

Normanville Energy Park

Application Number: 02709

Commencement Date: 02/12/2024

Status: Locked

1. About the project

1.1 Project details

1.1.1 Project title *

Normanville Energy Park

1.1.2 Project industry type *

Energy Generation and Supply (renewable)

1.1.3 Project industry sub-type

Wind Farm

1.1.4 Estimated start date *

01/01/2026

1.1.4 Estimated end date *

31/12/2062

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

Normanville Energy Park Pty Ltd as trustee for the Normanville Energy Park Unit Trust (the Proponent) proposes to build the Normanville Energy Park (the Project), including the construction and operation of up to 17 wind turbine generators (WTGs) and associated infrastructure, approximately 15 km south-west of Kerang township in the north of Victoria. The Project is located within the Gannawarra Shire Local Government Area.

The Project is being developed within an approximately 1933 hectare (ha), which includes 12 freehold lots and areas along public roads. The wind farm site comprises eight freehold lots held by four landholders. The wind farm site is comprised agricultural land used for cropping and livestock grazing. The disturbance footprint within the Project site (inclusive of all construction activities) is approximately 162 ha and the permanent infrastructure footprint is approximately 32 ha (1.7 %).

The key components of the Project are as follows:

- Up to 17 WTGs (up to 8 MW capacity each), with a maximum blade-tip height of 280 m and minimum ground clearance at 50 m;
- WTG foundations, hardstands and laydown areas;
- Approximately 26 km of internal access tracks of 5.5 m trafficable width (7 m on corners);
- Internal electrical cabling (underground) connecting WTGs to the internal collector station;
- One internal collector station;
- Approximately 7.2 km external transmission line (underground), connecting the internal collector station to the third-party Koorangie terminal station;
- One permanent meteorological mast (anemometer);
- Minor road intersection and site access upgrades;
- Temporary construction areas including equipment laydowns, concrete batching plants and site compounds;
- Other operational infrastructure, including site offices and amenities.

The Project is anticipated to be operational by 2028 and would operate for up to 40 years.

The Project would involve typical construction activities including vegetation clearance, earthworks and excavation, concrete batching, hauling materials and wind farm components, parts assembly, concrete formwork and associated activities, building of permanent structures, electrical works, testing and commissioning.

Disturbance activities and impacts that might be associated with them include:

- **Vegetation clearance:** the proposed layout has been designed to avoid and minimise impacts on native vegetation, however some removal of some native vegetation will be required to make way for the construction of wind turbines, access roads, and other infrastructure. This can cause temporary disturbance to flora and fauna due to the noise, vibration and movement of clearance machinery. There may also be longer term impacts to flora and fauna due to the resultant loss of habitat;
- **Earthworks and excavation:** to prepare the site for turbine foundations and access roads, soil excavation and grading will be required. This can lead to potential soil erosion and mobilisation of contaminants into surface water and/or groundwater which requires management through construction controls;
- **Construction of access tracks:** building new access tracks or upgrading existing ones to transport materials and equipment to the site. This can lead to potential increased weed incursion and soil compaction within agricultural areas which requires management through construction controls;
- **Installation of turbines and infrastructure:** erecting the wind turbines and associated infrastructure, such as substations and transmission lines. The proponent recognises that this can potentially increase weed incursion and cause soil compaction within agricultural areas. To mitigate these risks, we will implement and adhere to stringent construction controls throughout the project.
- **Operations and maintenance activities:** regular maintenance of the turbines and infrastructure, which may include periodic vegetation management and road maintenance.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

No

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

Key legislation relating to the proposed planning and environmental approvals pathway for the Project is summarised below.

Other legislation, including the *Road Management Act 2004* (VIC) will be considered as required by statutory compliance.

Commonwealth Legislation

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act): an action that has, will have or is likely to have a significant impact on protected matters requires approval by the Environment Minister under the EPBC Act.

The Project is being referred, to ensure due diligence on the basis that proponents believe their action is not an action that requires approval, the proponent 'may' refer the project under the EPBC Act.

State Legislation

- *Environment Effects Act 1978* (EE Act): the Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978 (Eighth edition, 2023) state that projects which 'could reasonably be expected to have the potential for a significant effect on the environment' should be referred under the EE Act.

The Project is not being referred, on the basis that the proponent has considered expert assessment of potential effects of the Project and considers that the Project could not reasonably be expected to have the potential for a significant effect on the environment.

- *Planning and Environment Act 1987* (P&E Act): the P&E Act provides a framework for planning the use, development and protection of land in Victoria, and gives legal weight to subordinate instruments including the Victoria Planning Provisions (VPP) and the Gannawarra Planning Scheme.

Clause 52.32-2 of the VPP states that the use and development of land for a wind energy facility requires a planning permit.

The Proponent proposes to utilise the newly established Development Facilitation Program (DFP), through a planning permit application under Clause 53.22 (Significant Economic Development). Applications lodged to the DFP will be determined by the Minister for Planning or the Department of Transport and Planning under delegation.

Other State relevant legislation which was considered during ecosystem assessments and impacts on land includes:

- *Environment Protection Act 2017*
- *Heritage Act 2017*
- *Water Act 1989*
- *Wildlife Act 1975*
- *Aboriginal Heritage Act 2006* – There is no appointed Registered Aboriginal Party for the Project site. The Proponent is undertaking a voluntary Cultural Heritage Management Plan (CHMP) which, in the absence of a Registered Aboriginal Party, will be administered by First Peoples - State Relations (FP-SR), and the Proponent is continuing consultation with First Nations groups advised by FP-SR in development of the voluntary CHMP.
- *Wildlife Act 1975*
- *Flora and Fauna Guarantee Act 1988*
- *Catchment and Land Protection Act 1994*

Local Legislation

- Gannawarra Planning Scheme: the planning permit application will consider the policies and provisions that control land use and development within the Shire.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

A Community and Stakeholder Communications Plan has been developed, outlining the principles and methodology used to build trust, encourage community dialogue and cultivate a partnership and inclusive local involvement with the community.

The Proponent has been engaging with key stakeholders about the Normanville Energy Park since 2019 and with the community since June 2023.

Key stakeholders who may have likely interest in the Project have been identified through desktop research and stakeholder mapping of the local community, capturing those in geographical proximity to the Project.

A range of engagement activities have been undertaken with key stakeholders since 2019, including:

- Meetings with Gannawarra Shire Council;
- Meetings with landholders hosting Project infrastructure;
- Meeting with DEECA and DTP;
- Establishment of a Project webpage and email inbox;
- Assigning of a designated community liaison resource;
- Sponsorship of the Wandella Bombers Football & Netball Club and the Kerang Football & Netball Club;

- Two community open days;
- Information booth at the Kerang Market;
- Initial door knocking campaign of landholders within a 5 km (and 10 km for selected properties) radius;
- Neighbour Benefit Scheme communication and door knocking (4km radius);
- Pop-up office in 2023 at the Kerang Neighbourhood House (July-September);
- Establishment of an ongoing pop-up temporary Project office in Kerang - open every Thursday from at the Kerang Neighbourhood House (beginning September 2024);
- Print advertising in the Gannawarra Times;
- Sponsorship of the Kerang Show in 2023 and 2024 including WestWind presence at a information booth at the shows;
- Financial support for Neighbourhood House Soup Kitchen and Emergency Food Provisions initiatives.

