# **EPBC Act referral**



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# 2021/9028 - SA Offshore Windfarm Title of proposal Section 1 Summary of your proposed action

# 1.1 Project industry type

# Energy Generation and Supply (renewable)

# 1.2 Provide a detailed description of the proposed action, including all proposed activities

SA Offshore Windfarm Pty Ltd (a wholly owned subsidiary of UK based Australis Energy Ltd) is proposing the construction, operation and decommissioning of the South Australian (SA) Offshore Windfarm project ('the Project'). The Project will be located approximately 10 km off the coast of Kingston SE (within the Kingston Local Government Area) at the southern end of Coorong and within the Limestone Coast region. If constructed, it will have a generation capacity of up to 600 MW, enough to power 400.000 South Australian homes.

The Project will comprise up to 75 offshore wind turbine generators (WTGs) with supporting offshore and onshore electrical assets to transfer energy generated by the windfarm to the existing electricity network. The size of the individual WTGs is yet to be determined, with an anticipated capacity ranging between 8 MW and 15 MW. The preferred turbines are the larger (15 MW) WTGs, as fewer will be required (40), which will result in less construction and reduced visual impact.

Key offshore infrastructure assets (e.g. WTGs/cables) would be located in South Australian coastal water only. However, as seen in Figure 1 of Appendix A, the Project Area extends into Commonwealth waters. This is to account for (a) navigational aids that may be installed in Commonwealth waters, (b) ancillary construction equipment and vessels that may traverse into Commonwealth waters on occasion and (c) to identify broader environmental values of the area to inform impact assessments. As the Project progresses, the siting of key infrastructure and ancillary equipment will be refined within the Project Area.

Site selection for the landfall site and onshore infrastructure is ongoing, with both the existing ElectraNet Black Range substation (275 kV) at Willalooka and South East substation (275 kV) north of Mount Gambier being investigated as potential connection points to the National Electricity Market (NEM). Subject to planning and environmental approval, construction will likely commence in early 2025 to be generating electricity by the Summer 2026 peak period.

Operation and maintenance activities will include routine inspections, and repair and replacement of equipment as required. It is expected that the Project will employ up to 100 full-time personnel.

The design life of offshore WTGs is 30 years, although the proposed lease with the SA Government could extend to 60 years. Therefore, when the turbines are reaching the end of their natural working life, a decision will be made whether to refurbish the scheme or decommission the site. It is expected that offshore structures (such as the WTGs) will be removed as part of the decommissioning process, with onshore infrastructure most likely to remain. Requirements for decommissioning will be established through the planning approvals for the Project.

Key features of the Project Area are discussed in detail in the Project Specification section within Appendix A. The Project will consist of offshore components (WTGs, substation, subsea cables), coastal and onshore assets (landfall site, overhead transmission, transformer substation), construction and maintenance vessels and possible modifications to existing ports.

Key construction activities:

Offshore: Pre-construction

Preparation of the seabed (including dredging as necessary)

Installation of ancillary components, including navigational aids and establishment of temporary 500m exclusion zones around WTGs locations.

Offshore: Construction

- Transport of WTGs and offshore substation monopiles and foundation components to site to marshalling site or sites
- Sequential driving of monopiles into seabed followed by fixing of transition pieces to the monopiles
- Installation of scour protection, as required
- Erection of WTG towers and nacelles, either pre-erected or erected individually at the site
- Installation of the turbine blades
- Construction of the offshore substation platform (OSP) and installation of substation components and equipment

Pre-trenching and simultaneous lay and burial of the array cables using a cable plough or trenching remotely operated vehicle (ROV).

Installation of the offshore export cable using a cable plough or trenching ROV.

**Onshore: Preconstruction** 

- Upgrades to, or construction of, site access site roads (clearing and levelling)
- Removal of areas of non-native vegetation
- Clearing and levelling of the onshore substation building area
- Establishment of onshore construction sites (offices, laydown areas, etc)
- Delivery of equipment.

# **Onshore: Construction**

Construction of foundations for the substation



- Excavation and preparation of the landfall site
- Installation of underground cables from offshore
- Installation of overhead transmission line
- Installation of substation switch-room and electrical equipment
- Electrical connection of cables
- Remove construction facilities and site tidy up.

Key Operational and Maintenance activities:

'Operation' generally refers to activities contributing to the high-level management of the windfarm, which will include remote monitoring, environmental monitoring, electricity sales, administration and other back office tasks. There may be a 50 m exclusion zone around offshore assets during operation to maintain the safety of key maintenance personnel and equipment as well as the public, as in other jurisdictions.

'Maintenance' refers to the up-keep and repair of the physical assets and systems, which can be divided into preventative maintenance and corrective maintenance. Preventative maintenance will include the proactive repair and replacement of known wearing components based on routine inspections or information from condition monitoring systems, and corrective maintenance will include the reactive repair or replacement of failed or damaged components. Typical operation and maintenance (O&M) activities include:

- Onshore and offshore logistics
- Turbine and blade maintenance, inspection, and service
- Foundation inspection and repair
- Cable inspection and repair
- Scour monitoring and management
- Substation maintenance and service
- Environmental monitoring and inspections.

Key decommissioning activities:

'Decommissioning' refers to the retirement of the physical facilities of the Project, including dismantlement, rehabilitation, landscaping and monitoring.

It is expected that offshore structures (such as the WTGs) will be removed to just below the seabed as part of the decommissioning process, with cables and onshore infrastructure most likely to remain.

Requirements for decommissioning will be established through the planning approvals for the Project and a decommissioning management plan will be developed prior to the commencement of decommissioning, in consultation with the relevant authorities. The decommissioning plan will include:

- Rehabilitation strategies and objectives
- Timeframes for rehabilitation
- Infrastructure (if any) agreed to remain in place
- Monitoring and mitigation measures.

#### **1.3 What is the extent and location of your proposed action?** See Appendix B

# 1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The Project will be located within the Kingston local government area (LGA), at the southern end of the Coorong Lakes System and within the Limestone Coast region of South Australia. The Project would be directly adjacent to a Commonwealth marine area and part of the proposed Project infrastructure would be located within the Upper South East State Marine Park, with significant infrastructure is located outside of Commonwealth marine area. The Project is located approximately 30 km from the marine traffic route running along the South Australian coastline. The project area will be further refined during future stages.

# 1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

Total Project Area (used for defining environmental risk) is approx. 164 484 ha(Onshore ~117,262 ha,Offshore ~47,222 ha). As Project progresses, the area will be refined and rationalised to show a more precise development envelope. •Marine indicative footprint for 8 MW array (75 turbines):920 ha; and 15 MW array (40 turbines):530 ha

•Terrestrial indicative footprint Option 1 (construction):610 ha; and Option 2 (construction):650 ha

The marine indicative footprint was calculated on estimated dimensions of offshore infrastructure, including number of turbines, substation, inter-array cabling and export cabling, with the assumption inter-array cables would follow the most direct route to the offshore substation. The terrestrial disturbance footprint was calculated on estimated dimensions of onshore infrastructure, including shore crossing, transition pit, onshore substation and transmission lines, with the assumption onshore area of disturbance is based on a 100m wide corridor.



1.7 Proposed action location         Other - The Project is located approximately 10 km off the coast of Kingston SE, South Australia.         1.8 Primary jurisdiction       South Australia         1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?         Yes       No         1.10 Is the proposed action subject to local government planning approval?       Yes         Yes       No         1.11 Provide an estimated start and estimated end date for the Start Date       01/01/2025         proposed action       1.10 Is there a local government area and council contact for the project area and the Project is located adjacent to a Commonwealth fmarine area, a referral to the Department of Agriculture, Water and the Environment (DAWE) will be submitted to understand the need for assessment of the Project under the EPBC Act, and if so, the level of assessment requirements:         The Planning, Development and Infrastructure Act 2016 (PDI Act) provides for the planning and regulation of development in South Australia. The PDI Act and associated regulations sets out the procedures by which different forms of development pathway for the Project will fiese understood impacts in South Australia community impacts (especially necreational and northy species         Location within the State Marine Park       Visual and community impacts (especially necreational and tourism use of the area).         In preliminary angagement with SA Planning, this has been discussed as the prefered approval pathway for the Project. The first step in the assessment process provides an opportunity to			
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#### under a bilateral arrangement.

#### 1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

SA Offshore Windfarm Pty Ltd values public participation process and will proactively ensure meaningful communication/engagement between the Project, agencies making decisions and public. A Stakeholder and Community Engagement Plan was developed to inform various stakeholders about the Project. The plan is based on the principle that involve people from the beginning of a project is the best way to achieve great outcomes and ensure the Project achieve and maintain a social licence to operate. The plan will be updated for each phase of the Project and will include consultation approaches for key stakeholders such as elected officials, community groups, local businesses and community members.

