2.8.1. Environmental Management Plans	The EIS must include a detailed outline of any Environmental Management Plans (EMPs) that sets out the framework for management, mitigation and monitoring of relevant impacts of the action, including any provisions for independent environmental auditing. The EMPs need to address the project phases (construction, operation and decommissioning) separately and any staging of each phase. Each EMP must state the environmental objectives, performance criteria, monitoring, reporting, corrective action, responsibility and timing for each environmental issue. The EMPs must also describe contingencies for events such as accidental vessel or machinery spills, heavy or prolonged rainfall, storms, or saltwater intrusion into ground water. The name of the agency responsible for endorsing or approving each mitigation measure or monitoring program must be provided. All EMPs must be in accordance with the Department's Environmental Management Plan Guidelines and take account of the Australian Ramsar Management Principles (EPBC Regulations): (a) clear, measurable, time specific environmental outcomes to be achieved by implementing the plan. The plan defines environmental outcomes as measurable extent and condition targets, or circumstances of, the protected matter (e.g. water quality environmental values, ecological attributes/function).	*Chapter 23 - Commonwealth Environmental Management Framework*

Section	Guideline requirement	Section addressed
	(b) clear, measurable, time specific performance and completion criteria: i. performance criteria are time-bound short and medium term targets, for management interventions and environmental condition, that are used to monitor, evaluate, review and improve the effectiveness of the plan; and ii. completion criteria are time-bound longer term values, specified for measurable parameters, that if attained and maintained ensure the plan's environmental outcome/s have been achieved (c) clear, measurable, time specific management measures that will be implemented to avoid and/or mitigate environmental impacts. Each management measure and corrective measure: i. has timeframes for implementation; ii. is described sufficient to avoid ambiguity and to inform plan implementation; iii. is related to quantitative and auditable performance and completion criteria; and iv. is derived from recognised principles, practice, or guidelines, and is justified - technically, scientifically and/or legally – as an effective and appropriate measure to achieve the plan's objective/s. (d) a clear, measurable, time specific schedule and triggers for auditing the implementation and effectiveness of the plan and outlines auditable systems for recording plan implementation and the environmental outcomes achieved. The Department's Environmental Management Plan Guidelines 2014 are available at: www.environment.gov.au/epbc/publications/environmental-management-plan-guidelines.	
2.8.2. Adaptive management: addressing uncertainty and managing risk	The EIS must identify key adaptive management measures addressing uncertainties and inherent risks. The EIS must describe how the adaptive management strategies will be implemented to ensure MNES are effectively protected over the life of the project. This includes how: (a) monitoring of MNES will occur, including monitoring of progress in achieving the desired environmental outcomes identified in the EIS, how the monitoring will be analysed throughout the life of the project and how the results of the monitoring will influence the project; and (b) an explanation of how monitoring and adaptive management will be effective in detecting and managing potential impacts on MNES throughout the life of the proposed action; and (c) new information relating to MNES or the EIS is to be assessed and accounted for in management of the area affected by the project.	Technical reports *Chapter 23 - Commonwealth Environmental Management Framework*

Section	Guideline requirement	Section addressed
2.9. Offsets	Environmental offsets are broadly understood to mean actions taken outside a development site that compensate for the significant residual impacts of that development. Offsets are not intended to replace avoidance and mitigation which are expected to be the primary strategies for managing the potential impacts of development proposals. The EIS must provide details of: • residual significant impacts on MNES that are likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account; and • where residual significant impacts are likely to occur, the reasons why the avoidance or mitigation of these significant impacts is not expected to be achieved. The EIS must include details of an offset strategy proposed to be implemented to compensate for the residual significant impacts of the project if these are determined likely, as well as an analysis about how the offset(s) meets the requirements in the Department's *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy October 2012* (EPBC Act Offset Policy). Offsets must directly contribute to the ongoing viability of the MNES impacted by the project, be based on scientifically robust information and deliver an overall conservation outcome that improves or maintains the viability of the MNES as compared to what is likely to have occurred under the status quo, that is, if neither the action not the offset had taken place. The outcomes of the offset strategy need to be specific, measurable and achievable, based on robust baseline data and demonstrate with a high degree of certainty that predicted outcomes will be achieved. Where offset area/s have been nominated, include an offset strategy as an appendix to the EIS which includes information to demonstrate how the environmental offset/s compensate for residual significant impacts of the action on relevant MNES, and/or their habitat, in accordance with the principles of the Offsets Policy. The offsets strategy must include: • quantity of impacts which are being offset and details of the environmental offset/s (in hectares) for residual significant impacts of the action on relevant MNES, and/or their habitat; • the availability and suitability of available offsets and evidence that the relevant MNES, and/or their habitat, is be present in the potential offset area/s; • information about how the proposed offset/s area provide a conservation benefit for the protected matter • specific environmental outcomes to be achieved through the offset, and reasoning for these in reference to relevant statutory recovery plans, conservation advices and threat abatement plans;	*Chapter 23 - Commonwealth Environmental Management Framework*