There is no appointed Registered Aboriginal Party for the Project site. The Proponent is undertaking a voluntary Cultural Heritage Management Plan (CHMP) which, in the absence of a Registered Aboriginal Party, will be administered by First Peoples - State Relations (FP-SR).

Consultation with the recognised Traditional Owner groups (the Barapa Aboriginal Corporation, the Wiran Aboriginal Corporation and the Wemba Wemba Aboriginal Corporation) as advised by FP-SR has been carried out during the heritage assessment and will continue to be carried out as part of the voluntary CHMP process.

1.3.1 Identity: Referring party

Privacy Notice:

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Confirm that you have read and understand this Privacy Notice *

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	15656111125
Organisation name	WESTWIND ENERGY DEVELOPMENT PTY LTD
Organisation address	PO Box 433, Gisborne VIC 3437

Referring party details

Name	Sarah Cane
Job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au
Address	PO Box 433, Gisborne VIC 3437, Australia

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	30669902792
Organisation name	NORMANVILLE ENERGY PARK PTY LTD
Organisation address	PO Box 433, Gisborne VIC 3437

Person proposing to take the action details

Name	Sarah Cane
Job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au

Address

PO Box 433, Gisborne VIC 3437, Australia

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

Yes

1.3.2.16 Describe the nature of the trust arrangement in relation to the proposed action. *

The owner of the Project will be Normanville Energy Park Pty Ltd as the trustee for the Normanville Energy Park Unit Trust. The Trust was established by Trust Deed. A copy of the trust deed is provided as Attachment A. This document is to be withheld from publication.

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

Prior to this project, Normanville Energy Park Pty Ltd has no environmental management record.

Normanville Energy Park Pty Ltd (the Proponent) as trustee for the Normanville Energy Park Unit Trust is a special purpose vehicle established by WestWind Energy Development Pty Ltd (WestWind Energy) to facilitate the development and delivery of the Project. It is expected that the Proponent will be responsible for all phases of the Project including development, permitting, construction, compliance, operation and decommissioning.

WestWind Energy is currently the largest developer of wind energy projects in Victoria by approved megawatts of generation and has a wealth of experience from working with regional and rural communities. WestWind Energy's previous projects demonstrate the company's history of responsible environmental management and strict compliance with all environmental protection laws and regulations.

WestWind Energy's projects previously referred under the EPBC Act include:

- Mt Mercer Wind Farm (130MW – in operation since 2013) (EPBC 2005/2116);
- Lal Lal Wind Farm (228MW – in operation since 2019) (EPBC 2007/3721);
- Moorabool Wind Farm (320MW – in operation since 2020);
- Golden Plains Wind Farm (1,333MW – construction commenced late-2022) (EPBC 2017/7965);
- Warracknabeal Energy Park (1,650MW – undergoing environmental and planning approvals since mid-2023) (EPBC 2023/09546);
- Bottle Tree Energy Park (400MW - undergoing environmental and planning approvals since late 2023) (EPBC 2023-09659); and

- Cobar Wind Farm (216 MW - undergoing environmental and planning approvals since early 2024) (EPBC 2024-09843).
- Lake Victoria Wind Farm (1500 MW - undergoing environmental and planning approvals since mid 2024) (EPBC 2024-02546).

As a special purpose vehicle established by WestWind Energy, the Proponent would undertake the Project in accordance with the WestWind Energy corporate environmental policy and framework as detailed below.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

The proponent will adhere to WestWind Energy's environmental policy and planning framework.

WestWind Energy is a responsible corporate citizen who has a long track record in developing wind farms with due diligence and a robust environmentally responsible manner. West Wind Energy's Sustainability Policy is reproduced below:

WestWind Energy is a developer and operator of environmentally friendly electric power generators. WestWind Energy is committed to the operation of electricity generation facilities which minimise environmental impact both in construction and operation.

The Proponent will manage its activities in an ecologically sustainable manner and to continuously improve their impact on the shared environment.

To achieve this objective, the Proponent will:

- Conduct all activities in accordance with the relevant legislation, government policies, agreements and planning approvals;
- Design, implement and audit programmes and works to responsibly minimise environmental impacts from the operation of its facilities;
- Establish and monitor environmental targets and indicators aimed at continually improving environmental performance;
- Work within a framework of sustainable development by using resources in a manner which maximises their value to both WestWind Energy and the general community;
- Respond promptly and effectively to any known significant environmental impacts caused by operations under its control;
- Educate and train personnel and contractors in their environmental obligations and responsibilities and educate and train employees to conduct their activities in an environmentally responsible manner;
- Consult and inform other organisations and the general community of the environmental impacts of its activities;
- Promote the efficient use of energy, raw materials and other resources within its operations;
- Promote environmental awareness among employees, supplier and contractors;
- Manage land under its care with sensitivity, having due regard for local environmental sensitivities;

Make this policy known and available to the public.

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN	30669902792
Organisation name	NORMANVILLE ENERGY PARK PTY LTD
Organisation address	PO Box 433, Gisborne VIC 3437

Proposed designated proponent details

Name	Sarah Cane
Job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au
Address	PO Box 433, Gisborne VIC 3437, Australia

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	15656111125
Organisation name	WESTWIND ENERGY DEVELOPMENT PTY LTD
Organisation address	PO Box 433, Gisborne VIC 3437
Representative's name	Sarah Cane
Representative's job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au
Address	PO Box 433, Gisborne VIC 3437, Australia

Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	30669902792
Organisation name	NORMANVILLE ENERGY PARK PTY LTD

Organisation address	PO Box 433, Gisborne VIC 3437
Representative's name	Sarah Cane
Representative's job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au
Address	PO Box 433, Gisborne VIC 3437, Australia

Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

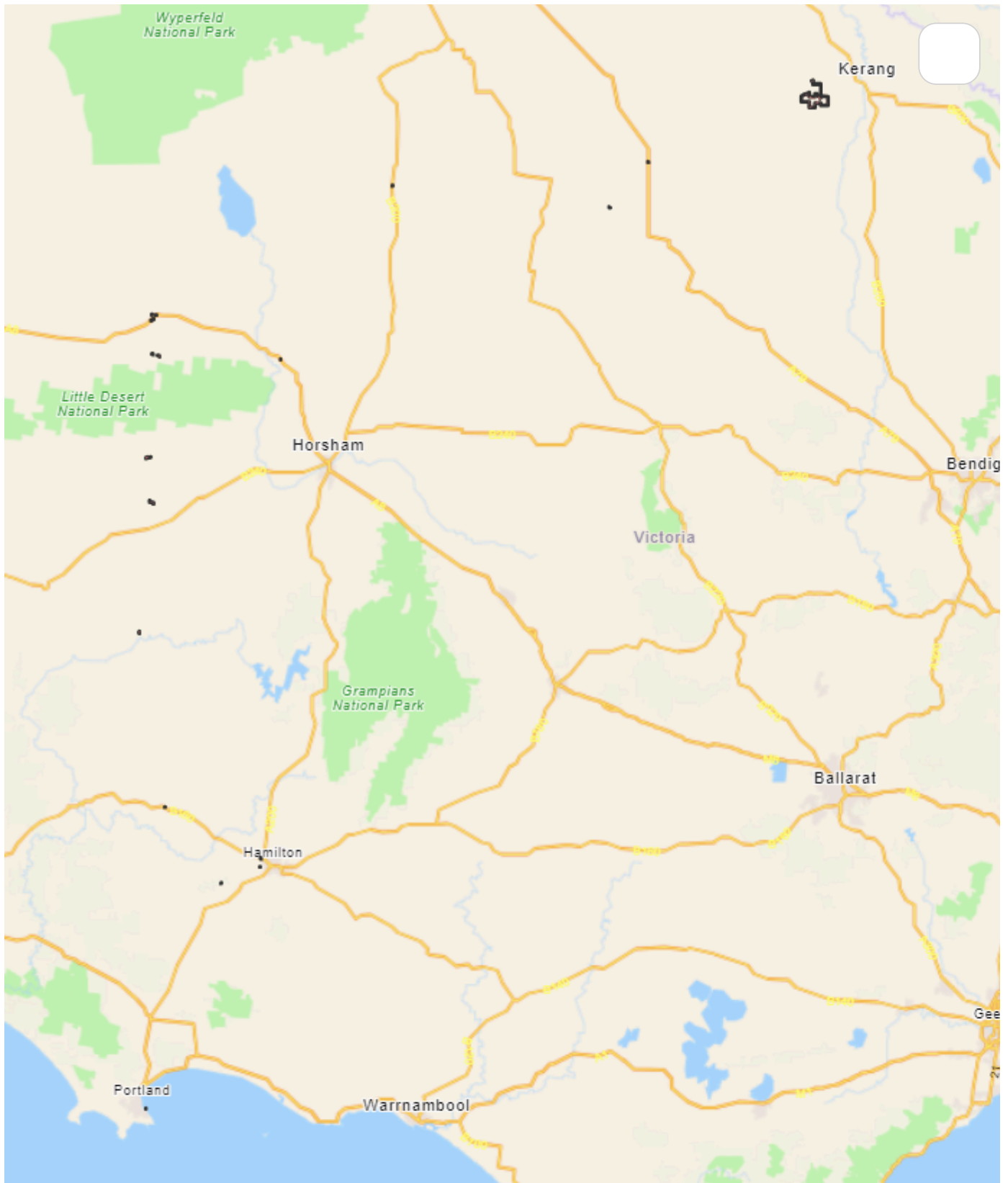
1.4 Payment details: Payment allocation

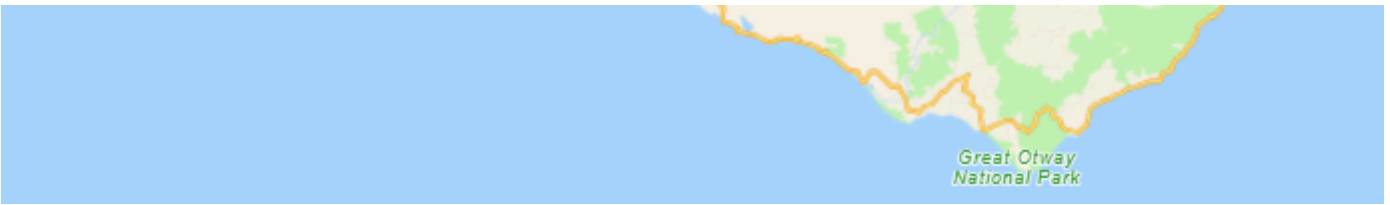
1.4.11 Who would you like to allocate as the entity responsible for payment? *

Proposed designated proponent

2. Location

2.1 Project footprint





Project Area: 1945.56 Ha Disturbance Footprint: 143.92 Ha

Maptaskr © 2025 -38.742655, 141.203356

Powered By Esri - Sources: Esri, TomTom, Garmin, FAO, N...

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Kerang-Quambatook Rd, Wandella; Denyer Road, Wandella VIC 3579

2.2.2 Where is the primary jurisdiction of the proposed action? *

Victoria

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

The Project area is located across the following lots:

Wind farm site

- Lot 54/PP2912 (freehold);
- Lot 2/PS326843 (freehold);
- Lot 40/PP2912 (freehold);
- Lot 39/PP2912 (freehold);
- Lot 62/PP2912 (freehold);
- Lot 61/PP2912 (freehold);
- Lot 60/PP2912 (freehold);
- Lot 58/PP2912 (freehold);
- Lot 59/PP2912 (freehold).

Transmission line

- Denyer Road
 - o PFI 133060886
 - o PFI 133065009
 - o PFI 133065109
- Quambatook-Kerang Road
 - o Transport Road Zone 2 – Principal Road Network (TRZ2)
- Kerang-Lalbert Road
 - o PFI 133065114

- o PFI 133061162

- o PFI 133069240

- 33/PP2912 (freehold);

Koorangie terminal station

- Lot 2/ PS921632 (freehold);

- Lot 2 / PS914951 (freehold);

(the wind farm site, Koorangie Terminal Station and the transmission line are together referred to below as the 'Project site')

Swept paths (transport route) – Portland to Normanville

- TBCNo2 Quay Road / Madeira Packet Road

- o PFI 132504828

- Henty Highway

- o PFI 132494340

- o PFI 132499656

- Henty Highway / Chrome Road

- o PFI 132596473

- o PFI 132598886

- Dartmoor-Hamilton Road / Chrome Road

- o PFI 13294909

- o PFI 132603425

- o PFI 132590698

- o PFI 132604559

- Dartmoor-Hamilton Road / Fairburns Road

- o PFI 132606244

- o PFI 132597368

- o PFI 132589804

- Glenelg Highway / Fairburns Road

- o PFI 132631825

- o PFI 132590196

- Glenelg Highway / Coleraine – Edenhope Road

- o PFI 132587075

- o PFI 132587455

- Coleraine – Edenhope Road / Nhill-Harrow Road

- o PFI 132534573

- o PFI 132533180

- Nhill-Harrow Road

- o PFI 132528076

- Nhill-Harrow Road

- o PFI 132527243

- Nhill-Harrow Road

- o PFI 132528180

- o PFI 132525899

- o PFI 132529960

- Nhill-Harrow Road

- o PFI 132525899

- o PFI 132529960

- o PFI 132536306

- Nhill-Harrow Road

- o PFI 132569650

- Nhill-Harrow Road

- o PFI 132569650

- Nhill-Harrow Road / Western-Highway

- o PFI 132559925

- o PFI 132569106

- Western-Highway / Mckenzie Avenue

- o PFI 132569034

- o PFI 132569106
 - Mckenzie Avenue / Nhill – Yanac Road
- o PFI 132569034
- o PFI 132565567
- o PFI 132563640
 - Western-Highway / Borung Highway
- o PFI 132562524
- o PFI 132563408
- o PFI 132568515
 - Henty Highway / Lyle Street
- o PFI 132900037
- o PFI 132902250
- o PFI 132906129
- o PFI 132908851
- o PFI 132910737
 - Henty Highway / Galaquil East Road
- o PFI 132899857
- o PFI 132900904
- o PFI 132904737
- o PFI 132908799
 - Mcloughlans Road / Sunraysia Highway
- o PFI 132780891
- o PFI 132786890
- o PFI 132789626
 - Birchip-Wycheproof Road / Donald Swan Hill Road
- o PFI 132782590
- o PFI 132785268
- o PFI 132791600
 - Donald Swan Hill Road/ Calder Highway
- o PFI 132783366
- o PFI 132791868

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

The majority of the Project area comprises public road reserves and private farmland that has been completely cleared of its original native ecosystem and cultivated for decades, mostly for cereal cropping. Most remnant vegetation and habitat are confined to roadsides, internal fence lines or small, retained patches on private land. Large spaces between patches of native vegetation offer opportunities to design the Project to ensure minimal vegetation loss.