The approach to engagement will be guided by the International Association of Public Participation's (IAP2) Core Values and Public Participation Spectrum. IAP2 is the peak body for community and stakeholder engagement sector and believes that engagement, when done well, improves social, environmental and economic outcomes.

Consultation tools which have been utilised to-date, and will be used future consultation include:

•Letters – providing stakeholders with information about the Project allowing us to build relationships and inform them of the Project status, benefits and timelines

•Meetings – virtual presentations and discussions directly with key stakeholders to provide and introduction to the project, clarify information and gather feedback, ideas and options to feed into project planning and the EIS

•Frequently Asked Question: a fact sheet contain common questions has been prepared to add to the website and in a format that could be easily downloaded by stakeholders

•Project webpage – a dedicated project website established providing key information about the Project, including a link to the FAQ fact sheet and contact information.

Consultation to date: Initial stakeholder engagement focused on engaging with key stakeholders/government agencies. The following list includes the consultation undertaken to date:

•12 Oct 2020: Meeting with Department of Mining and Energy (DEM) to introduce the Project/team

•16 Oct 2020: Meeting with Department of Agriculture, Water and the Environment (DAWE) to introduce Project and request meeting to discuss EPBC Act

•3 Feb 2021: Phone call with Department of Infrastructure and Transport (DIT) for Major Project declaration •9 Mar 2021: EPBC pre-referral meeting with DAWE

Future consultation: SA Offshore Windfarm Pty Ltd is currently planning for broader consultation to begin following the submission of the State IAD and EPBC Act referrals. The Stakeholder and Community Engagement Plan will be updated and continue to be a live document that will be reviewed and updated in response to feedback received through the various Project stages.

Aboriginal engagement: As part of the current phase of consultation, engagement has been carried out with the Department of Premier and Cabinet, who are the lead agency on Aboriginal affairs, to gain a deeper understanding of the connection with where the Project is planned and explore future opportunities for collaboration with the appropriate Indigenous communities. Ongoing consultation will be held with the Department of Premier and Cabinet as well as the relevant Aboriginal communities and organisations throughout the planning process and future stages of the Project.

# Community engagement:

SA Offshore Windfarm Pty Ltd will undertake open and transparent consultation with stakeholders and the community to seek their feedback on the Project. It will be made clear which decisions can be influenced by community feedback and how the feedback will be incorporated into the planning and design of the Project as well as the EIS.

Future community engagement activities will include:

•An up-to-date Project website where people can find the latest information about the proposed Project as well as relevant contact details (this is already live)

•Establishing a Community Advisory Group with people from across Coorong and southern coast area to share information, answer question and seek local advice as we progress our plans for the Project

•Project fact sheets and newsletters which will be distributed amongst stakeholders at key stages

•Establishing a Project contact number and email address with agreed service levels for responding to queries received via these channels

•Setting up a Project information display at a Project office in the region

•Community information sessions (including some virtual sessions) which will be held during preparation of the EIS to provide a chance for community members to learn more about the Project

•Scheduling proactive meetings with stakeholders such as business and industry groups, land and traditional Owners, working collaboratively on plans to minimise impact where possible

. Maintain regular communication with key stakeholders and Media release.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

A Preliminary Environmental Risk Review (Appendix D) was undertaken to provide a high-level risk assessment of relevant land, planning and environmental aspects, including ecology, existing ports and harbours, aircrafts, radars, waste, traffic and transport and others. BMT was engaged to conduct a Preliminary Marine Environmental Assessment (Appendix B) and



provide an early evaluation on the Commonwealth and State marine aspects relevant to the Project Area. Similarly, an MNES Terrestrial Supporting Information document (Appendix C) has been prepared to identify potential MNES within the onshore Project Area.

An EIS Scoping Report (Appendix A) has been prepared and submitted to the SA Government to provide preliminary information to support scoping of future EIS for the Project.

The current environmental assessment has been completed using a high-level assessment of desktop sources and a Study Area has been established (5 km buffer around the Project Area).

1.15	Is this	action part	t of a	staged development (or a component of a larger project)?
	Yes	$\mathbf{\nabla}$	No	
1.16	Is the	proposed a	action	related to other actions or proposals in the region?
	Yes	$\mathbf{\nabla}$	No	



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Section 2
Matters of national environmental significance
2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?
🗋 Yes 🗹 No
2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?
🗋 Yes 🗹 No
2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?
Yes No
Wetland
The Coorong, and Lakes Alexandrina and Albert Wetlands System (Ramsar wetland) are adjacent to the marine boundary 20 km west of the land-based section of the Project Area. While the Project boundary does not directly intersect this region, there are several wetland features that continue along the coast that intersect with regions that are likely to be inhabited by the same species that would be present within the Ramsar site. The inland environment consists of ephemeral wetland networks which provide habitat to several species requiring freshwater habitats for foraging and breeding. Some of these high environmental values include parts of the southern extend of the Watervalley Wetlands.
Impact
The wetland is located over 20km from the Project Area, and no areas will be directly destroyed or modified. There is a chance that the hydrological regime of the wetland would be changed as a result of the project due to runoff generated by the Project works. These hydrological regime changes may result in impacts to habitat or lifecycle of native species. A large number of fish and bird species are supported by the Ramsar site during critical stages of their lifecycle and may be sensitive to any minor hydrological changes. Ramsar is over 20km away from the project area, given this distance, impacts to hydrology and the life cycle of migratory birds using the Ramsar wetlands are unlikely to cause a significant impact. The Ramsar wetland supports critically endangered and endangered bird species, and while there is a risk of bird strike from the WTG rotor blades, the turbines would be around 30km from the wetland and this is not considered to be a significant impact. Given the distance of the Ramsar wetland from the Project Area, it is unlikely that construction and operation of the Project would result in substantial and measurable changes to the water quality of the wetland. This would be confirmed through additional investigations of ground and surface water hydrology. With appropriate mitigation measures, water quality is likely to be managed. Further field assessment, analysis and modelling will be required in future project phases to better understand the potential impacts and inform design.
2.3.2 Do you consider this impact to be significant?
U res V NO
ecological community, or their habitat?
r Yes □ No
Species or threatened ecological community
<ul> <li>The following three threatened ecological communities (TECs) are likely to occur within the Project Area:</li> <li>Subtropical and Temperate Coastal saltmarsh (Vulnerable)</li> <li>Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (Critically Endangered)</li> <li>Giant Kelp Marine Forests of South East Australia (Critically Endangered).</li> <li>Table 4.2 within Appendix B contains the list of threatened marine species and Table 2 within Appendix C contains the list of threatened terrestrial species that have been identified as potentially occurring in the 5 km Study Area.</li> </ul>



### Impact

# TECs

Clearing of TECs and increased risk of introduced species may result in reduced extent, or fragmentation, of the ecological community. In absence of detailed data and field assessments, a precautionary approach has been applied and impacts from the Project are deemed potentially significant. Field studies should be undertaken at the next stage of the Project to groundtruth whether TECs are present and this will inform future design phases so that placement of onshore infrastructure can avoid sensitive areas, where possible. Until further studies can be carried out, a conservative approach has been taken. Section 6.2 of Appendix C discusses potential impacts to TECs in detail.

# Species or threatened ecological community

Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

# Impact

MARINE ECOLOGY-BIRDS:

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur within the marine environment Study Area, and the potential impact offshore infrastructure may have on these species.

Project activities that may cause a potentially significant impact on listed marine avifauna include rotor strikes, resulting in injury or mortality.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

MARINE ECOLOGY-BIRDS (C	Cont.):
Thalassarche cauta (Shy	albatross)
Thalassarche carteri (India	an yellow-nosed) albatross)
Thalassarche chrysostoma	(Grey headed albatross)
Thalassarche impavida (Cam	npbell Albatross)
Thalassarche melanophris	(Black-browed albatross)
Thalassarche salvini (Salvi	in's albatross)
Thalassarche steadi (Whit	e-capped albatross)
Thinornis cucullatus cucullatus	Eastern hooded plover
Table 4-2 within Appendix B lis	sts the threatened marine species identified as potentially occurring in study area.

# Impact

MARINE ECOLOGY-BIRDS (Cont.):

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur within the marine environment Study Area, and the potential impact offshore infrastructure may



have on these species.

Project activities that may cause a potentially significant impact on listed marine avifauna include rotor strikes, resulting in injury or mortality.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

 MARINE ECOLOGY - MAMMALS

 Balaenoptera borealis
 Sei whale

 Balaenoptera musculus
 Blue whale

 Balaenoptera physalus
 Fin whale

 Eubalaena australis
 Southern right whale

 Megaptera novaeangliae
 Humpback whale

 Neophoca cinerea
 Australian sea lion

 Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

# Impact

# MARINE ECOLOGY - MAMMALS

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur in the Study Area marine environment, and the potential impact the Project may have on these species.