Section	Guideline requirement	Section addressed
	• details of the proposed mechanism to legally secure the environmental offset/s (under Victorian legislation or equivalent) to provide protection for the offset area/s against development incompatible with conservation; • how any proposed staging of the overall development will impact the delivery of offsets; • roles and responsibilities (clearly stating who is responsible for activities); • auditing and review mechanisms; and • an analysis of how the offset package meets the requirements of the EPBC Act Offsets Policy.	
2.10.1. Commonwealth, State and local Government approvals	The EIS must set out as far as practicable at this stage of the proposed action, the scope and likely schedule of applications and assessment requirements and whether the proposed action is in accordance with the various Commonwealth, State and local government statutory processes.	*Chapter 5 - Commonwealth Legislative Framework* *Chapter 23 - Commonwealth Environmental Management Framework*
2.10.2. Beagle Marine Park	The EIS must consider the Beagle Marine Park. It must be consistent with the management principles and management plan for the area and specify management outcomes for the protection, presentation and use of the area in accordance with the relevant management plans. The EIS should also detail any additional approvals that may be needed from the Director of National Parks under the relevant marine park network management plans.	*Chapter 5 - Commonwealth Legislative Framework* *Chapter 13 – Marine Protected Areas* *Technical Report F – Marine Protected Areas*
2.10.3. Other Requirements	The EIS must include information on any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. This must include: (a) details of any local or Commonwealth, State Government planning scheme, or plan or policy under any local or State Government planning system that deals with the proposed action, including: • what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy; and • how the scheme provides for the prevention, minimisation and management of any relevant impacts; (b) a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action; (c) a statement identifying any additional approval that is required; and (d) a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.	*Chapter 5 - Commonwealth Legislative Framework*
2.11. Promoting ecologically sustainable development	The EIS must describe how the following principles of ecologically sustainable development (ESD) have been applied in the project:	*Chapter 24 - EIS Summary and Conclusions* Technical Reports

Section	Guideline requirement	Section addressed
	(a) decision making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations. (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. (c) the principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making.	
2.12. Auditing and reporting	The EIS must set out: (a) a program of baseline reporting on the current status/condition of the site and surrounding region; (b) a program of monitoring, public reporting and independent or third-party auditing to be undertaken; (c) a process that will incorporate these findings into ongoing management; (d) who is responsible for overseeing and taking these actions; and (e) record keeping and review processes under the approval.	*Chapter 23 - Commonwealth Environmental Management Framework*
2.13. Review, modification or abandonment	The EIS must identify and analyse the likely circumstances and procedures that may result in the review, modification or abandonment of the project. This is to include a discussion of how any commitments under the EIS will continue to be met.	*Chapter 23 - Commonwealth Environmental Management Framework*
2.14. Consultation	The EIS must include details of any consultation about the action, including: (a) any consultation that has already taken place; (b) proposed consultation about relevant impacts of the action with persons, groups or organisations that may be directly affected by the proposed action; (c) proposed consultation about relevant impacts of the action with interested parties. (d) if there has been consultation about the proposed action, identification of any objections or claims about the proposed action and a documented response to, or result of, the consultation; and	*Chapter 7 - Community Engagement* *Attachment II - Consultation Report* Technical Reports

Section	Guideline requirement	Section addressed
	(e) identification of affected parties, including a statement mentioning any communities that may be affected and describing their views. The Minister must be provided with a report on the public submissions received on the draft EIS, together with proposed final drafts of the EIS, incorporating any revisions made in response to public comments. The EIS must include a process for ongoing consultation with Indigenous people whose rights, claims or interests may be affected by the development. This must include consultation on the development of mitigation measures and management of proposed additional protected areas. The process for consultation with Indigenous people must be take into consideration *Engage Early Guidance for proponents on best practice Indigenous engagement for environmental assessments under the* Environment Protection and Biodiversity Conservation Act 1999 *(EPBC Act),* Commonwealth of Australia 2016.	
2.15. Endorsement criteria	The EIS must set out how the project meets the objectives of the EPBC Act. In determining whether or not to approve the project, the Minister will have regard to the extent to which the project meets the objectives of the EPBC Act including how the project: (a) protects the environment, especially MNES; (b) promotes ecologically sustainable development; (c) promotes the conservation of biodiversity; (d) promotes a cooperative approach to the protection and management of biodiversity and MNES; and (e) assists in the co-operative implementation of Australia's international environmental responsibilities.	*Chapter 24 - EIS Summary and Conclusions*
2.16. Environmental record of person(s) proposing to take the action	The information provided must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against: (a) the person proposing to take the action; and (b) for an action for which a person has applied for a permit, the person making the application.	*Chapter 24 - EIS Summary and Conclusions*
2.17. Economic and social matters	The economic and social impacts of the action, both positive and negative, must be analysed. Matters of interest may include: • details of any public consultation activities undertaken, and their outcomes;	*Chapter 7 - Community Engagement* *Attachment II - Consultation Report* *Chapter 20 - Social*

Section	Guideline requirement	Section addressed
	• projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies; • information on the amount of domestic and/or overseas investment for capital infrastructure (versus alternatives). • employment opportunities expected to be generated by the project (including construction and operational phases).	*Technical Report R - Social* *Chapter 21 - Business and Tourism* *Technical Report Q - Business and Tourism*
2.18. Information sources provided in the EIS	For information given in a draft EIS, the draft must state: (a) the source of the information; (b) how recent the information is; (c) how the reliability of the information was tested; and (d) what uncertainties (if any) are in the information.	Whole of EIS Technical reports
2.19. Conclusion	An overall conclusion as to the environmental acceptability of the proposed action should be provided, including discussion on compliance with principles of ESD and the objects and requirements of the EPBC Act. Reasons justifying undertaking the proposed action in the manner proposed should also be outlined.	*Chapter 24 - EIS Summary and Conclusions*