The Project site (site boundary, transmission line and Koorangie Terminal Station) is located approximately 15 km south-west of Kerang township in the north of Victoria. It lies within the Murray Mallee Victorian bioregion and the Murray Darling Depression Interim Biogeographical Regionalisation of Australia (IBRA) bioregion. The Project site is under the jurisdiction of the North Central Catchment Management Authority (CMA) and Gannawarra Shire Council. Waterbodies within the Project site comprise artificial farm dams, often linked by artificial drainage channels. There are no rivers, creeks or DEECA mapped wetlands occurring within the Project site.

The wind farm site is bordered by Kerang-Quambatook Road to the north and Normanville Road to the south. Robinson Road and Denyer Road intersect the site boundary from north to south. The transmission line largely follows Denyer Road in a northerly direction to the intersection with Lalbert-Kerang Road. It then follows Lalbert-Kerang Road in a westerly direction to the turn-off for the existing Koorangie terminal station, where it will follow the existing access track north into the terminal station.

Twenty-four roadside locations (hereafter referred to as 'swept paths') along the transport route between Portland and Normanville will require vegetation clearance to facilitate the turning circles of the over-dimensional vehicles transporting the blades; these locations have been included in the Project area.

Further information on the current environmental conditions can be found in Attachment B, Section 4, pp. 19-25.

3.1.2 Describe any existing or proposed uses for the project area.

Existing uses

The wind farm site is designated as Farming Zone (FZ) under the Gannawarra planning scheme and is primarily used by cropping and agricultural activities. The roads to be used for the transmission line route are zoned FZ, except for Kerang-Quambatook Road, which is Transport Road Zone 2 – Principal Road Network (TRZ2)

The Project site and the surrounding area are in Victoria's Murray River Renewable Energy Zone. There are six solar farms (either approved or operating) within 40 km. The minimal low impact permanent infrastructure footprint of the Project (1.7% of the wind farm site) means that the current agricultural land use will generally be able to continue.

Existing use of the Koorangie terminal station and roads within the Project area will not be affected by the Project other than some temporary construction impacts.

Proposed uses

The proposed use involves the construction and operation of up to 17 WTGs and associated electrical infrastructure (Normanville Energy Park).

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

A small section of Little Lake Bael Bael (part of the Kerang Ramsar Wetlands) lies within 5 km of the northernmost extent of the site boundary.

The Kerang Ramsar Wetlands cover an area of 9,784 ha and comprise 23 named lakes, marshes and swamps. The wetlands are known for their variety of salinity and water regimes which result in diverse wetland vegetation communities including black box, river red gum and reed beds.

Project activities closest to Little Lake Bael Bael are limited to the installation of an external transmission line from a collector station within the site boundary to the existing Koorangie terminal station. Activities to connect the transmission line to the Koorangie terminal station involve minor, short-duration civil and electrical works and are within the existing terminal station footprint.

The closest wind turbine to Little Lake Bael Bael is located approximately 5 km to the south. The other 16 turbines are located between 5 km and 8.5 km from the lake. Neither the turbines nor the transmission line are anticipated to impact upon the ecosystem components, processes, benefits and quality of the Ramsar wetland. The construction activities will practice responsible erosion and sediment control measures to ensure that no stormwater activity or off site migration of sediment impacting Little Lake Bael Bael occurs.

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

The Project site is generally flat with no substantial changes in elevation or notable terrain features. Elevation across the Project site ranges between 80 m and 100 m above sea level.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

Extensive ecological surveys have been conducted in the Project site from November 2022 (spring) to the present. The survey effort to date is summarised below. Further information including all dates, methodologies and full survey outcomes is available in the Normanville MNES assessment (Attachment B).

Fourteen vegetation surveys and targeted surveys (for threatened ecological communities and listed threatened flora) were conducted across the wind farm site, transmission line route and along the transport route (swept paths) between November 2022 and October 2024.

A fauna overview assessment was conducted in November and December 2022. Sites within the study area considered to potentially support habitat or have the potential to support listed fauna species were mapped and visited. Habitats were identified and their connectivity determined. Techniques to detect fauna species included searches for mammal scats, tracks and signs, turning over ground debris and general searches for reptiles, frogs, mammals and birds.

Seven bird and bat utilisation surveys (BUS) were conducted between November 2022 and October 2024. A final BUS is planned for January 2025, which will conclude 24 months of BUS effort.

Existing ecosystem (general)

The Project area (including the wind farm site boundary, transmission line, Koorangie Terminal Station and swept paths) comprises public road reserves and private farmland, that has been largely cleared of its original native ecosystem and cultivated for decades. Remnant vegetation is largely confined to the road reserves, internal fence lines or small, retained patches on private farmland.

The Project site lies within the Murray Mallee Victorian bioregion and the Murray Darling Depression Interim Biogeographical Regionalisation of Australia (IBRA) bioregion. It is generally flat and underlain by red-brown sandy soil. Waterbodies are confined to artificial farm dams, often linked by artificial drainage channels.

Flora

The PMST identifies 13 listed flora species with the potential to occur within the Project site (wind farm site and transmission line) and/or a wider 10 km buffer. A likelihood of occurrence analysis informed by surveys undertaken by ecologists was conducted, concluding that none of these species are likely to occur (Appendix B, Appendix 1, pp. 43-44). None occurred within the development footprint.

The PMST identifies 14 listed flora species with the potential to occur within the transport route (swept paths) and/or a wider 10 km buffer. A likelihood of occurrence analysis informed by surveys undertaken by ecologists was conducted, concluding that 13 have the potential to occur, and one is known to occur but is assumed to be recently planted (Appendix B, Appendix 2, pp. 45-46).

Fauna

The PMST identifies 31 listed threatened fauna species, and 19 listed migratory fauna species with the potential to occur within the Project Area and/or a wider 10 km buffer. A likelihood of occurrence analysis informed by surveys undertaken by ecologists was conducted (Appendix B, Appendix 4, pp. 48-52). After excluding marine and pelagic fauna and migratory oceanic bird species (as they do not occur at this inland project area), the likelihood of occurrence analysis confirms that three listed fauna species are known to occur, and a further six have the potential to occur:

1. Blue-winged Parrot, *Neophema chrysostoma* (Vulnerable) – known to occur;
2. Brown Treecreeper, *Climacteris picumnus victoriae* (Vulnerable) – known to occur;

3. Corben's Long-eared Bat, *Nyctophilus corbeni* (Vulnerable) – potential to occur;
4. Diamond Firetail, *Stagonopleura guttata* (Vulnerable) – potential to occur;
5. Fork-tailed Swift, *Apus pacificus* (Migratory) – potential to occur;
6. Latham's Snipe, *Gallinago hardwickii* (Vulnerable, Migratory) – potential to occur;
7. Southern Whiteface, *Aphelocephala leucopsis* (Vulnerable) – potential to occur;
8. South-eastern Hooded Robin, *Melanodryas cucullata cucullata* (Endangered) – known to occur;
9. White-throated Needletail, *Hirundapus caudacutus* (Vulnerable, Migratory) – potential to occur.