Project activities that may cause a potentially significant impact on listed mammal species include habitat loss, introduced pest species, underwater noise from piling activity, vessel movement and low frequency noise from WTGs. Additional lower risk impacts are included in Appendix B.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

 MARINE ECOLOGY - OTHERS

 Caretta caretta (Loggerhead turtle)

 Chelonia mydas
 (Green turtle)

 Dermochelys coriacea
 (Leatherback turtle)

 Carcharodon carcharias
 (White shark)

 Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

# Impact

# MARINE ECOLOGY - OTHERS

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur in the Study Area marine environment, and the potential impact the Project may have on these species.

Project activities that may cause a potentially significant impact on listed species (others) include habitat loss, introduced pest species, underwater noise from vessel movement, piling and low frequency noise from WTGs. Additional lower risk impacts are included in Appendix B.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

 TERRESTRIAL ECOLOGY - BIRDS

 Calyptorhynchus banksii graptogyne
 (South-eastern red-tailed black-cockatoo)

 Falco hypoleucos
 (Grey falcon)

 Grantiella picta (Painted Honeyeater)
 Hirundapus caudacutus (White-throated Needletail)

 Leipoa ocellata (Malleefowl)
 Table 2 within Appendix C lists the threatened terrestrial species identified as potentially occurring in study area.



# Impact

# **TERRESTRIAL ECOLOGY - BIRDS**

The Project may result in a potentially significant impact on EPBC Act listed threatened species. The main threats to these species are discussed in Appendix C, including clearing of habitat, indirect impacts from a deterioration in surface water quality and rotor blade strikes for bird species.

The listed bird species in the list above only represent the species considered to have 'potentially significant' impact.

Table 5 and 6 of Appendix C provides description of potential impacts for each species and identifies where further studies are necessary to understand species occupancy and scale of impact. At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach is warranted. Therefore, a potentially significant impact rating has been given for the majority of species where impacts are less understood and likelihood of occurrence is not yet confirmed.

# Species or threatened ecological community

 TERRESTRIAL ECOLOGY - MAMMALS

 Isoodon obesulus obesulus
 (Southern brown bandicoot)

 Miniopterus orianae bassanii
 (Southern bent-wing bat)

 Antechinus minimus maritimus
 Swamp Antechinus (mainland)

 Pteropus poliocephalus
 (Grey-headed Flying-fox)

 Table 2 within Appendix C lists the threatened terrestrial species identified as potentially occurring in study area.

# Impact

# **TERRESTRIAL ECOLOGY - MAMMALS**

The Project may result in a potentially significant impact on EPBC Act listed threatened species. The main threats to these species are discussed in Appendix C, including clearing of habitat, indirect impacts from a deterioration in surface water quality and spread of introduced species. At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach is warranted. Therefore, a potentially significant impact rating has been given for the majority of species where impacts are less understood and likelihood of occurrence is not yet confirmed.

The listed mammal species in the list above only represent the species considered to have 'potentially significant' impact. Table 5 and 6 of Appendix C provides description of potential impacts for each species and identifies where further studies are necessary to understand species occupancy and scale of impact.

# Species or threatened ecological community

TERRESTRIAL ECOLOG	GY - PLANTS	
Caladenia colorata	(Coloured spider orchid)	
Cassinia tegulata	(Avenue cassinia)	
Dipodium campanulatum	(Bell flower hyacinth orchid)	
Thelymitra epipactoides	(Metallic sun-orchid)	
Caladenia Formosa	(Elegant spider orchid)	
Caladenia versicolor	(Candy spider orchid)	
Pomaderris halmaturina s	subsp. halmaturina (I	Kangaroo Island pomaderris)
Prasophyllum spicatum	(Dense leek orchid)	
Pterostylis Arenicola	(Sandhill greenhood orchid)	
Pterostylis chlorogramma	a (Green-striped gree	enhood)
Pterostylis cucullate	(Leafy greenhood)	
Senecio psilocarpus	(Swamp fireweed)	
Xerochrysum palustre	(Swamp everlasting)	
Table 2 within Appendix (	C lists the threatened terrestri	ial species identified as potentially occurring in study area.

#### Impact

# TERRESTRIAL ECOLOGY - PLANTS

The Project may result in a potentially significant impact on EPBC Act listed threatened species. The main threats to these plant species are discussed in Appendix C, including clearing of habitat and potential spread of introduced species. At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach is warranted. Therefore, a potentially significant impact rating has been given for the majority of species where impacts are less understood and likelihood of occurrence is not yet confirmed.

The listed plant species in the list above only represent the species considered to have 'potentially significant' impact. Table 5 and 6 of Appendix C provides description of potential impacts for each species and identifies where further studies are necessary to understand species occupancy and scale of impact.



# Species or threatened ecological community

- The following three threatened ecological communities (TECs) are likely to occur within the Project Area:
- Subtropical and Temperate Coastal saltmarsh (Vulnerable)
- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (Critically Endangered)
- Giant Kelp Marine Forests of South East Australia (Critically Endangered).

Table 4.2 within Appendix B contains the list of threatened marine species and Table 2 within Appendix C contains the list of threatened terrestrial species that have been identified as potentially occurring in the 5 km Study Area.

# Impact

TECs

Clearing of TECs and increased risk of introduced species may result in reduced extent, or fragmentation, of the ecological community. In absence of detailed data and field assessments, a precautionary approach has been applied and impacts from the Project are deemed potentially significant. Field studies should be undertaken at the next stage of the Project to groundtruth whether TECs are present and this will inform future design phases so that placement of onshore infrastructure can avoid sensitive areas, where possible. Until further studies can be carried out, a conservative approach has been taken. Section 6.2 of Appendix C discusses potential impacts to TECs in detail.

# Species or threatened ecological community

MARINE ECOLOGY-BIRDS
Botaurus poiciloptilus (Australasian bittern)
Calidris canutus(Red knot)
Calidris ferruginea (Curlew sandpiper)
Diomedea antipodensis (Antipodean albatross)
Diomedea epomophora (Southern royal albatross)
Diomedea exulans (Wandering albatross)
Diomedea sanfordi (Northern royal albatross)
Halobaena caerulea (Blue petrel)
Limosa lapponica baueri (Bar-tailed godwit) (baueri)
Limosa lapponica menzbieri Northern Siberian bar-tailed godwit
Macronectes giganteus (Southern giant petrel)
Macronectes halli (Northern giant petrel)
Neophema chrysogaster (Orange-bellied parrot)
Numenius madagascariensis (Eastern curlew)
Pachyptila turtur subantarctica (Fairy prion)
Phoebetria fusca (Sooty albatross)
Pterodroma mollis (Soft-plumaged petrel)
Rostratula australis (Australian painted snipe)
Sternula nereis nereis (Australian fairy tern)
Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

#### Impact

MARINE ECOLOGY-BIRDS:

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur within the marine environment Study Area, and the potential impact offshore infrastructure may have on these species.

Project activities that may cause a potentially significant impact on listed marine avifauna include rotor strikes, resulting in injury or mortality.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

MARINE ECOLOGY-BIRDS (Cont.):Thalassarche cauta(Shy albatross)Thalassarche carteri(Indian yellow-nosed) albatross)Thalassarche chrysostoma(Grey headed albatross)Thalassarche impavida(Campbell Albatross)Thalassarche melanophris(Black-browed albatross)Thalassarche salvini(Salvin's albatross)



Thalassarche steadi (White-capped albatross)

Thinornis cucullatus cucullatus Eastern hooded plover

Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

#### Impact

MARINE ECOLOGY-BIRDS (Cont.):

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur within the marine environment Study Area, and the potential impact offshore infrastructure may have on these species.

Project activities that may cause a potentially significant impact on listed marine avifauna include rotor strikes, resulting in injury or mortality.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

 MARINE ECOLOGY - MAMMALS

 Balaenoptera borealis
 Sei whale

 Balaenoptera musculus
 Blue whale

 Balaenoptera physalus
 Fin whale

 Eubalaena australis
 Southern right whale

 Megaptera novaeangliae
 Humpback whale

 Neophoca cinerea
 Australian sea lion

 Table 4.2 within Appendix B lists the threatened marine species identified as potentially occurring in study area

Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

#### Impact

# MARINE ECOLOGY - MAMMALS

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur in the Study Area marine environment, and the potential impact the Project may have on these species.

Project activities that may cause a potentially significant impact on listed mammal species include habitat loss, introduced pest species, underwater noise from piling activity, vessel movement and low frequency noise from WTGs. Additional lower risk impacts are included in Appendix B.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.

# Species or threatened ecological community

 MARINE ECOLOGY - OTHERS

 Caretta caretta (Loggerhead turtle)

 Chelonia mydas
 (Green turtle)

 Dermochelys coriacea
 (Leatherback turtle)

 Carcharodon carcharias
 (White shark)

 Table 4-2 within Appendix B lists the threatened marine species identified as potentially occurring in study area.

# Impact

# MARINE ECOLOGY - OTHERS

Table 6.1 and Table 6.2 of Appendix B provides an assessment of critically endangered, endangered and vulnerable species that are likely to occur in the Study Area marine environment, and the potential impact the Project may have on these species.

Project activities that may cause a potentially significant impact on listed species (others) include habitat loss, introduced pest species, underwater noise from vessel movement, piling and low frequency noise from WTGs. Additional lower risk impacts are included in Appendix B.

The assessment is preliminary only, and without detailed data a precautionary approach has been applied. Further sitespecific studies are required to confirm the use and values of the Study Area by threatened EPBC listed species. Section 6 of Appendix B discusses potential impacts to marine species in detail.



# Species or threatened ecological community

#### TERRESTRIAL ECOLOGY - BIRDS Calyptorhynchus banksii graptogyne

(South-eastern red-tailed black-cockatoo)

Falco hypoleucos (Grey falcon)

Grantiella picta (Painted Honeyeater)

Hirundapus caudacutus (White-throated Needletail)

Leipoa ocellata (Malleefowl)

Table 2 within Appendix C lists the threatened terrestrial species identified as potentially occurring in study area.

#### Impact

# **TERRESTRIAL ECOLOGY - BIRDS**

The Project may result in a potentially significant impact on EPBC Act listed threatened species. The main threats to these species are discussed in Appendix C, including clearing of habitat, indirect impacts from a deterioration in surface water quality and rotor blade strikes for bird species.

The listed bird species in the list above only represent the species considered to have 'potentially significant' impact.

Table 5 and 6 of Appendix C provides description of potential impacts for each species and identifies where further studies are necessary to understand species occupancy and scale of impact. At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach is warranted. Therefore, a potentially significant impact rating has been given for the majority of species where impacts are less understood and likelihood of occurrence is not yet confirmed.

# Species or threatened ecological community

**TERRESTRIAL ECOLOGY - MAMMALS** 

Isoodon obesulus obesulus(Southern brown bandicoot)Miniopterus orianae bassanii(Southern bent-wing bat)Antechinus minimus maritimusSwamp Antechinus (mainland)Pteropus poliocephalus(Grey-headed Flying-fox)

Table 2 within Appendix C lists the threatened terrestrial species identified as potentially occurring in study area.

# Impact

# **TERRESTRIAL ECOLOGY - MAMMALS**

The Project may result in a potentially significant impact on EPBC Act listed threatened species. The main threats to these species are discussed in Appendix C, including clearing of habitat, indirect impacts from a deterioration in surface water quality and spread of introduced species. At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach is warranted. Therefore, a potentially significant impact rating has been given for the majority of species where impacts are less understood and likelihood of occurrence is not yet confirmed.

The listed mammal species in the list above only represent the species considered to have 'potentially significant' impact. Table 5 and 6 of Appendix C provides description of potential impacts for each species and identifies where further studies are necessary to understand species occupancy and scale of impact.

# Species or threatened ecological community

TERRESTRIAL ECOLO	GY - PLANTS	
Caladenia colorata	(Coloured spider orchid)	
Cassinia tegulata	(Avenue cassinia)	
Dipodium campanulatum	(Bell flower hyacinth orchid)	
Thelymitra epipactoides	(Metallic sun-orchid)	
Caladenia Formosa	(Elegant spider orchid)	
Caladenia versicolor	(Candy spider orchid)	
Pomaderris halmaturina	subsp. halmaturina	(Kangaroo Island pomaderris)
Prasophyllum spicatum	(Dense leek orchid)	
Pterostylis Arenicola	(Sandhill greenhood orchid)	
Pterostylis chlorogramma	a (Green-striped gre	enhood)
Pterostylis cucullate	(Leafy greenhood)	
Senecio psilocarpus	(Swamp fireweed)	
Xerochrysum palustre	(Swamp everlasting)	
Table 2 within Appendix	C lists the threatened terrest	trial species identified as potentially occurring in study area.



# **TERRESTRIAL ECOLOGY - PLANTS**

The Project may result in a potentially significant impact on EPBC Act listed threatened species. The main threats to these plant species are discussed in Appendix C, including clearing of habitat and potential spread of introduced species. At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach is warranted. Therefore, a potentially significant impact rating has been given for the majority of species where impacts are less understood and likelihood of occurrence is not yet confirmed.

The listed plant species in the list above only represent the species considered to have 'potentially significant' impact. Table 5 and 6 of Appendix C provides description of potential impacts for each species and identifies where further studies are necessary to understand species occupancy and scale of impact.

# 2.4.2 Do you consider this impact to be significant?

🗹 Yes 🗌 No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

🗹 Yes 🗌 No

# **Migratory species**

# BIRDS:

Actitis hypoleucos Common sandpiper Apus pacificus Fork-tailed swift Ardenna carneipes Flesh-footed shearwater Ardenna grisea Sooty shearwater Calidris acuminata Sharp-tailed sandpiper Calidris canutus Red knot Calidris ferruginea Curlew sandpiper Calidris melanotos Pectoral sandpiper Diomedea antipodensis Antipodean albatross Diomedea epomophora Southern royal albatross Diomedea exulans Wandering albatross Diomedea sanfordi Northern royal albatross Hydroprogne caspia Caspian tern Limosa lapponica baueri Bar-tailed godwit Macronectes giganteus Southern giant petrel Macronectes halli Northern giant petrel Numenius madagascariensis Eastern curlew Pandion haliaetus Osprey

Table 6-3 of App. B lists migratory marine species (including seabirds & shorebirds) that may occur in the study area and the potential impact on these species. Table 7 of App. C lists migratory wetlands and terrestrial species that may occur in study area and potential impacts.

# Impact

MIGRATORY SPECIES - BIRDS:

Given a significant proportion of the Study Area is a marine environment with adjacent Ramsar wetland and coastal areas, the area is likely to support a diverse variety of listed migratory species. The listed migratory bird species in the list above only represent the species considered to have 'potentially significant' impact. Refer to the full list of migratory bird species within Appendix B and Appendix C.

Potential impacts may include bird strike and potential habitat loss.

These potential impacts are further discussed in Section 5 of both Appendix B and Appendix C respectively. In the absence of detailed data and field survey assessments, a precautionary and conservative approach has been applied and impacts from the Project are deemed potentially significant. Further field studies will identify the potential presence and habitat of these migratory species and this will inform future design phases, including timing of construction and O&M work and WTG height.

# **Migratory species**

MIGRATORY SPECIES - BIRDS (CONT):		
Phoebetria fusca	Sooty albatross	
Thalassarche cauta	Shy albatross	
Thalassarche impavida Campbell albatross		
Thalassarche melanophris Black-browed albatross		
Thalassarche salvini	Salvin's albatross	
Thalassarche steadi	White-capped albatross	



	Hirundapus caudacutus	White-throated needletail
	Gallinago megala	Pin-tailed snipe
	Numenius minutus	Little curlew
	Tringa nebularia	Common greenshank
	Table 6-3 of App. B lists	migratory marine species(including seabirds & shorebirds) that may occur in the study area and the
р	otential impact on these s	pecies. Table 7 of App. C lists migratory wetlands and terrestrial species that may occur in study
а	rea and potential impacts.	

#### Impact

# MIGRATORY SPECIES - BIRDS (CONT):

There is a potential for the listed migratory species to occur within the Study Area. Potential impacts may include bird strike and potential habitat loss. In the absence of detailed data and field survey assessments, a precautionary and conservative approach has been applied and impacts from the Project are deemed potentially significant. Further field studies will identify the potential presence and habitat of these migratory species and this will inform future design phases.

These potential impacts are further discussed in Section 5 of both Appendix B and Appendix C respectively. In the absence of detailed data and field survey assessments, a precautionary and conservative approach has been applied and impacts from the Project are deemed potentially significant. Further field studies will identify the potential presence and habitat of these migratory species and this will inform future design phases, including timing of construction and O&M work and WTG height.

#### **Migratory species**

<b>MIGRATORY SPECIES</b>	- WHALES:
Balaenoptera borealis	Sei whale
Balaenoptera musculus	Blue whale
Balaenoptera physalus	Fin whale
Eubalaena australis	Southern right whale
Megaptera novaeangliae	Humpback whale
Orcinus orca Killer wh	ale
Lagenorhynchus obscur	us Dusky dolphir

Table 6-3 of App. B lists migratory marine species (whales) that may occur in the study area and the potential impact on these species.

# Impact

# MIGRATORY SPECIES – WHALES

There is a potential for the listed migratory species to occur within the Study Area. Potential impacts may include underwater noise, and potential habitat loss. In the absence of detailed data and field survey assessments, a precautionary and conservative approach has been applied and impacts from the Project are deemed potentially significant. Further field studies will identify the potential presence and habitat of these migratory species and this will inform future design phases. These potential impacts are further discussed in Section 5 of Appendix C.