Given the wide geographic range of the 24 individual swept path locations (from Portland to Normanville), and the minimal areas of roadside habitat to be impacted at each location, an overarching desktop search was conducted to ascertain the potential occurrence of listed fauna. Sources include the Victorian Biodiversity Atlas (VBA) and the PMST. One listed fauna species is identified as having the potential to occur:

1. Growling Grass Frog, *Litoria raniformis* (Vulnerable) – potential to occur.

Threatened ecological communities

The PMST identifies six threatened ecological communities (TECs) with the potential to occur within the Project Area. A likelihood of occurrence analysis informed by surveys undertaken by ecologists was conducted (Appendix B, Appendix 3, pp. 47), concluding that only one is known to occur:

1. Plains Mallee Box Woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions (PMBW) - Critically Endangered. 34.18 ha confirmed within the Project site.

Targeted surveys confirmed the presence of four TECs along the transport route:

1. Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregion (BWRM) - Endangered. 5.91 ha confirmed across the 24 swept path locations;
2. Natural Grasslands of the Murray Valley Plains (NGMV) - Critically Endangered. 1.020 ha confirmed across the 24 swept path locations;
3. Natural Temperate Grassland of the Victorian Volcanic Plain (NTGV) – Critically Endangered. 0.264 ha confirmed across the 24 swept path locations;
4. Plains Mallee Box Woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions (PMBW) - Critically Endangered. 1.027 ha confirmed across the 24 swept path locations.

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

The majority of the Project site is highly modified farmland, comprising extensive areas of cereal (wheat) cropping. Scattered trees are present in farmed paddocks; most are old multi-stemmed mallee eucalypts, with occasional Slender Cypress Pines also present. Non-native trees planted on private property include Pepper Tree and Sugar Gum.

Linear stretches of remnant native vegetation exist generally along public roads and fence lines.

In the central and western parts of the wind farm site, remnant native vegetation is primarily an open canopy of mallee eucalypts including Dumosa Mallee, Oil Mallee, Red Mallee, Bull Mallee, Grey Mallee and Slender-leaf Mallee. The understorey often comprises a mid-layer of shrubs including Cattle Bush, Weeping Pittosporum, Sugarwood and Umbrella Wattle, as well a diverse ground layer of saltbushes; Hedge Saltbush, Prickly Saltwort, Ruby Saltbush, Berry Saltbush, Saloop, Grey Copperburr and Black Cotton-bush are common. Native grasses and herbs are present but generally sparse. Common herbs include Pale Twin-leaf and Variable Sida.

The eastern part of the wind farm site is distinguished by an open canopy of Black Box with a similar understorey to that in the central and western parts of the site (described above).

Non-native species present across the wind farm site include annual grasses, African Box-thorn, Horehound and Common Heliotrope. Vegetation along the transport route is characterised by a mix of native and invasive flora in a degraded state, which has been subject to clearing, pollution and soil disturbance.

3.3 Heritage

3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.

There are no World Heritage listed sites or National Heritage listed sites within or adjacent to the Project area.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

There are no registered Aboriginal Places or cultural heritage places within the Project site.

There is no Registered Aboriginal Party appointed for the Project site. The Project site is located on Wemba Wamba Country.

A voluntary CHMP is being undertaken in consultation with the local Traditional Owner groups (the Barapa Aboriginal Corporation, the Wiran Aboriginal Corporation and the Wemba Wamba Aboriginal Corporation) for the wind farm site [and transmission line].

The Project's Preliminary Cultural Heritage Assessment Report found that the site prediction model concludes that there is a low to moderate likelihood that Aboriginal cultural heritage will be present within the study area. The 'moderate' value assigned to this assessment is based on the proximity of the Project Site to known archaeologically sensitive riparian and lacustrine landscapes. The Project Site could be considered a transitory landscape, utilised largely for targeted resource gathering and migration.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

The Project site is located within the Murray-Darling basin between the Avoca River, which is approximately five km north-west of the site boundary, and the Loddon River, approximately 10 km east of the site boundary (Attachment C, Section 5, pp. 16).

A small section of Little Lake Bael Bael (part of the Kerang Ramsar Wetlands) lies within 5 km of the northernmost extent of the site boundary. The Kerang Wetlands cover an area of 9,784 ha and comprise 23 named lakes, marshes and swamps. The wetlands are known for their variety of salinity and water regimes which result in diverse wetland vegetation communities including Black Box, River Red Gum and reed beds.

No rivers, creeks or DEECA mapped wetlands occur within the Project site. Waterbodies within the Project site comprise artificial farm dams, often linked by artificial drainage channels (Attachment B, Section 4.1, pp. 18). The artificial drainage channels are part of a network of minor drainage channels that deliver water for irrigating crops and for local storage. The capacity and general flow conveyance of the channels is assumed to be small and therefore unlikely to impact downstream receptors, including the Kerang Ramsar wetlands (Attachment C, Section 5, pp. 16).

Flood mapping indicates that flooding associated with the Avoca River and Loddon River floodplains during a 1 in 100-year flood event does not extend into the Project site (Attachment C, Section 5.1.2, pp. 20).

There is very limited groundwater development in the region, potentially reflecting the saline nature of the groundwater table. The available mapping indicates that groundwater is generally more than 10 m below ground level across most of the Project site, with the exception of the northern and eastern boundaries where it is between 5 m and 10 m below ground level. The depth to groundwater suggests that it does not discharge to local waterways (Attachment C, Executive Summary, pp. i).

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	No	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no World Heritage Sites within or adjacent to the Project Area.

The closest World Heritage site to the Project site is the Willandra Lakes Region in NSW, approximately 250 km to the north north-east.

Due to the considerable distance that the Project Area is from the closest World Heritage site, neither a direct nor an indirect impact is considered likely. Nevertheless the developer will implement responsible and legally compliant practices, such as installing silt fences and sediment basins, to ensure no migration of water or sediment off-site.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no National Heritage Places within or adjacent to the Project Area.

There are 28 National Heritage sites in Victoria. Closest to the Project Area are:

1. Echuca Wharf (approximately 100 km to the south-east)
2. Murtoa No. 1 Grain Store (approximately 170 km to the south-west)
3. Castlemaine Diggings National Heritage Park (approximately 200 km to the south).

Due to the considerable distances from the Project Area, both direct and indirect impacts are considered to be unlikely.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	No	Kerang Wetlands

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The wind farm site is approximately 5 km upstream of Little Lake Bael Bael, which is the closest part of the Kerang Ramsar Wetlands.