2.5.2 Do you consider this impact to be significant?
Yes No
2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?
Yes No
2.6.1 Is the proposed action likely to have any direct or indirect impact on the Commonwealth marine environment?
Yes No
0.0.0 Describe the nature and extent of the likely impact on the whole of the environment

#### 2.6.2 Describe the nature and extent of the likely impact on the whole of the environment

Offshore ancillary components may be required during pre-construction, construction and operation, such as navigational aids, meteorological and oceanographic monitoring devices. The type, number and positions will be confirmed during development of the Project, and in consultation with the relevant authorities. It is anticipated these will be located within both State and Commonwealth waters.

Vessel movements and docking would be limited to State waters where possible. However, some navigation may be required through Commonwealth waters.

There is the risk that the Project may result in the introduction of known or potential pest species being introduced to the Project Area, however this risk would be managed through targeted mitigation measures and is not anticipated to consist of a significant impact.

Site investigations will be undertaken to understand the presence and extent (if any) of marine habitat. Where feasible, design will be refined to avoid potential impacts on these areas to reduce the risk of any impacts on marine ecosystem function or integrity.



Site investigations will also inform the presence or absence of suitable habitat for marine fauna species as identified above. Given the uncertainty of existing conditions, there is the potential that the project may result in impacts to marine species or cetacean life cycle and spatial distribution. This risk would be informed through site survey and assessment, and impacts will be reduced or avoided where possible.

Construction and operation of the Project would not result in substantial changes to air quality, though may result in some localised impacts to water quality through activities such as cable playing (or removal), piling activity, spills etc.

The Project would not result in persistent organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment.

In the absence of detailed data and field survey assessments, a precautionary and conservative approach has been applied and impacts from the Project are deemed potentially significant. Further field studies will identify the potential presence and habitat of these migratory species and this will inform future design phases.

In regards to State waters, there may be impact to the marine environment, as a result of spills, cable laying (or removal), piling activity, vessel strikes, underwater noise from vessels, the introduction of pest species, changes to hydrodynamics and water quality and low frequency noise from turbines. Risks to marine areas are discussed in detail in Appendix B.

2.6.3 Do you consider this impact to be significant?
🗋 Yes 🗹 No
2.7 Is the proposed action likely to be taken on or near Commonwealth land?
🗋 Yes 🗹 No
2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?
🗌 Yes 🗹 No
2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?
Yes 🗹 No
2.10 Is the proposed action a nuclear action?
🗋 Yes 🗹 No
2.11 Is the proposed action to be taken by a Commonwealth agency?
🗋 Yes 🗹 No
2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?
🗌 Yes 🗹 No
2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?
Yes No
2.13.1 Describe the nature and extent of the likely impact on the whole of the environment
The Commonwealth Marine Area is defined as any part of the sea, including the waters, seabed and aircease within

The Commonwealth Marine Area is defined as any part of the sea, including the waters, seabed and airspace within Australia's exclusive economic zone and/or over the continental shelf of Australia, that is not State or Northern Territory waters, and stretches from 3 to 200 nautical miles from the coast (DAWE 2021).

The nearest Commonwealth Marine Park is the Murray Marine Park (located approximately 60 km west of the site).

Waters and seabed:

A large portion of the South Australia coastline, including the Project Area, falls within the Bonney Coast Upwelling. This upwelling is listed by the Commonwealth as a Key Ecological Feature, which while not a MNES in its own right, forms a



# component of the Commonwealth Marine area MNES.

At present, no direct physical disturbance of the Commonwealth marine area is proposed. However, indirect impacts may potentially occur, such as reduction in water quality or the generation of underwater noise extending beyond state waters. Although works do not take place in Commonwealth waters, there is potential for indirect impacts to waters, as a result of spills, cable laying (or removal), piling activity and the introduction of pest species or changes to hydrodynamics. Indirect impacts that may occur include turbidity, localised water quality impacts and the generation of underwater noise extending beyond State waters.

#### Airspace:

There are no anticipated impacts to airspace from the WTGs. The risk to aviation and radar was assessed in the Preliminary Risk Review Assessment and considered Low as any impacts are thought to be managed through early consultation and design development. Refer to Appendix D for further information.

2.13.2 Do you consider this impact to be significant?



# **Section 3**

#### Description of the project area

#### 3.1 Describe the flora and fauna relevant to the project area

Desktop assessments to date have identify various flora and fauna species that may potentially be present within the Project Area. Refer to Appendix B and C as well as sections 2.4 and 3.5 of this referral for further information on the desktop results of the flora and fauna in the Study Area.

The Project is located in the South Australian Upper South East Marine Park, within the Habitat Protection Zone (HPZ) and Sanctuary Zone (Lacepede Bay SZ-2). The marine environment supports a diverse range of habitats, including high energy sandy beaches, fringing limestone and platform reefs, dense seagrass beds and kelp forests. The Coorong and Lakes Alexandrina and Albert Ramsar Wetland are adjacent to the marine boundary 20 km west of the land-based section of the Project Area.

At this early stage of the Project, and in the absence of detailed data and field assessments, a precautionary approach to describing the flora and fauna elements of the Study Area is warranted. Further field studies will identify areas of TECs and presence of or suitable habitat for threatened species and this will inform future design phases.

#### 3.2 Describe the hydrology relevant to the project area (including water flows)

The Project would be located in the Murray Groundwater Basin, with some transmission infrastructure also potentially located in the Otway Basin, both of which are classified as shallow sedimentary ground water basins. The South Australian Department for Environment and Water (DEW) Depth to Water Table mapping (2009) shows a range of water table depths within the Project Area, from some areas where the water table is above the surface for more than 10 months to others where the water table is greater than 200cm below the surface. There are a number of wetland complexes mapped in the area, some falling within the Project Area. Some of the wetlands in the areas are mapped as Priority Wetland Complexes LUT-Lower Limestone Coast PWA – Water Allocation Plan 2010 (DEW).

The presence of several water features (wetlands, lakes and drains) within the Project Area and the close proximity to the coast would suggest a relatively shallow groundwater table. The following watercourses/drains are mapped within the Project Area:

- Blackford drain
- Butchers Gap drain
- Jacky White drain
- Baker Range drain
- Tresant drain
- Fariview drain
- Watervalley drain
- Ballater East drain
- Wongawill drain
- Reedy Creek watercourse

Also, it is anticipated that watercourse crossings for the onshore asset infrastructure will be required and will be investigated in future project stages. This will be a consideration for future project design and construction stages.

Further investigations will be carried out to understand the value of ground and surface water environments in the area in order to inform design and establish appropriate management measures to be applied.

Refer to Appendix A for further information on hydrology.

# 3.3 Describe the soil and vegetation characteristics relevant to the project area

#### Terrestrial:

The vegetation communities for the Project Area include coastal shrubland, tall shrublands and tall sedgelands. Intact vegetation is scattered in amongst residential, urban development and agricultural land uses. To the north of the landfall section of the Project Area includes Teilaka and Partari lakes and the southern tip of Paranki Lagoon Conservation Park. The Project Area also crosses Nangwarry Native Forest Reserve along the southern onshore route near South East substation. The Nangwarry Native Forest Reserve is located on both sides of Tower Road, between Penola and Nangwarry, approximately 10 km south of Penola. It is envisaged that further refinement of the proposed route will focus on avoiding or limiting the route's encroachment on more sensitive areas such as forests and vegetated areas.

The Reedy Creek – Lucindale Road alignment has approximately 11km of Roadside Significant Sites that contain long sections of native and intact vegetation.

A majority of the Project Area has an extremely low to low probability of acid sulphate soils. There is a section with a high probability of occurrence close to the coastline at Kingston SE.

The potential for acid sulphate soils and contaminated land within the construction footprint would be ascertained through on-site assessment during design development and pre-construction stages.

# Coastal and marine:

The marine environment between Cape Jaffa and Cape Northumberland consists of low profile, platform reef with heavy



limestone or calcarenite and few patches of sand. These sand patches typically constitute a shallow layer of sand over hard substrate. Benthic habitat is a mosaic of seagrass meadows, reefs (notably Margaret Brock and North Reefs), and unconsolidated substrate. Almost half of the Study Area consists of low profile reef with macroalgae. Refer to Appendix B for more information.

As the Project is still in preliminary stages, detailed investigations into highly erodible soils, acid sulphate soils are yet to be undertaken. Acid material may be present in the Project Area, however geotechnical surveys will be required to determine if they are present in the Project Area, and if so, the level of acidity.

Given there is no major industrial or urban sources of contamination near to the offshore Study Area, it is unlikely that the marine environment would contain contaminants that exceed acceptable limits.

#### 3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

A large portion of the South Australia coastline, including the Study Area, falls within the Bonney Coast Upwelling, which is listed by the Commonwealth as a Key Ecological Feature. Although not a MNES in its own right, this upwelling forms a component of the Commonwealth marine area MNES. The Bonney Coast Upwelling is a highly productive area providing important habitat to a wide range of species

The Project would be located within the Coorong Coastal Commercial Fishing Zone and Pipi (Goolwa Cockle) Harvest Area, and with two Rock Lobster sanctuaries present in the area; one located off Cape Jaffa (approximately 8 km south of the nearest turbine), and the second at Margaret Brock Reef (approximately 10 km south of the nearest turbine).