Relevant construction activities within the wind farm site are primarily the earthworks required to install the turbine foundations and hardstands, and to a lesser extent (due to the reduced depth and on-ground footprint), the access tracks and internal electrical cabling. The potential impact associated with these activities is contaminated (most likely by sediment and/or hydrocarbons) runoff draining into the Kerang Ramsar wetlands, either directly or via the Avoca River. This impact is unlikely to occur due to the 5 km distance between the closest turbine (and therefore the most significant earthworks) and Little Lake Bael Bael is vegetated, pervious ground; the likelihood of comparatively small volumes of runoff reaching the wetland is improbable (Appendix C, Section 8.4, pp. 56). Equally, best practice construction management measures will be implemented including selective siting, bunding, spill control, and sediment and erosion controls, reducing the post-control (mitigated) risk level to insignificant (Attachment C, Section 8.4, pp. 56).

The underground transmission line is proposed to run from a collector station within the wind farm site to the Koorangie terminal station. Connecting the transmission line to the terminal station will involve minor, short-duration civil and electrical works to install an additional transformer. These works will occur within the existing terminal station footprint, which has already established drainage, impervious concrete bunding and operates according to an established Operation Environmental Management Plan. The minimal nature of the works and the existing management framework within an established facility mean that any impacts to the Ramsar wetland are insignificant.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	Aphelocephala leucopsis	Southern Whiteface
No	No	Botaurus poiciloptilus	Australasian Bittern

Direct impact	Indirect impact	Species	Common name
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)
No	No	<i>Crinia sloanei</i>	Sloane's Froglet
No	No	<i>Eleocharis obicis</i>	a spike rush
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Galaxias rostratus</i>	Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	No	<i>Grantiella picta</i>	Painted Honeyeater
No	No	<i>Hemiaspis damelii</i>	Grey Snake
No	No	<i>Lathamus discolor</i>	Swift Parrot
No	No	<i>Leipoa ocellata</i>	Malleefowl
No	No	<i>Lepidium aschersonii</i>	Spiny Peppercross
No	No	<i>Lepidium monoplocoides</i>	Winged Pepper-cross
No	No	<i>Litoria raniformis</i>	Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog
No	No	<i>Lophochroa leadbeateri leadbeateri</i>	Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo
No	No	<i>Maireana cheelii</i>	Chariot Wheels
No	No	<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin, Hooded Robin (south-eastern)
No	No	<i>Myriophyllum porcatum</i>	Ridged Water-milfoil
No	No	<i>Neophema chrysostoma</i>	Blue-winged Parrot
No	No	<i>Nyctophilus corbeni</i>	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	No	<i>Pedionomus torquatus</i>	Plains-wanderer
No	No	<i>Polytelis anthopeplus monarchoides</i>	Regent Parrot (eastern)
No	No	<i>Rostratula australis</i>	Australian Painted Snipe
No	No	<i>Senecio behrianus</i>	Stiff Groundsel, Behr's Groundsel
No	No	<i>Stagonopleura guttata</i>	Diamond Firetail

Direct impact	Indirect impact	Species	Common name
No	No	Swainsona murrayana	Slender Darling-pea, Slender Swainson, Murray Swainson-pea
No	No	Tringa nebularia	Common Greenshank, Greenshank

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	No	Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions
No	No	Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia
No	No	Mallee Bird Community of the Murray Darling Depression Bioregion
Yes	No	Natural Grasslands of the Murray Valley Plains
Yes	No	Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions
No	No	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Desktop searches of sources including the VBA and PMST identified 58 threatened species (27 flora species and 31 fauna species) with the potential to occur in the Project area.

In depth threatened ecological communities assessment, including a likelihood of occurrence analysis informed by surveys undertaken by ecologists, concluded that 14 threatened flora species and nine threatened fauna species are either known to occur or have the potential to occur (due to the confirmed presence of suitable habitat) in the Project area:

Flora (all associated with the 24 swept path locations along the transport route, none within the Project site)

1. Matted Flax-lily, *Dianella amoena* - potential to occur;
2. Clover Glycine, *Glycine latrobeana* - potential to occur;
3. White Sunray, *Leucochrysum albicans subsp. tricolor* - potential to occur;
4. Fragrant Leek-orchid, *Prasophyllum suaveolens* - potential to occur;
5. Ornate Pink-fingers, *Caladenia ornata* - potential to occur;
6. Metallic Sun-orchid, *Thelymitra epipactoides* - potential to occur;
7. Spiral Sun-orchid, *Thelymitra matthewsii* - potential to occur;
8. Floodplain Rustyhood, *Pterostylis cheraphila* - potential to occur;
9. Slender Darling-pea, *Swainsona murrayana* - potential to occur;
10. Red Swainson-pea, *Swainsona plagotropis* - potential to occur;
11. Striate Spike-sedge, *Eleocharis obicis* - potential to occur;
12. Chariot Wheels, *Maireana cheelii* - potential to occur;
13. Hairy-pod Wattle, *Acacia glandulicarpa* - known to occur, however likely planted;

14. Turnip Copperburr, *Sclerolaena napiformis* - potential to occur.

Targeted surveys in September and October 2024 did not record any listed, threatened flora species (noting that the Hairy-pod Wattle is presumed to be planted). Potential indirect impacts are the introduction or spread of invasive species (weeds and pests). Expert assessment concluded that, considering that no listed, threatened flora species have been recorded, the minimal footprint of each swept path location (ranging from 0.28 ha to 0.67 ha), and the fact that not all locations require clearance down to ground level, the likelihood of impacts is low.

Fauna

1. Blue-winged Parrot, *Neophema chrysostoma* – known to occur;
2. Brown Treecreeper, *Climacteris picumnus victoriae* – known to occur;
3. Corben's Long-eared Bat, *Nyctophilus corbeni* – potential to occur;
4. Diamond Firetail, *Stagonopleura guttata* – potential to occur;
5. Latham's Snipe, *Gallinago hardwickii* – potential to occur;
6. Southern Whiteface, *Aphelocephala leucopsis* – potential to occur;
7. South-eastern Hooded Robin, *Melanodryas cucullata cucullata* – known to occur;
8. White-throated Needletail, *Hirundapus caudacutus* – potential to occur;
9. Growling Grass Frog, *Litoria raniformis* (Vulnerable) – potential to occur along Transport Route only.

The Growling Grass Frog has the potential to occur in an ephemeral pond in the road reserve at one of the swept path locations. Consequently the pond itself has been avoided through layout changes, however there is the potential for indirect impacts due to disturbance associated with works adjacent to the pond. These impacts will be avoided by timing of construction during late summer and autumn when the wetland is dry and habitat is not utilised by Growling Grass Frog. Further mitigation measures will be outlined in the Construction Environmental Management Plan.

Five threatened species have either been confirmed by survey or may potentially occur within the Project site due to the presence of suitable habitat and the likelihood of their occurrence. These threatened species are as follows:

- Hooded Robin (south-eastern) (*Melanodryas cucullata cucullata*) – endangered – confirmed present
- Blue-winged Parrot (*Neophema chrysostoma*) – vulnerable – confirmed present.
- Brown treecreeper (*Climacteris picumnus victoriae*) – vulnerable – confirmed present.
- White-throated Needletail *Hirundapus caudacutus* – vulnerable – potential to occur.
- Corben's Long-eared Bat (*Nyctophilus corbeni*) – vulnerable – potential to occur.