There are seven shipwrecks located within the Study Area, the closest being approximately 3 km from the nearest proposed turbine. These shipwrecks are managed by the Commonwealth under the Underwater Cultural Heritage Act 2018 or the South Australian Historic Shipwrecks Act 1981:

- Thunderbird (ID 5778), located approximately 1.5 km off Cape Jaffa Lighthouse (Commonwealth listed shipwreck)
- Victoria (ID 5872), located within Cape Jaffa waters (Commonwealth listed shipwreck)
- Sea Hero (ID 5713), located approximately 40 km off from Margaret Brock lighthouse (Commonwealth listed

# shipwreck)

- Maria (ID 5565), located within the Margaret Brock Reef (Commonwealth listed shipwreck)
- Explorer (ID 5341), located off Cape Jaffa (Commonwealth listed shipwreck)
- Kingston (ID 327) (State listed shipwreck)
- Kingston (ID 147) (State listed shipwreck)

# 3.5 Describe the status of native vegetation relevant to the project area

# Terrestrial:

There are two TECs mapped as potentially occurring within the Project Area (Subtropical and Temperate Saltmarsh and Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains). Based on the geography and location of the Project Area, there is a potential for these TECs to occur. Ground-truthing and site-based vegetation mapping will be completed to identify if any of these TECs occur on the site. Data on the floristic structure and condition of potential TECs will be collected to assess against the key diagnosis criteria and condition threshold relevant to each TEC.

# Coastal and marine:

The EPBC Act listed TEC Giant Kelp Marine Forest of South Australia has the potential to occur around the Cape Jaffa. Further marine site surveys will be required to confirm their presence within the Project Area.

Broadscale Seamap Australia benthic habitat mapping identifies the majority habitat within the Project Area is low-profile reef with macroalgae. The reefs within the Study Area support the most western extent of giant kelp (Macrocystis angustifolia) and bull kelp (Durvillea potatorum). These kelp areas may be classified as the Giant Kelp Marine Forests of South East Australia TEC.

During future Project phases, native vegetation communities will be mapped and ground-truthed with impacts to these areas avoided and minimised as much as possible.

Future terrestrial and marine ecological surveys should be completed at the next phase of the Project to determine the status of native vegetation on site.

# 3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

# Onshore:

The topography of the Project Area comprises of rolling topography in the north with elevations ranging from approximately 3m AHD to 35m AHD. The topography gradually increases along the south east substation transmission line with elevations in order of 80m AHD at South East substation.

# Offshore:

A review of the Australian Bathymetry map indicates the majority of the site is located within water depths between 80 to 40 m. Areas in the north east corner of the offshore Project Area with water depths less than 8 m. No offshore wind turbines are proposed to be constructed in the north east corner.



#### 3.7 Describe the current condition of the environment relevant to the project area

#### Offshore:

The Project is located within Bonney Coast Upwelling (a key ecological feature important for the biodiversity, ecosystem functioning and integrity of the Commonwealth Marine Area). Commonwealth listed critically endangered TEC (Gian Kelp Marine Forests of South Australia) potentially occurs within the Project Area. It is understood from desktop assessment that almost half of the Study Area is a low profile reef with macroalgae. Areas outside the Project Area but within the 5 km Study Area contain a mosaic of seagrass meadows, reefs (notably Margaret Brock and North Reefs) and unconsolidated substrate. The reefs within the Study Area support the most western extent of giant kelp (Macrocystis angustifolia) and bull kelp (Durvillea potatorum). These kelp areas maybe classified as the Giant Kelp Marine Forests of South Australia TEC, however, further ground-truthing will be required to confirm their characteristics and habitat meet the TEC criteria.

There are also a number of Commonwealth listed threatened marine and migratory species potentially occur within the Project Area, including birds, whales, fish, dolphins, turtles, sea dragons, sharks, seals and sea lions.

#### Onshore:

The onshore section of the Project Area covers approximately 1,800 km2 and intersects various land uses zoned by the Kingston District Council. Outside the town of Rosetown and Kingston SE, the majority of the Project Area is within a rural area with small pockets of conservation zone, namely along the coastline (SA Planning & Design Code).

The majority land use of the onshore section is agricultural land, with the residential areas, including Kingston kindergarten, Kingston community school, mainly located within the towns of Kingston SE and Rosetown.

Kingston SE is mainly a recreational (i.e. fishing), recreation and tourism node (winemaking) and is anticipated to be highly valued by the local communities. The beaches at Kingston SE, including Wyomi Beach and Pink Beach are utilised by local residents and tourists for recreational activities such as swimming, kite/wind surfing, sailing, boating and fishing. The rocky outcrops of the continental shelf are frequently used for recreational rock lobster fishing from November to June each year. Further field assessments are required to determine the environmental condition of the Project Area.

# 3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

There are no Commonwealth listed heritage places or sites within the Project area or the 5km Study Area. In regard to other places with heritage value, there are two shipwrecks named Kingston located in the Project Area. Both shipwrecks are located close to the coastline and therefore away from the proposed turbines.

There are a number of shipwrecks located within the Study Area, the closest being approximately 3 km from the nearest turbine. These shipwrecks are managed by the Australian Federal Government under the Underwater Cultural Heritage Act 2018 or the South Australian Historic Shipwrecks Act 1981. Refer to section 3.4 for the list of the shipwrecks.

No state heritage places are mapped within the Project Area. There are 11 local heritage sites (SA Heritage Places Database, 2021) mapped in the Project Area, including the following:

Heritage number 25525 Farm Group 'Bull Island', Location: Lucindale-Kingston Road, Avenue Range; LGA: Naracoorte Lucindale

Heritage number 25524 Former School (Art gallery), Location: Lucindale-Kingston Road, Avenue Range; LGA: Naracoorte Lucindale

Heritage number 25551 Dwelling, former Police Station and Cell Building, Location: 32 Musgrave Avenue, Lucindale; LGA: Naracoorte Lucindale

Heritage number 25552
Heritage number 25553
Heritage number 25553
Naracoorte Lucindale
Heritage number 25559
Naracoorte Lucindale
Heritage number 24929
Heritage number 24936
Heritage number 24937
Heritage number 24937
Heritage number 24942
Heritage number 24942
Heritage number 24945
Heritage number 24945
Heritage number 24945
Former Presbyterian Church, Location: 1 Willow Avenue, Lucindale; LGA: Naracoorte Lucindale
Shearing shed 'Messamurry', Location: Lochaber South Road, Stewarts Range; LGA:
Naracoorte Lucindale
Heritage number 24929
Heritage number 24936
Heritage number 24937
Heritage number 24945

# District Council

# 3.9 Describe any Indigenous heritage values relevant to the project area

Prior to European settlement, Coorong was one of the most densely populated areas in Australia, with the Traditional Owners, the Meintangk people, who were members of the Ngarrindjeri people, having lived there for thousands of years. The Coorong remains an intrinsic part of their culture, spirituality and identity. The Project Area is within the area of a Native Title claim by First Nations of the South East #1 (SAD211/2017), which covers all land within the Project Area to a point 500 m seaward of the Mean Low Water Mark; and the Ngarrindjeri and Others Native Title Claim (SAD6027/1998) which covers the Coorong and Kingston SE district area. Project Area

While the Project infrastructure would be located to avoid impacts as much as practicable (by utilising previously disturbed



land and existing infrastructure easements and corridors where possible), some disturbance to Aboriginal cultural heritage sites may occur as a result of the Project. This will be further examined and determined as the Project progresses, applying the hierarchy of avoid, minimise, mitigate, offset during design development.

Culturally sensitive landforms or intangible heritage sites could be located within the Project Area. Desktop assessments have not been able to identify culturally sensitive sites and consultation with Aboriginal representatives is required. If present, there is a risk that construction activities could temporarily restrict access to some culturally sensitive sites. Further consultation with relevant Aboriginal parties and groups is required to further understand Aboriginal cultural heritage within the Project Area and the value of tangible and intangible heritage sites.

# 3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

#### Offshore:

Coastal and marine infrastructure will be located on State waters. The Project Area is not located within Commonwealth land or Commonwealth waters. Some navigation and ancillary sites may require access via Commonwealth waters, as discussed in Sections 1.2 and 2.6 above.

# Onshore:

The majority of the land is classified as 'Freehold and Crown Leasehold Land". The Nangwarry section has been classified as 'Forestry Reserve". A key element of the next stage of work is to resolve identified tenure matters with both the State (for Crown lands), Native Title holders and local communities and landholders. Potential areas have been identified and will be investigated in detail. Future stages will include seeking to define, negotiate and secure tenure in an appropriate manner.

# 3.11 Describe any existing or any proposed uses relevant to the project area

# Onshore:

The present land use is primarily for the grazing of livestock with localised areas including rural residence, forestry and reserves. The Project Area also crosses Nangwarry Forest along the southern onshore route near South East substation. It is envisaged that further refinement of the proposed route will focus on avoiding or limiting the route's encroachment on more sensitive areas such as forests, reserves and urban/residential areas.

# Offshore:

The offshore component of the Project is located within a marine environment that is approximately 10 km off the coast of Kingston SE, within state waters that include commercial fishing, recreational fishing, tourism, and shipping activities. The beaches at Kingston SE, including Wyomi Beach and Pink Beach are utilised by local residents and tourists for recreational activities such as swimming, kite/wind surfing, surfing, sailing, boating and fishing. The rocky outcrops of the continental shelf are frequently used for recreational rock lobster fishing from November to June each year.

Refer to Appendix D for further information relating to land use and potential risks associated with the Project.

Further field assessments are required to determine the environmental condition of the Project Area.



# Section 4

# Measures to avoid or reduce impacts

#### 4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Site selection:

Management of environmental, heritage and social risks were a key consideration in selection of the site. The process found Kingston SE was the most suitable location off the SA coast because of its low nearby population density and proximity to the NEM, meaning less transmission infrastructure is required to connect to the grid, which ultimately allows for reduced amenity impacts for sensitive receivers.

#### Design:

Although the Project is in early design stages, design decisions have been implemented to minimise potential environmental impacts, e.g design developed to maximise existing infrastructure corridor and easements to minimise impacts on environment. Offshore cabling will be buried to reduce potential electromagnetic field (EMF) impacts and allow benthic habitat to regenerate. Consideration will be given to construction staging and timing to reduce noise and disturbance impacts on marine ecology.

In future design phases, impacts to onshore and offshore sensitive areas will be avoided and minimised through careful siting of infrastructure. Sensitive areas include benthic communities and habitat, Aboriginal/historical heritage sites(including areas with intangible Aboriginal cultural value), TECs or potential habitat that supports threatened species.

Future studies and assessments will identify areas of significance, which will further avoid and minimise impacts and may include:

•Marine and terrestrial ecology field studies – identify key areas of habitat to limit clearing and inform siting of infrastructure •Aboriginal and historical heritage assessments – inform infrastructure siting

•Noise and vibration assessments (incl underwater noise) - inform construction methodology/timing

•Flightpath, migration studies and modelling of collision risk for birds – inform infrastructure siting and WTG height

•Water quality monitoring of marine environment and onshore groundwater and surface water (including wetlands) – inform siting of infrastructure and necessary mitigation measures (e.g. erosion/sediment controls).

Impact mitigation: These mitigation measures may be applied to reduce potential impacts:

Onshore:

•Pre-clearing flora and fauna surveys prior to construction, to identify any threatened flora and/ or native fauna species •Measures for regeneration of native vegetation disturbed during construction.

•Where possible, restoration activities will be adopted to reduce fragmentation of the existing habitat and increase the value of the habitat for local fauna.

•A soil and erosion management and monitoring plan will be implemented to minimise impacts to waterways during construction and operation of the Project.

•A Construction Management Plan and Traffic Management Plan will be developed to minimise any temporary impacts to residents.

Offshore:

Marine fauna

•Staging and scheduling construction activities likely to noise from piling outside of peak migratory periods.

•A Noise and Vibration Management Plan will be developed to minimise noise at the source.

•Management of underwater noise will be consistent with the procedures outlined in EPBC Act Policy Statement 2.1. Interaction between offshore seismic exploration and whales. This will likely include measures such as soft starts for pile driving, setting marine monitors and exclusion zones for stop works procedures in the event of a sighting nearby and no night works.

•Appropriate shut down and go-slow procedures to avoid vessel strikes and piling while migratory species are observed in the proposal area and until they have left the area.

•Hull inspections and sourcing of local vessels to reduce risk of introduction of marine pest species.

•Burial of cables to avoid EMF impacts and allow benthic communities to recover post-disturbance.

•WTGs tower design and siting to minimise impacts to bird species.

•Post-construction monitoring program for birds/whales, including underwater ambient noise surveys.

•Investigation of any incidents of bird strike/deaths.

•Installation of lighting that will minimise light nuisance for marine fauna.

Marine habitat

•A baseline water quality monitoring program will be prepared and implemented prior to construction. This will include monitoring and setting targets/limits for changes in water quality (salinity and turbidity concentrations) to reduce plume and sedimentation impacts to benthic habitats.

•Offshore infrastructure and cabling will be designed and positioned to avoid disturbance to benthic habitat communities (including seagrass meadows) where feasible.

•Exclusion zones will be developed as part of the CEMP to prevent inadvertent clearing or damage to fauna habitats outside the limit of works.

•A suitable Environmental Management & Monitoring program for construction, commission and operation will be developed



# and implemented.

Refer to Appendix D for potential mitigation measures.

# 4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

The Project may potentially have a significant impact on MNES (threatened ecological communities and species, listed migratory species and Commonwealth marine areas) identified as potentially occurring within or nearby to the Project Area. Where possible, the design will aim to avoid impacts on MNES and Commonwealth waters. Construction, operation and decommissioning of the proposal will be implemented through a Construction Environmental Management Plan (CEMP), Operation Environmental Management Plan (OEMP) and Decommission Environmental Management Plan (DEMP) to minimise potential impacts throughout the different phases of the Project.

If approved, the Project will be constructed and operated in accordance with the issued Ministers Conditions of Approval.



Section 5
Conclusion on the likelihood of significant impacts
5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled
action
World Heritage properties
National Heritage places
Wetlands of international importance (declared Ramsar wetlands)
Listed threatened species or any threatened ecological community
✓ Listed migratory species
Marine environment outside Commonwealth marine areas
Protection of the environment from actions involving Commonwealth land
Great Barrier Reef Marine Park
A water resource, in relation to coal seam gas development and large coal mining development
Protection of the environment from nuclear actions
Protection of the environment from Commonwealth actions
Commonwealth Heritage places overseas
Commonwealth marine areas
5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action
Significant matters identified above.



# **Section 6**

#### Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

Yes – The Project is being developed by SA Offshore Windfarm Pty Ltd, which is a wholly owned subsidiary of Australis Energy Ltd (Australis). Australis has a strong record of responsible environmental management and has had no prosecutions arising from the carrying out of its offshore windfarm projects in the UK, or their subsequent operation.

Australis is committed to the principles of sustainable development and environmental stewardship, including the protection of the environment and striving to minimise adverse impacts of operations on the environment and community.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

SA Offshore Windfarm Pty Ltd has had no proceedings arising from the carrying out of its projects or their subsequent operation.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

# 🗹 Yes 🗌 No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

The Project will be carried out in accordance with Australis's Environmental Policy (attached as Appendix E). Australis's commitment to the environment and adherence to the EMS and its policies are the responsibility of all management and all employees and contractors. Australis's policy operates within its wider environmental, social and governance (ESG) management.

Achieving and maintaining the highest standards in health, safety and environmental and planning management are core to Australis and its subsidiaries operations. The Company is committed to diversity and gender inclusivity, alongside the overall physical and mental health of employees and consultants.

Critical to each project is developing strategies to ensure that during the construction, operations and decommissioning, the project benefits the local and national economy without causing harm to the environment or local communities. The approach includes:

- Working with industry partners and the supply chain to mitigate the impact on non-renewable natural resources.
- Avoiding or mitigating impacts on ocean ecosystems throughout development, construction and operation.
- Engaging with relevant stakeholders to collaborate in identifying how local species and natural habitats can be protected throughout the development.

The increasing use of renewable power generation is mitigating the impact of climate change. Australis is committed to developing social sustainability in partnership with all community stakeholder groups impacted by the Project.

Effective, strong and transparent governance structure are central to Australis's management. This is particularly relevant to attracting the capital required to construct the windfarm and gaining and maintaining the respect of all shareholders and stakeholders in the through fair, honest and transparent dealings.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

🗹 Yes 🗌 No

# 6.4.1 EPBC Act No and/or Name of Proposal

2021/8961 - WA Offshore Windfarm 2021/8966 - VIC Offshore Windfarm



Section 7	
Information sources	
Reference source	

References used in preparing the referral range from Commonwealth, State and Local sources (including species information and online mapping) to publicly available studies. Full reference lists are available in Appendix B and C.

#### Reliability

All sources are accredited government sources or peered review studies.

#### Uncertainties

Some ecological sources are dated from more than 10 years ago. This reinforces the need to conduct detailed field assessment and technical studies to ensure species within the existing environment are identified correctly.

It should be noted that while available spatial mapping has identified areas of ecological, Aboriginal heritage and historical heritage, it does not preclude the potential for other values to be present on site. Therefore, spatial mapping has limitations as it only represents what has been documented to date. This further reinforces the need to conduct detailed field assessments and community engagement with Aboriginal representatives.