Given the uncertainties around bird and bat strike and barotrauma impacts from operational turbines, assessments concluded that the Project may have minimal impacts on species that may fly at rotor height:

- Corben's Long-eared Bat
- White-throated Needletail
- Blue-winged Parrot

The Project may result in the direct loss of potential habitat for the Brown Treecreeper, Hooded Robin, Blue-winged Parrot, and Corben's Long-eared Bat due to vegetation clearing during construction. However, the removal of native vegetation is expected to be minimal, as it is generally confined to road reserves and small patches in paddocks, which the Project aims to avoid during its design and development.

Indirect impacts on the species may also occur due to noise and dust generated during construction. To mitigate these impacts, we will implement measures such as using dust suppression techniques, scheduling construction activities to avoid sensitive periods for wildlife, and installing noise barriers where necessary.

The EPBC Protected Matters Search Tool indicated that seven TECs had the potential to occur in the Project area:

1. Mallee Bird Community of the Murray Darling Depression Bioregion
2. Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains
3. Grey Box Grassy Woodlands and Derived Native Grasslands of South-eastern Australia
4. Natural Grasslands of the Murray Valley Plains
5. Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions
6. Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions
7. White Box-yellow Box-Blakeley's Red Gum Grassy Woodland and Derived Nature Grassland

Direct impacts through vegetation clearance are expected for three of the four TECs confirmed to occur (see referral section 3.2.1) within the Project area:

1. Plains Mallee Box Woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions (PMBW)
35.207 ha of PMBW are confirmed within the Project area (site boundary, transmission line and swept paths). Removal of a total of 0.114 ha (0.32%) is required for track crossovers within the Project area, and to facilitate the turning circles of the over-dimensional vehicles transporting the blades.
2. Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregion (BWRM)
5.91 ha of BWRM are confirmed across the 24 swept path locations. Removal of 0.167 ha (2.8%) is required to facilitate the turning circles of the over-dimensional vehicles transporting the blades.
3. Natural Grasslands of the Murray Valley Plains (NGMV)
1.020 ha of NGMV are confirmed across the 24 swept path locations. Removal of 0.026 ha (2.5%) is required to facilitate the turning circles of the over-dimensional vehicles transporting the blades.

Impacts to these TECs are small and isolated, ranging from 0.0007 ha to 0.1516 ha (Attachment B, Section 5.2, pp. 27). Areas to be removed comprise roadside remnant woodland, grassland patches, and scattered trees. Significant impacts are considered unlikely given these areas comprise small parts of much larger patches within the landscape. An assessment of impacts to these communities against the Significant Impact Criteria (DoE 2013) concludes that a significant impact to TECs is unlikely (Attachment B, Section 5.2, pp. 26).

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

No

4.1.4.6 Describe why you do not consider this to be a Significant Impact. *

From a review of the Protected Matters Search Tool and the species recorded in the Victorian Biodiversity atlas, the following are considered to have potential to occur in the Project site:

Hooded Robin

The Hooded Robin was only recorded only once as a single individual during bird utilisation surveys in 2023, suggesting it is rare at the Project Site. The Hooded Robin may occur on site in low densities however it is unlikely to be impacted by operational turbines because it favours woodland which is largely absent on-site and generally flies lower than canopy height, which is significantly lower than height of the proposed rotor swept area (minimum of 50m from ground to RSA). Expert assessment concluded that, due to the limited occurrence of the species and given the project will not result in loss of habitat that is critical to the survival of the species, significant impacts are not anticipated.

Blue-winged Parrot

The Blue-winged Parrot has a low risk of being impacted by operational turbines because it is not abundant within 10 km of the site and is generally observed around wetlands and large areas of woodland which are absent from site. Expert assessment concluded that, due to the limited occurrence of the species and given the project will not result in loss of habitat that is critical to the survival of the species, significant impacts are not anticipated.

Brown Treecreeper

The Brown Treecreeper is unlikely to be impacted by operational turbines because it favours woodland which is largely absent on-site and generally flies lower than canopy height. Expert assessment concluded that, due to the limited occurrence of the species and given the project will not result in loss of habitat that is critical to the survival of the species, significant impacts are not anticipated.

White-throated Needletail

The site is located on the northwestern extent of the White-throated Needletail's range. The species has not been recorded on-site during any of the surveys and roosting habitat to support flocking is absent within the region of the site. The species more regularly fly over wooded areas and less likely over grasslands or swamps. The species is known to collide with turbines, however, expert assessment concluded that due to the limited occurrence of the species on-site and given there is no roosting habitat on site, significant impacts are not anticipated.

Corben's Long-eared Bat

A desktop review found one record of Corben's Long-eared Bat being captured two years ago over 50km away from the site. The species is unlikely to be consistently present within the local area. It forages at the edge of the canopy and within vegetation and is also unlikely to regularly fly at rotor swept area (RSA) height. Expert assessment concluded that, due to the species unlikely to be present onsite and limited occurrence of the species on-site and given it is unlikely to collide with the proposed turbines, significant impacts are not anticipated and the disturbance from the project will not result in loss of habitat that is critical to the survival of the species.

Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions

The Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plains occurs within 35.10ha of the Site and Transport Route. The Project proposes to remove 0.11ha of this TEC (0.068 ha within the Project Site and 0.046 ha along transport route). The TEC is primarily within road reserves and small patches in paddocks. Any impact is expected to be minimal and consistent with existing circumstances associated with the agricultural use. The Project is designed to utilise access points and open cropping land, avoiding the removal of the majority of the community. Expert assessment concluded that the Project will not significantly alter the overall ecological function of the community, nor its long-term survival, due to the small and localised nature of potential impacts.

As described in referral section 4.1.4.2:

- 14 threatened flora species are unlikely to be impacted by the Project; we do not consider this to be a significant impact;
- Nine threatened fauna species are unlikely to be impacted by the Project; we do not consider this to be a significant impact;
- Three TECs are likely to be impacted by the Project. These impacts are small and isolated.

An assessment of impacts against the Significant Impact Criteria (DoE 2013) concludes that a significant impact to TECs is unlikely and therefore we do not consider this to be a significant impact.

4.1.4.7 Do you think your proposed action is a controlled action? *

No

4.1.4.9 Please elaborate why you do not think your proposed action is a controlled action. *

Impacts to threatened species are considered unlikely and impacts to ecological communities are small and isolated. A significant impact is considered unlikely, and therefore we do not think the proposed action is controlled action.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Throughout the initial design phase, we have carefully positioned project infrastructure to avoid impacting native vegetation across the site. Since the Project site is predominantly cropping land, we can site infrastructure and turbines to prevent direct impacts on patches of native vegetation in paddocks and along the roadside. This approach to designing around native vegetation will assist with protecting the values of matters of National Environmental Significance by:

- Retaining the quality and ecological function of the patches of Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plains community.
- The existing habitat for the Hooded Robin, Brown Treecreeper and Corben's Long-eared Bat will not be significantly impacted and the species can remain within the Project site.