# **Section 8**

#### Proposed alternatives

Do you have any feasible alternatives to taking the proposed action?

🗹 Yes

# 8.0 Provide a description of the feasible alternative

No

1. Do nothing option: this option would not help achieve the strategic targets set by the Australian and SA Gov around renewable energy, climate change and emissions listed in Appendix A.

2. Different technology options:

WTGs arrays between 8MW and 15MW are being considered. Commercial and supply chain considerations and stakeholder/community consultation will inform array size. The Rochdale envelope approach has been applied to allow for consideration and evaluation of a range of options and worst-case scenario.

The SA offshore environment offers opportunity to tap into a powerful and consistent wind resource, with potential to generate electricity at steadier rate than other renewable energy sources. Offshore wind combined with additional equipment such a battery storage is preferred and would provide NEM with a consistent, dispatchable renewable energy resource while providing grid stability. Other advantages of offshore windfarm include:

•Wind speeds tend to be steadier than on land as there is nothing around to produce turbulence (e.g.hills,trees,buildings). A steadier supply of wind means more reliable energy source

•Many coastal areas have high energy needs. Over 90% of Australia's population live in coastal areas. Building offshore windfarms can help meet energy needs from nearby sources, reduce losses in electrical transmission systems

•WTGs used offshore are generally taller than those onshore which pushes them up into the naturally higher wind flows, generating more energy

3. Alternative sites:

Offshore: A multi-criteria assessment was adopted as the methodology to delineate potential sites. The criteria were spatially represented via GIS database, thus allowing a heat map to be developed for visual assessment of suitable sites along the coastline. Several categories were assessed to determine the most appropriate site which included legislative boundaries (State vs Commonwealth), distance to major port facilities, marine traffic, wind resource, water depth, environmentally sensitive sites and receptors, proximity to built-up areas and proximity to onshore electricity networks.

Each of the evaluation criteria were then weighted to reflect their relative importance in influencing the site selection. For example, proximity to built-up areas was assigned a weighting of 20% whereas legislative boundaries was assigned a weighting of 5%. The site characteristics were also assigned a suitability score ranging from zero to three with zero indicating an unsuitable site and three a suitable site. The scoring was combined for each category in order to generate the "heat map" to allow a visual assessment of suitable sites.

When all MCA layers are weighted, scored and combined the preferred site was located south east of Kingston SE. This site had the following favourable characteristics:

•Good wind resources associated with the site with mean wind speeds greater than 8.5m/s at 100m elevation

•Water depths <25m along most of the coastline

•Low marine traffic volumes

•Potential nearby access to the NEM at ElectraNet Black Range substation (275kV) and South East substation (275kV)

•Low population density within the surrounding area to mitigate any visual impact; and

•Benefits from location in Lacepede Bay as the area has extended state waters.

Onshore: A wide corridor is currently being investigated for the landfall site and onshore transmission infrastructure, with final locations to be determined during design development and subject to further technical studies and discussions with stakeholders. The landfall site would be located landward of the mean highwater mark on land suitable to accommodate an underground joint pit. The transmission infrastructure is anticipated to be predominately above ground.

It is anticipated the cable will be trenched/ buried from the shallow reach of the subtidal/intertidal habitat onshore where a connection will transfer the power to above ground cables. From here, there are currently two transmission corridors being investigated:

•Option 1: a new corridor connection to Black Range substation that will connect into the main South East substation transmission line corridor. Total area ~ 66,501 ha.

•Option 2: a new corridor connection along the Reedy Creek- Lucindale Road corridor into the main South East substation transmission line corridor. The total area ~16,933 ha.

These options have been developed from discussions with ElectraNet on potential future grid connection opportunities and will be further refined following future technical investigations and consultation with ElectraNet.

4. Different generating capacities:

Various generating capacities have been considered and guided by ongoing feasibility assessment, technology options and early discussion with ElectraNet. Generation capacity of up to 600MW is proposed and will be tested as the Project progresses and more detailed technical/market assessments are carried out with key stakeholders.



Australian Government Department of Agriculture, Water and the Environment

8.1 Select the relevant alternatives related to your proposed action	
Timeframes	
8.25 Do you have another alternative?	
🗋 Yes 🗹 No	



Section 9		
Person proposing the action		
9.1.1 Is the person proposing the action an organisation or b	usiness?	
Yes No		
Organisation		
Organisation name (as registered for ABN/ACN)	SA OFESHORE WINDEARM RTV I TD	
Business name		
ABN	87647508503	
ACN		
Business address	C/- ALM Williams Partners, Level 2, 570 St Kilda Road, Melbourne, 3004, Victoria, Australia	
Postal address		
Main Phone number	+44 (0)7775 712817	
Fax		
Primary email address	andrew.hindle@australis-energy.com	
Secondary email address		
Since in the second sec	1)(ii) of the EPBC Regulations because I am:	
Not applicable		
9.1.2.2 I would like to apply for a waiver of full or partial fees u	under Regulation 5.21A of the EPBC Regulations	
9.1.3 Contact (for an organisation - the contact details of	the person authorised to sign on behalf of the organisation)	
First name	Andrew	
Last name	Hindle	
Job title	Managing Director	
Phone	+44 (0)7775 712817	
Mobile		
Fax		
Email	andrew.hindle@australis-energy.com	
Primary address	Office 7b, the Bridge Workspace, 7b Parkshot, Richmond,	
Address	Surrey, TW9, 2RD, United Kingdom	
Declaration: Person proposing the action (To be signed )	by the person at 0.1.3)	
ANDREW HINDLE		
o the best of my knowledge the information I have given on, o correct. I understand that giving false or misleading information behalf or for the benefit of any other person or entity. Bignature:	or attached to the EPBC Act Referral is complete, current and on is a serious offence. I declare that I am not taking the action on	
broposing the action, consent to the designation of <u>SA OFFSP</u> burposes of the action described in this EPBC Act Referral. Bignature:	TOLE WINDFREM PTY LTD as the proponent for the	



Proposed designated proponent	
9.2.1 Is the proposed designated proponent an organisation	or business?
Organisation	
Organisation name (as registered for ABN/ACN)	
Business name	SA OFFSHORE WINDFARM PTY LTD
ABN	87647508503
ACN	07047308303
Business address	C/- ALM Williams Partners, Level 2, 570 St Kilda Road, Melbourne, 3004, Victoria, Australia
Postal address	
Main Phone number	+44 (0)7775 719917
Fax	
Primary email address	
Secondary email address	andrew.nindle@australis-energy.com
9.2.2 Contact (for an organisation - the contact details of	f the person suthering the i
First name	And row
Last name	Hindle
Job title	Managing Director
Phone	+44 (0)7775 712917
Mobile	(0)///3/1201/
Fax	
Email	andrew hindle@australis-energy.com
Primary address	C/- ALM Williams Partners   evel 2, 570 St Kilde Bood
Address	Australia, 3004, VIC, Australia
Declaration: Proposed Designated Proponent	
, ANDREW HINDLE	
proposed designated proponent, consent to the designation	of,the
nyself as the proponent for the purposes of the action description	ibed in this EPBC Act Referral.



Referring party (person preparing the information)		
9.3.1 Is the referring party an organisation or a business?		
Yes No		
Organisation		
Organisation name (as registered for ABN/ACN)	ARUP AUSTRALIA PTY LTD	
Business name		
ABN	76625912665	
ACN		
Business address	Level 4, 108 Wickham Street, Fortitude Valley, Brisbane, 4006, Queensland, Australia	
Postal address		
Main Phone number	+61 7 3309 4805	
Fax		
Primary email address	fiona.riley@arup.com	
Secondary email address		
9.3.2 Contact (for an organisation - the contact details of the personal sector of the pers	on authorised to sign on behalf of the organisation)	
First name	Fiona	
Last name		
Job title	Environmental Lead	
Phone	+61 / 3309 4805	
	fiona rilov@arun.com	
Email Primary address	Lovel 4, 108 Wickham Street, Fortitude Valley, Brisbane	
Primary address	4006. Queensland. Australia	
Address	····, ····	
Declaration: Referring party (person preparing the information)		
I, FIONA RILEY	, declare that	
to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.		
Signature: Date:23 August 2	2021	



Appendix A	
Attachment	
Document Type	File Name
action_area_images	Figure 1_Project Area.pdf
impact_reduction_docs	Appendix A_SA State referral submission.pdf
impact_reduction_docs	*Appendix B_ Prelim Marine Enviro Assessment.pdf
impact_reduction_docs	Appendix C_Terrestrial MNES Supporting Information_Rev
	0.pdf
impact_reduction_docs	Appendix D_Risk_Assessment_Framework_Rev_0.pdf
Impact_reduction_docs	Appendix E_Australis_Energy_HSE_Policy.pdf
	Appendix B_ Prelim Marine Enviro Assessment_Rev I.pdi
Appendix B	* NOT PUBLISHED - SUPERSEDED
Coordinates	
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