The impacts of the Project will be further evaluated as preliminary studies are conducted, and the design will be refined to better utilize the site and minimize impacts. This process will incorporate data from wind monitoring, environmental assessments, and feedback from host landholders and the local community. To minimize potential impacts, we will implement several mitigation measures, including:

- Micro-siting turbines and infrastructure to avoid the removal of native vegetation where possible.
- Implementing management plans to ensure that any necessary removal of native vegetation is conducted to best practice, with avoidance measures in place to protect threatened species.
- Developing a Bird and Bat Management Plan to address the potential for turbine collisions with birds and bats, including specific mitigation measures.
- Creating buffer zones around sensitive habitats to protect them from construction activities.
- Using low-impact construction techniques to reduce soil disturbance.
- Implementing erosion and sediment control measures to prevent runoff into nearby water bodies.
- Conducting regular environmental monitoring to detect and address any unforeseen impacts promptly.
- Restoring disturbed areas with native vegetation to promote habitat recovery.
- Engaging with local communities and stakeholders to incorporate their feedback and address concerns.

These measures will help ensure the wind farm minimizes its environmental footprint and protects local biodiversity.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Given the low impact of the Project, an offset strategy will not be necessary. The Project will comply with the Victorian Government's *Planning and Environment Act 1987* and the Guidelines for the removal, destruction, or lopping of native vegetation, ensuring minimal environmental disturbance.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper

Direct impact	Indirect impact	Species	Common name
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Motacilla flava	Yellow Wagtail
No	No	Tringa nebularia	Common Greenshank, Greenshank

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.5.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

Desktop searches of sources including the VBA and PMST identified 1 migratory species with the potential to occur in the Project site:

1. Fork-tailed Swift, *Apus pacificus* – potential to occur.

Fork-tailed Swift has not been recorded at the Project Site. The species occurs throughout Australia over late spring, summer and into autumn. Locally, its occurrence is nomadic and driven by abundance of small aerial insects.

As the species is highly mobile, is not expected to frequent the Project site regularly and is unlikely to rely on terrestrial habitats (Attachment B, Section 5.3.1, pp. 27), the primary potential impact is collision with operating turbines. Due to the species' scarcity on-site, there is considered to be a very low risk of turbine collision, (Attachment B, Section 5.3.1, pp. 27).

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project does not involve a nuclear facility.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is not located in or nearby a Commonwealth Marine Area.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is not located on or within the catchment of the Great Barrier Reef Marine Park.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is not a large coal mining or coal seam gas development.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is not located on Commonwealth Land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—
4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

Not applicable. The Project area is within Australia.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

None

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)

- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

An alternate timeline for the proposed wind farm was not possible due to several key factors:

- **Regulatory Approvals:** The project requires multiple permits and approvals from various regulatory bodies, including environmental assessments under the Victorian State EES process. These processes are time-consuming and involve extensive public consultations and reviews.
- **Stakeholder Engagement:** Effective engagement with local communities, state, and federal agencies was essential to address concerns and mitigate potential conflicts. This engagement is crucial for gaining support and ensuring the project meets all legal and social requirements.
- **Site Selection and Environmental Impact:** Identifying a suitable site that minimizes environmental impact and conflicts with other land uses is a complex process. This involved detailed studies and assessments, which cannot be fast tracked without compromising the project's integrity.
- **Technical and Financial Planning:** Developing a comprehensive technical and financial plan for the wind farm, including securing financing and negotiating power purchase agreements, requires significant time and coordination.

These factors collectively contributed to the necessity of the proposed timeline, ensuring the project was developed responsibly and sustainably.

Following extensive research and evaluation, the Proponent determined that the proposed location is the most suitable for the NMEP project due to several key factors:

1. **Wind Resource Availability:** The proposed site has been identified as having optimal wind conditions necessary for efficient energy production. Alternative locations did not offer the same level of wind resource reliability.
2. **Environmental Impact:** The chosen site allows us to minimize environmental disruption. Other potential sites posed greater risks to sensitive ecosystems and wildlife habitats.
3. **Proximity to Infrastructure:** The proposed location is strategically positioned near existing infrastructure, such as roads and power grids, which reduces the need for extensive new construction and associated environmental impacts.
4. **Community Support:** We have engaged with local communities and stakeholders, and the proposed site has received positive feedback and support. Alternative locations faced significant opposition or lacked the necessary community backing.
5. **Land Use Compatibility:** The proposed site is compatible with existing land use practices, ensuring that agricultural activities can continue with minimal disruption. Other locations would have required significant changes to current land use, impacting local livelihoods.

By selecting this location, we are confident that we can achieve our project goals while maintaining our commitment to environmental stewardship and community well-being.

During the scoping stage of the Project, consideration has been given to the 'do nothing' scenario and the 'Project scenario'. The 'do nothing' scenario would mean that the 17 WTGs and BESS would not be constructed at the proposed Project location, which would forego the benefits of the Project. The outcomes of the 'do nothing' scenario would include:

- Not delivering the estimated emissions savings of the Project of millions of tonnes of CO2 per year
- Not contributing towards Australia's 2050 net zero targets, as legislated in the *Climate Change Act 2022*
- Not providing enough electricity to power more than 90,000 homes;
- Not providing additional annual income lasting decades to farmers hosting Project infrastructure.

The 'do nothing' scenario is not the preferred option for the Project.

5. Lodgement

5.1 Attachments

1.3.2.16 (Person proposing to take the action) Nature of the trust arrangement in relation to the proposed action

Type	Name	Date	Sensitivity	Confidence
#1.	Document Attachment A_Trust deed.pdf		Yes	

3.1.1 Current condition of the project area's environment

Type	Name	Date	Sensitivity	Confidence
#1.	Document Attachment B_MNES assessment.pdf Assessment of impacts to MNES	03/12/2024	No	High

3.4.1 Hydrology characteristics that apply to the project area

Type	Name	Date	Sensitivity	Confidence
#1.	Document Attachment C_Surface water and groundwater assessment.pdf Surface water and groundwater assessment	25/11/2024	No	High

5.2 Declarations

✔ Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	15656111125
Organisation name	WESTWIND ENERGY DEVELOPMENT PTY LTD
Organisation address	PO Box 433, Gisborne VIC 3437
Representative's name	Sarah Cane

Representative's job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au
Address	PO Box 433, Gisborne VIC 3437, Australia

Check this box to indicate you have read the referral form. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

By checking this box, I, **Sarah Cane of WESTWIND ENERGY DEVELOPMENT PTY LTD**, 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. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	30669902792
Organisation name	NORMANVILLE ENERGY PARK PTY LTD
Organisation address	PO Box 433, Gisborne VIC 3437
Representative's name	Sarah Cane
Representative's job title	Planning and Environment Manager
Phone	0411252819
Email	environment@w-wind.com.au
Address	PO Box 433, Gisborne VIC 3437, Australia

Check this box to indicate you have read the referral form. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

I, **Sarah Cane of NORMANVILLE ENERGY PARK PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

- Check this box to indicate you have read the referral form. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *
- I, **Sarah Cane of NORMANVILLE ENERGY PARK PTY LTD**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *