PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

Name of Proponent:	Neoen Australia Pty Ltd
Authorised person for proponent:	Matthew Parton
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Person who prepared Referral:	David Knight
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Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	Neoen Australia Pty Ltd (Neoen) is a developer, operator and long-term investor in renewable energy assets. Neoen has an established track record of constructing 11 renewable energy projects in Western Australia, South Australia, New South Wales and Victoria. Neoen owns three projects with co-located renewable energy generation and batteries and is a leader in energy system integration.
	Neoen has engaged suitably qualified consultants to undertake a range of investigations in relation to the proposed Kentbruck Green Power Hub. The following specialist investigations have been undertaken to accompany this EES referral:
	Preliminary Landscape and Visual Impact Assessment, prepared by Green Bean (dated July 2019)
	<i>Preliminary Flora and Fauna Assessment</i> , prepared by Biosis (dated July 2019)
	Preliminary Cultural Heritage Due Diligence Assessment, prepared by Biosis (dated July 2019)
	<i>Preliminary Noise Assessment,</i> prepared by AECOM (dated July 2019)
	Preliminary Hydrology Technical Memorandum, prepared by AECOM (dated March 2019)

1. Information on proponent and person making Referral

2. Project – brief outline

Project title: Kentbruck Green Power Hub Project

Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing Project site or investigation area, as well as its regional and local context)

Neoen Australia Pty Ltd (Neoen) is proposing an up to 900-megawatt (MW) wind farm and battery storage facility to be located in an actively managed and harvested pine plantation in Victoria's south west, between Portland and Nelson. The key components of the Kentbruck Green Power Hub (the Project) will comprise:

- A wind farm, consisting of up to 157 wind turbines and associated infrastructure
- A battery storage facility, comprising a lithium-ion (or other battery technology) battery with up to 500 megawatts (MW) / 1,000 MW hours of storage
- A connection to the electricity grid via an underground and/or overhead transmission line.

The Project will be wholly located within the Glenelg Shire. The location of the Project is shown in Figure 1 – Location plan.

A brief description of the Project is outlined below under 'Short Project Description'. The locations of the proposed wind farm, battery storage facility and transmission line options are shown in Figure 2 – Project overview. An alternative version of Figure 2 – Project overview with a topographic map base layer is also included. More detailed descriptions of the existing environment associated with the Project are provided in Section 8 of this form.

Wind farm

The proposed wind farm site is located approximately 30 kilometres north west of the township of Portland and approximately three kilometres to the east of the township of Nelson in Victoria (from the closest edge of town to the closest point of the proposed wind farm site boundary). The proposed wind farm site boundary is shown on Figure 2 – Project overview.

The Portland-Nelson Road bisects the wind farm site in a generally east to west direction. The site is generally bound by forestry to the north, highly-modified land used for grazing purposes to the east and west, Discovery Bay Coastal Park to the south, and the Lower Glenelg National Park and Cobboboonee National Park to the east and north-east. Key existing features around the Project are shown in Figure 2 – Project overview.

The wind farm covers an approximate area of 7,500 hectares. The Project will also include either around 32 kilometres or 45 kilometres of linear infrastructure consisting of underground and/or overhead electricity transmission line (dependant on the final transmission line option selected).

The wind farm includes 107 individual land parcels, although the wind farm infrastructure will take up only a fraction of this total area once the Project is operational. Most of the site is located within an area that has been substantially modified for commercial forestry use (active management and harvesting of radiata pine). On the eastern and western extents of the site there are some areas of land used for agricultural purposes (primarily grazing).

Transmission line options

The Project will connect to the electricity network via a new transmission line. There are currently two options are under consideration, with the preferred option subject to ongoing design development and discussions with Project stakeholders. Two transmission line development envelopes have been established to show the area within which the route for the transmission line will be located (see Figure 2 – Project overview). Using a development envelope for the transmission line options provides flexibility for the selection of the preferred route, which will be defined in response to environmental, land use and topographical constraints, landholder negotiations and technical and operational requirements. This approach is critical as it also allows for flexibility in response to the final design of the wind farm and the corresponding electrical requirements.

The locations of these development envelopes being considered as well as the proposed connection points are described in the section below and shown in Figure 2 – Project overview.

1. <u>Transmission line option one: underground cable/combined underground cable and</u> <u>overhead line route</u>

The option one route extends from the eastern boundary of the proposed wind farm to the existing Heywood Terminal Station located inside the western boundary of the Narrawong Flora Reserve (on land owned by Ausnet and zoned Public Use Zone – Schedule 1 under the Glenelg Planning Scheme). This transmission line connection option is approximately 32 kilometres in length and will bisect the Cobboboonee National Park for around 15 kilometres. Within the Cobboboonee National Park, the transmission line will be buried underneath either Boiler Swamp Road or Cut-out Dam Road. At the eastern end of the route between the Cobboboonee National Park and the Heywood Terminal Station, the transmission line will be either an underground cable or an overhead line and will cross properties predominantly used for grazing.

2. Transmission line option two: overhead line route

The option two route generally extends between the eastern boundary of the proposed wind farm to a cut-in point on the existing Heywood to Portland 500kV transmission line north of Portland. The option two route consists of an overhead transmission line to be mounted on poles or towers. The route will be around 45 kilometres in length dependent on the final route selection and will be located primarily within freehold land used for grazing. This option will require the development and construction of a new electrical terminal station located adjacent to the existing 500kV line north of Portland.

Battery storage facility options

At this stage, two locations for the battery storage facility are being considered:

- 1. Adjacent to the collector station that will be located within the proposed wind farm site boundary. The collector station for the Project is anticipated to be located at the eastern end of the site.
- 2. Adjacent to the terminus of the transmission line. This will be either adjacent to the Heywood Terminal Station at Heywood, or on land adjacent to the existing 500kV line into which the Project will connect to at a point north of Portland.

Short project description (few sentences):

The Project is in the early stages of development and indicatively consists of up to 157 turbines and associated infrastructure, a battery storage facility and a transmission line to connect the Project to the electricity network, and includes (but is not limited to):

- Internal site access tracks and upgrades to existing access points from the public road network
- Hardstand and lay down areas
- Underground electricity cabling
- Overhead power lines (up to 275kV)
- Electricity collector stations
- Overhead and/or underground electricity cabling
- A terminal station to provide a connection to the existing 500kV transmission line east of the wind farm site (for transmission line option two)
- Permanent meteorological monitoring masts (met masts)
- An operations and maintenance building
- Temporary infrastructure including construction compounds, concrete batching plants, car parking, site buildings and amenities.

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):

Kentbruck Green Power Hub will supply renewable electricity to the National Electricity Market (NEM). The Project will play a key role in supporting Victoria's transition to increased penetration of renewable energy in the electricity generation sector.

The aim of the Kentbruck Green Power Hub Project is to generate approximately 3,300 gigawatt hours (GWH) per annum, of renewable energy to supplement Victorian and Australian energy supply, through the development of a viable wind energy facility. The Project will power around 500,000 households and reduce Australia's carbon emissions by around 3.5 million tonnes of carbon dioxide annually. These calculations are preliminary and subject to final design.

Kentbruck Green Power Hub will also include a battery storage facility with around 500 MW / 1,000 MW hours of storage capacity. The battery storage facility will play two important roles in supporting Victoria's transition to renewable energy:

- Strengthening the Victorian electricity grid by providing frequency control and short-term network security services
- Storing power from the wind farm when demand is low and dispatching this stored energy when demand for electricity is high, reducing the need for more expensive alternatives and putting downward pressure on Victoria's electricity prices.

Kentbruck Green Power Hub will:

- Support Victoria's Renewable Energy Target which has the goal of reaching 25 per cent renewable penetration by 2020 and 40 per cent renewable penetration by 2025 (up to 1500 megawatts (MW) of new large-scale renewable energy capacity by 2020 and up to 5400MW by 2025)
- Support initiatives within the *Victorian Climate Change Act 2017* to assist in meeting a greenhouse gas emissions reduction target of net zero emissions by 2050
- Support the Australian Government commitment to achieve its 2030 climate change target, to reduce greenhouse gas emissions by 26 per cent to 28 per cent on 2005 levels by 2030.

Background/rationale of project (describe the context / basis for the proposal, eg for siting):

Neoen has strategically identified, developed, constructed and owns 11 wind farms, solar farms and battery storage facilities around Australia. Neoen is also the owner and operator of the largest battery in the world, the Hornsdale Power Reserve, located near Jamestown in South Australia.

One of the key advantages of this Project site is its proximity to the extremely secure AusNet 500kV electricity network (see Figure 2 – Project overview). This 500kV infrastructure will allow energy produced by the facility to be efficiently transported to both the Portland Aluminium Smelter (the major load in Western Victoria) as well as Melbourne and surrounds, the major electricity load centre of Victoria. As has been seen during electricity outages in February 2019, in which 200,000 houses lost power, dispatchable generation such as the Kentbruck Green Power Hub will be essential moving forward. The security of the 500kV network will ensure that when required, Kentbruck Green Power Hub will be able to effectively dispatch energy required by Victoria.

Other key factors contributing to the suitability of the site include:

- The area provides a strong and consistent wind resource.
- Proximity to existing transport networks, including the Port of Portland.
- The surrounding area has a very low population density.
- The site is subject to previous disturbance from either commercial forestry or agriculture.
- The 500kV network has the capacity to transport large volumes of electrical energy to the Victorian load centre in Melbourne.
- The site will use existing access points and, wherever possible, an existing road network currently used for hauling logs within the pine plantation.

- Supportive host landowners.
- The current land use of the site (predominantly forestry land and limited agricultural land used for grazing) including the controlling zone and overlay provisions are compatible with a proposed wind energy facility.

Main components of the project (*nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):*

Figure 3 – Indicative development plan shows the main components of the Project. An alternative version of Figure 3 – Indicative development plan with a topographic base map is also included. As previously mentioned, the Project is in the early stages of development and specific details will be refined following the completion of further environmental investigations including (but not limited to) targeted ecological surveys and complex cultural heritage assessment. A small number of work exclusion areas are shown within the indicative wind farm site boundary on Figure 3. These correspond with areas on the site that will not be used as part of the Project due to existing constraints, predominantly associated with the ongoing use of the site for actively managed and harvested forestry.

The proposed wind farm will consist of up to 157 wind turbines. Specific turbine details will be developed following a tendering process which will take place once planning approvals have been granted. At this stage, the turbines are proposed to meet the following metrics:

- 4 MW to 8 MW peak power output
- tip height of up to 270 metres above ground level
- rotor diameter of up to 190 metres
- lower blade sweep height of 45 metres or higher (the distance between the ground and the bottom of the blade at its lowest point).

An indicative wind turbine showing the dimensions outlined above is included in Figure 4 – Indicative wind turbine dimensions.

Subject to geotechnical assessments, the turbine foundations will consist of concrete gravity or rock anchor foundations. Foundations will be approximately four metres deep with an approximate outer diameter of 25 metres.

The Kentbruck Green Power Hub will consist of an underground and / or overhead transmission line to connect the Project to the electricity grid (see Figure 2 – Project overview). Currently, two options are under consideration with the final option subject to ongoing design development and discussions with Project stakeholders. Two transmission line development envelopes have been established to show the area within which the route for the transmission line will be located. Using a development envelope for the transmission line options provides flexibility for the selection of the preferred route, which will be defined in response to environmental, land use and topographical constraints, landholder negotiations and technical and operational requirements. This approach is critical as it also allows for flexibility in response to the final design of the wind farm and the corresponding electrical requirements.

The Kentbruck Green Power Hub will also include a battery storage facility. The dimensions of the battery storage will be around 350 metres in width, 350 metres in length and around six metres in height (with some items such as lightning protection being taller). The battery storage facility will be located either adjacent to the collector station within the wind farm site or adjacent to the connection to the electricity grid. The selection of the preferred location for the battery storage facility is subject to ongoing design development and the selection of the preferred transmission line route.

The wind farm is anticipated to have a total capacity of up to 900 megawatts. The battery storage facility is anticipated to have a storage capacity of up to 1000 MW hours.

Permanent infrastructure will include:

- Up to 157 wind turbine generators.
- A battery storage facility with a capacity of up to 1000 MW hours.
- Upgrade of public road intersections and site access. Note that existing site accesses into the commercial forestry operation will be used to minimise the requirement for new site

entrance locations.

- Up to 16 permanent meteorological monitoring masts.
- Hardstand and laydown areas (around 120 metres by 50 metres but subject to refinement based on the dimensions of the final wind turbine.
- Internal access tracks with a cross section width of between five and ten metres. Existing access tracks within the commercial forestry operation and on land currently used for agricultural purposes will be used/upgraded where practicable.
- Underground electricity cables.
- Up to eight internal power collection stations.
- Overhead powerlines.
- One terminal sub-station that will connect to the transmission line exiting the site. This terminal sub-station is proposed to be located at the eastern end of the site to limit the distance between this terminal sub-station and the connection point to the electricity grid.
- Operations and maintenance building including car parking.
- Other ancillary works.

Temporary infrastructure will include:

- Up to three concrete batching plants. Concrete batching plants may be mobile to allow concrete batching to occur close to wind turbine foundations. On-site concrete batching reduces the number of vehicle movements on public roads,
- A main construction compound, and up to six ancillary construction compounds. The main construction compound will house site offices, car parking, storage, amenities and a workshop.
- Other temporary ancillary buildings and works.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

The Project will seek to use existing access points used as part of the forestry operations to facilitate the delivery of wind turbines and other components. These intersections and access points will be upgraded to accommodate wind farm traffic. There will also be a requirement for new site access points to be built where existing access points do not exist. Indicative locations of site access points are shown in Figure 3 – Indicative development plan.

The wind farm will be accessed from the Portland-Nelson Road. There will also be a requirement for new and or upgraded site access points to provide construction and/or operational access to the battery storage facility and the transmission line. The locations of these will be subject to detailed design of the Project, however the Project will seek to use / upgrade existing access points where practicable to minimise disruptions to the road network.

Raw materials for the Project are anticipated to be sourced from providers external to the wind farm site.

Around 210,000m³ of concrete is estimated to be required for construction of the project. Concrete will primarily be used for the construction of turbine foundations and ancillary infrastructure such as the substation and will be either brought to site via concrete delivery vehicles or, more likely, batched on site at a concrete batching plant(s) that would be established for the project. Raw materials such as sand and aggregate would also be used in the concrete batching process and need to be delivered to site.

Around 260,000m³ of crushed rock is estimated to be required for the Project. Crushed rock will be used primarily for the construction of new and upgraded access tracks and the establishement of hardstands. The requirement to transport crushed rock to site from an external source may be reduced where limestone available on site can be used for road base materials, or where existing forestry roads can be utilised. It is not expected that this material available on site will be suitable for wind turbine foundations.

A detailed analysis of the potential sources of raw materials for the Project will be carried out during the preparation of the planning application. This will include assessment of potential impacts on the public road network.

Key construction activities:

At this stage it is not anticipated that the Project will be constructed in stages. Construction of the Project will generally involve the following key construction activities:

- The preparation of the Project site including clearing pine trees from selected land, removal and storage of topsoil for future use.
- Access road and public intersection upgrades.
- Construction of internal access tracks (where existing forestry roads are not used).
- Establishment of concrete batching plants and construction of site buildings and construction compounds.
- Construction of hard stands and laydown areas.
- Excavation of turbine foundations and form work.
- Construction of cable trenches and power pole foundations, laying bedding materials, cables and engineered backfill, replacement of topsoil.
- Construction of terminal sub-station, collector stations, and operation and maintenance buildings involving excavation and pouring of building foundations and concrete pads at switchyard and transformer locations.
- Installation of towers, turbines, collector stations, terminal sub-station, battery storage facility cabling and overhead powerlines and other ancillary electricity infrastructure, and
- Progressive rehabilitation of the site and landscaping.

It is expected that construction activities will be undertaken over a two-year period with a workforce of at least 200 full-time equivalent employees directly engaged on the Project.

Key operational activities:

The operational life of the wind farm and the battery storage facility is expected to be 25 to 30 years. During this period, operational, maintenance and monitoring of the wind farm will include (but not be limited to):

- Service of wind turbines, the battery storage facility and associated infrastructure.
- Maintenance of internal access tracks and electrical infrastructure.
- The use and maintenance of buildings and plant, including the operational control room.
- Ongoing environmental monitoring in accordance with relevant approval conditions.

Key decommissioning activities (if applicable):

At the end of the operational life of the Project, the wind farm and the battery storage facility will either be decommissioned or upgraded with new turbines and/or ancillary infrastructure. Upgrading (or repowering) the Project will extend the operational period of the Project.

Key decommissioning activities will include:

- Removal of all above ground non-operational equipment
- Removal and clean up any residual contamination
- Rehabilitation of all storage areas, construction areas, access tracks and other areas affected by the decommissioning of the turbines (if those areas are not otherwise useful to the ongoing use or decommissioning of the wind farm).

The Project will comply with any relevant requirements for decommissioning as prescribed under any planning approval or subsequent permit or licence.

Is the project an element or stage in a larger project?

X No **X** Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

Is the project related to any other past, current or mooted proposals in the region? No Yes If yes, please identify related proposals.

4. Project alternatives

Brief description of key alternatives considered to date (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

Neoen is aiming to develop, construct and own at least 5 GW of renewable energy capacity by 2021. To achieve this aim Neoen is exploring wind, solar and battery storage Project opportunities across the world, with a considerable part of this growth expected in Australia. Within Australia several potential Project opportunities have been considered.

Neoen's selection of the Kentbruck Green Power Hub Project for further feasibility assessment was informed by an understanding of the available wind resource, the proximity of a possible electricity transmission network connection point, site access and environmental and planning constraints including:

- land use and tenure
- locations of dwellings and other sensitive receptors
- the boundaries of National Parks and Ramsar wetland sites
- areas of ecological sensitivity
- areas of cultural heritage sensitivity.

A feature of this proposed Project is co-location of a large proportion of the wind turbines and associated infrastructure with an operating forestry plantation. Co-location achieves a more efficient use of land already disturbed and minimises impact on land being used for conservation or other productive purposes.

Further evolution of the proposal may occur prior to the lodgement of a planning permit application. This may include refinements to the number and location of turbines and other project-related infrastructure in response to ongoing technical, environmental, commercial and constructability assessments. A description of the alternatives and options considered during the development of the project will be described in the planning permit application.

Brief description of key alternatives to be further investigated (if known):

Two transmission line options are under consideration as described in Section 2 above. Therefore, this referral and the planning application will consider the potential impacts of both options.

Additionally, the final choice of wind turbine and battery storage facility will be determined by what is available on the market at the time of procurement through a detailed tendering process. The timing of this tendering process is necessarily driven by the dates of any environmental approvals.

Further, the micro-siting of wind turbines and ancillary infrastructure will be determined as part of a future detailed design process and in consideration of ongoing environmental and social impact assessments.

5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:

No ancillary activities or further Project stages are proposed to be excluded.

6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor):

Founded in 2008, Neoen is France's leading and one of the world's most dynamic renewable energy companies. With a current capacity of more than 2 GW already in operation or under construction, and a further 1 GW of projects formally awarded and secured, Neoen has doubled

in size in over the past 24 months.

Neoen is active in France, Australia, El Salvador, Zambia, Jamaica, Portugal, Mexico, Mozambique, Finland and Argentina and has assets in more than 15 countries. It operates Europe's largest solar PV farm (300 MW in Cestas, France) and the world's largest lithium-ion battery in Hornsdale, Australia (100 MW/129 MWh storage capacity). At the end of 2017, Neoen won one of the largest (375 MW) and the most competitive solar energy tenders in Mexico. Neoen is targeting 5 GW capacity in operation and under construction by 2021.

Within Australia Neoen owns and operates the 11 wind farms or solar farms shown below, making Neoen one of the largest owner/operators in Australia. Neoen owns three grid-scale batteries in Australia including the world's largest lithium-ion battery: the Hornsdale Power Reserve in South Australia.

Project Name	State	Technology	Capacity (AC)	Project Status
Bulgana Green Power Hub	VIC	Wind and Battery	194MW Wind + 20MW Battery	Under Construction
Numurkah Solar Farm	VIC	Solar	100MW	Under Construction
De Grussa	WA	Solar and Battery	10.6MW Solar + 6MW Battery	Operating
Hornsdale Wind Farm 1	SA	Wind	102.4MW	Operating
Hornsdale Wind Farm 2	SA	Wind	102.4MW	Operating
Hornsdale Wind Farm 3	SA	Wind	112MW	Operating
Hornsdale Power Reserve	SA	Battery	100MW	Operating
Parkes Solar Farm	NSW	Solar	65.9MW	Operating
Griffith Solar Farm	NSW	Solar	35.9MW	Operating
Dubbo Solar Park	NSW	Solar	28.9MW	Operating
Coleambally Solar Farm	NSW	Solar	150MW	Operating

Implementation timeframe:

- An indicative timeline for the implementation of the Project comprises:
- December 2020 Secure all planning and environmental approvals
- June 2021 Construction commencement, to occur over a period of around 2 years
- June 2023 Commission the Project.

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

No XYes If no, please describe area for investigation. If yes, please describe the preferred site in the next items (if practicable).

General description of preferred site, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

Figure 2 – Project overview shows the location of key features and constraints on and near the Project site. Photos of the Project site are shown in Figure 9 to Figure 11

The wind farm component of the Project covers an approximate area of 7,500 hectares. The Project will also include either around 32 kilometres or 45 kilometres of linear infrastructure consisting of underground and/or overhead electricity transmission line (dependent on the preferred transmission line option).

Wind farm

The wind farm site consists primarily of commercially managed and harvested timber plantation (radiata pine) and small areas of land used for agricultural purposes (primarily grazing) at the western and eastern extents. The wind farm site contains access tracks and limited built infrastructure in relation to the timber plantation such as sheds and water tanks. Areas within the wind farm site but outside of the timber plantation also include built infrastructure typically associated with farms used for grazing purposes such as sheds and access tracks. There are no other land uses present within the wind farm site. The use of the wind farm site for forestry and grazing purposes means that the land has been subject to previous disturbance and therefore, presence of native vegetation is largely restricted to roadside reserves and small areas of regrowth.

The proposed Kentbruck Green Power Hub site is in a local catchment that is highly modified. Data available on the Glenelg Hopkins Catchment Management Authority (GHCMA, 2019) website indicates that there are some creeks located east of the proposed wind farm site, including Johnstone Creek and some unnamed creeks. The biggest watercourse within the Glenelg Hopkins Catchment is the Glenelg River which is located north and west of the proposed wind farm site (GHCMA, 2019).

The Glenelg Estuary and Discovery Bay Ramsar site borders the proposed site along the southern boundary and on the north western boundary. The wind farm site is also located within 10 kilometres of two nationally important wetlands, Long Swamp and the Glenelg River. There are 67 waterbodies located within one kilometre of the wind farm site, eight of which are within the site boundary. The location of the Ramsar site and waterbodies is shown in Figure 2 – Project overview.

Transmission line options

The location of the proposed transmission line options and associated development envelopes extend primarily through freehold land used for grazing (option one and two) and buried below existing roads that bisect the Cobboboonee National Park and Cobboboonee Forest Park (option one only). The transmission line options and associated development envelopes are shown in Figure 2 – Project overview, and comprise:

- **Option One** is characterised as open agricultural landscape and National Park/Forest Park. Within the Cobboboonee National Park / Cobboboonee Forest Park this option will be an underground cable buried below existing roads. To the east of Cobboboonee National Park this option will be either underground or overhead through agricultural landscape. This option crosses Surrey River and Mt Kincaid Creek.
- **Option Two** is generally characterised as open agricultural landscape which is largely cleared of trees except along roadsides, creeks, fences and around dwellings. The proposed overground transmission route option crosses Johnstone Creek and Wattle Hill Creek.

Wind Farm

Site area (if known): around 7,500 hectares

Battery Storage Facility

Site area (if known): Around 12 hectares total, to be located either within the 7,500 hectares of the wind farm site or adjacent to the connection point to the existing 500kV transmission line.

(for linear infrastructure)

Transmission line route options

- Option 1: **Route length** around 32 km **and width** of around 10 metres to 40 metres for an easement (10 metres will apply to the underground section and 40 metres will apply to the above ground section).
- Option 2: Route length around 45 km and width of around 40 metres for an easement.

Current land use and development:

The current land use and development of the three Project elements are as follows:

- The wind farm is located primarily within an area that has been substantially modified for commercial forestry use (radiata pine). Small sections of grazing also exist within the wind farm site boundary at the eastern and western extents.
- The transmission line options are located primarily within freehold land used for grazing (option one and two) and beneath existing roads that bisect National Park/Forest Park land (option one).
- The battery storage facility options are located within an area for commercial forestry purposes (option one), and either adjacent to the Heywood Terminal Station (in Heywood) or adjacent to where the Project will connect to the existing 500kV line between Portland and Heywood.

Description of local setting (e.g. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

The Kentbruck Green Power Hub is surrounded by varied land uses, some of which are recognised for their environmental significance. These land uses are shown in Figure 2 – Project overview and can be summarised as follows:

- Very few adjacent dwellings with the nearest township being Nelson, which is around three kilometres from the indicative wind farm site boundary and about five kilometres from the nearest turbine in the indicative wind farm layout (see Figure 3 – Indicative development plan).
- Discovery Bay Coastal Park, which extends generally north-west to south-east south of the wind farm site.
- Plantations north of Portland-Nelson Road to the north of the wind farm site.
- The Ramsar Glenelg Estuary and Discovery Bay site to the north-west and south of the wind farm site.
- The Lower Glenelg National Park north of the wind farm site.
- The Cobboboonee National Park to the east and north-east of the wind farm site, and north and south from option one of the transmission line route options.
- Freehold agricultural land generally used for grazing at the eastern and western ends of the wind farm site and along sections of both transmission line route options.
- The Glenelg River north-west of the proposed wind farm site.

There is a network of roads around and within the Project site of which many are used by vehicles associated with the plantation (refer Figure 5 – Road network plan). Portland Airport is located 30 kilometres to the east of the wind farm site. There are also two private airstrips located nearby: - Nelson Aerodrome which is around one kilometre east of Nelson and about two kilometres from the closest point of the wind farm site boundary.

- An airfield in the plantation to the north of the Project site. This is located about two kilometres from the northern edge of the wind farm site.

Neoen has advised both owners of these aviation facilities of the proposed development and is in

ongoing discussions with them regarding the Project.

There are seven known noise sensitive locations that are situated within two-kilometres of a turbine, three of which are involved stakeholders (refer to Figure 6 – Noise sensitive locations).

Planning context (eg. strategic planning, zoning & overlays, management plans):

The Project site is located wholly within the municipal boundary of the Glenelg Shire Council and therefore subject to the provisions of the Glenelg Planning Scheme (the Planning Scheme). The Planning Scheme sets out the relevant planning policies that a responsible authority must consider when administering the use and development of land.

State and Local Planning Policy Framework

The State Planning Policy Framework (SPPF) comprises general principles for land use and development of land and outlines specific policies in relation to settlement, environment, housing, economic development, infrastructure, and particular uses. The SPPF is the same in all Victorian planning schemes. The policies outlined in the SPPF must be taken into account when responsible authorities are assessing planning permit applications.

The Local Planning Policy Framework (LPPF) consists of the Municipal Strategic Statement (MSS) and Local Planning Policies (LPP). The LPPF is specific to each planning scheme. The MSS is a statement of the key strategic planning, land use and development objectives for a municipality and the strategies and actions for achieving those objectives. LPPs are policy statements of intent explaining the expectations of what the responsible authority will do in specified circumstances. The LPPF must be consistent with the SPPF and demonstrates how State polices are to be considered in each local municipality. Responsible authorities must take into account the LPPF when assessing planning permit applications.

Table 7-1 sets out the State Planning Policy clauses and sub-clauses that are relevant to the Project.

State Plannii	ng Policy Clause
11.01-1R	Settlement – Great South Coast
11.03-4S	Coastal settlement
11.03-5S	Distinctive areas and landscapes
11.03-6S	Regional and local places
12	Environmental and landscape values
12.01-1S	Protection of biodiversity
12.01-2S	Native vegetation management
12.02-1S	Protection of coastal areas
12.02-2S	Coastal Crown land
12.03	Water bodies and wetlands
12.03-1S	River corridors, waterways, lakes and wetlands
12.05-1S	Environmentally sensitive areas
12.05-2S	Landscapes
13.04-2S	Erosion and landslip
13.04-3S	Salinity
13.05-1S	Noise abatement
13.07-1S	Land use compatibility
14.01-1S	Protection of agricultural land
14.01-3S	Forestry and timber production
14.02-1S	Catchment planning and management
15.03-1S	Heritage conservation
15.03-2S	Aboriginal cultural heritage
19.01-2S	Renewable energy
19.01-2R	Renewable energy – Great South Coast

Table 7-1 – Relevant clauses of the State Planning Policy

Local Planning Policy

The Glenelg Shire Council Municipal Strategic Statement (MSS) and Local Planning Policy Framework (LPPF) at Clause 21 and Clause 22 of the Planning Scheme covers key matters relating to the environment, landscape and heritage, environmental risk, natural resource management, economic development, transport and infrastructure.

The LPPF clauses of relevance to the Project are set out in Table 7-2.

Table 7-2 – Relevant clauses of the Local Planning Policy

Local Planni	ng Policy Clause					
Municipal Stra	ategic Statement					
21.02-17	Environmental and Landscape Values					
21.02-22	Coastal Management					
21.02-26	Significant Landscapes					
21.02-30	Environmental Risks					
21.02-39	Floodplains					
21.02-43	Soil degradation					
21.02-47	Noise and air					
21.02-51	Natural Resources Management					
21.02-56	Water					
21.02-65	Heritage					
21.02-90	Transport					
Local Plannin	Local Planning Policy					
22.02	Heritage					

Land Use Terms

In accordance with **Clause 73.03** (Land Use Terms) of the Planning Scheme, the Project elements are defined as follows:

- A wind farm, a connection to the electricity grid and battery storage facility is classified as a wind energy facility, of which is defined as 'land used to generate electricity by wind force. It includes land used for:
 - a) Any turbine, building or other structure or thing used in or in connection with the generation of electricity by wind force
 - b) An anemometer.

It does not include turbines principally used to supply electricity for domestic or rural use of the land.'

- A connection to the electricity grid is classified as a *utility installation*. A *utility installation* is defined as *'land used*:
 - a) for telecommunications;
 - b) to transmit or distribute gas, oil or power;
 - c) to collect, treat, transmit, store, or distribute water; or
 - d) to collect, treat, or dispose of storm or flood water, sewage, or sullage.

It includes any associated flow measurement device or a structure to gauge waterway flow.'

The utility installation land use term will apply to the transmission line proposed to connect the Project to the electricity network.

Planning Permit requirements for the Project

Under Clause 53.32-2 a permit is required to use and develop land for a Wind Energy Facility. An assessment of the relevant zones and overlays that will apply to Project has been undertaken to identify additional permit triggers.

Zones and Overlays

The proposed Kentbruck Green Power Hub is affected by the zones and overlays under the

Planning Scheme set out in Table 7-3. Refer to Figure 7 – Planning zones and Figure 8 – Planning overlays for the zone and overlay controls applicable to the Project.

Table 7-3 – Zones and overlays

	Wind	Transmis	ssion line	Battery	Storage		
	farm	Option 1	Option 2	Option 1	Option 2		
	ZON	IES					
Farming Zone	\checkmark	✓	\checkmark	\checkmark	✓		
Public Park and Recreation Zone*	\checkmark						
Public Conservation and Resource Zone		~	-				
Road Zone Category 1	\checkmark	✓					
Rural Conservation Zone – Schedule 2			\checkmark		\checkmark		
	OVERLAYS						
Bushfire Management Overlay	\checkmark	~	\checkmark	\checkmark	\checkmark		
Environmental Significance Overlay – Schedule 1 (Coastal Areas)	\checkmark						
Environmental Significance Overlay – Schedule 3 (South-Eastern Red- Tailed Black Cockatoo Habitat Areas)	✓	√	~				
Airport Environs Overlay – Schedule 2			~				
Design and Development Overlay – Schedule 1 (Airport Environs)			✓		✓		
Significant Landscape Overlay – Schedule 1 (<i>Glenelg River Estuary</i> <i>and Surrounds</i>)	✓						

* A planning scheme amendment will be sought to rezone the section of Public Park and Recreation Zone within the indicative wind farm site boundary.

Zones

Clause 35.07 – Farming Zone

The use of the land for a *wind energy facility* and *utility installation* is classified as a Section 2 use, which requires a permit. A permit is required to construct or carry out buildings and works associated with a Section 2 use of this clause.

Clause 36.02 – Public Park and Recreation Zone

The indicative site area for the *wind energy facility* does include Public Park and Recreation Zone. A wind energy facility is a Section 2 use under this clause and therefore requires a permit. However, the use must be conducted by or on behalf of a public land manager or Parks Victoria under the relevant provisions of several Acts.

Neoen will seek to rezone the land currently within the wind farm site area zoned Public Park and Recreation Zone to a more suitable zone (ie Farming Zone) via a planning scheme amendment. It should be noted that the section of land zoned Public Park and Recreation Zone within the wind farm site area is freehold land used for forestry purposes.

Clause 36.04 – Road Zone

The indicative site boundary for the *wind energy facility* does include Road Zone Category 1. No buildings and works for the *wind energy facility* are occurring within this zone, however, a permit is still required for the use of this land for a *wind energy facility* as it is classified as a Section 2 use.

A *utility installation* is also classified as a Section 2 use under this clause and therefore requires a permit. A permit is also required to construct a building or construct or carry out works for a Section 2 use. As a result, a permit will be required for both the use and development of a *utility*

installation.

<u>Clause 36.03 – Public Conservation and Resource Zone</u> The indicative site area for the *wind energy facility* does not include any land within this zone.

However, the location of the *utility installation* (transmission line route option 1) is located within this zone where the transmission line will be located below one of the existing roads that bisect the Cobboboonee National Park.

Cobboboonee National Park is identified as a National Park pursuant to Part 45 of Schedule Two of the *National Parks Act 1975* (Vic). This land is Crown land.

Section 27 of the *National Parks Act 1975* allows for the construction of infrastructure within national parks. Section 27(1) provides that a public authority — including distribution, transmission and generation companies within the meaning of the *Electricity Industry Act 2000* (Vic) — may, with the consent of Parks Victoria, and subject to any conditions, perform its functions and exercise its powers in a national park. This includes construction and operation of a transmission line.

Neoen has commenced discussions with Parks Victoria and DELWP on this matter.

Clause 35.06 – Rural Conservation Zone

The indicative site area for the *wind energy facility* does not include any land within this zone. However, the location of the *utility installation* may be located within this zone (dependent on the selection of the route for the transmission line). A *utility installation* is classified as a Section 2 use and therefore a planning permit is required for the use of the land. A permit is also required under this zone to construct or carry out buildings or works associated with a Section 2 use.

Overlays

Clause 44.06 – Bushfire Management Overlay

Buildings and works for both the *wind energy facility* and the *utility installation* are both within this overlay, however, buildings and works associated with these land uses do not require a planning permit under this overlay.

Clause 42.01 – Environmental Significance Overlay Schedule 1

A permit is required to construct a building or construct or carry out works for the *wind energy facility*. A permit is also required to remove, destroy or lop any vegetation, including dead vegetation.

<u>Clause 42.01 – Environmental Significance Overlay Schedule 3</u> Buildings and works for both the *wind energy facility* and the *utility installation* are both within this overlay, however, a permit is not required to construct a building or construct or carry out works. A permit will be required to remove, destroy or lop vegetation.

<u>Clause 42.03 - Significant Landscape Overlay Schedule 1</u> Buildings and works for the *wind energy facility* will occur within this overlay. A permit is required to construct a building or construct or carry out works.

Clause 43.02 – Design and Development Overlay Schedule 1

Buildings and works for the *utility installation* are within this overlay. A permit is required to construct a building or construct or carry out works.

Clause 45.02 – Airport Environs Overlay Schedule 2

Buildings and works for the *utility installation* are within this overlay, however, buildings and works associated with these land uses do not require a planning permit under this overlay. Schedule 2 of this overlay identifies that the use of land for a utility installation does not trigger the requirement for the application to be referred to the airport owner.

Planning assessment

Table 7.3 and the section above identifies the zones and overlays within the wind farm site and the transmission line development envelopes (for options 1 and 2) that apply to the Project. This analysis has identified that the key planning approvals that will be required for the Project include:

- Use and development of the land for the purpose of a wind energy facility including associated ancillary temporary and permanent infrastructure.
- Use and development of the land for the purpose of a utility installation.
- A planning scheme amendment to rezone the section of land within the *wind energy facility* site area that is currently zoned Public Park and Recreation Zone.
- Removal of vegetation pursuant to clause 42.01 and clause 52.17 of the Glenelg Planning Scheme.
- To create or alter access to a road in a Road Zone under clause 52.29 of the Glenelg Planning Scheme.
- A permit for buildings and works associated with the utility installation (for the transmission line) under particular overlays, dependent on the transmission line route selected.

Key other approvals that are also likely to be required include:

- If the option one transmission line route is selected, approval from Parks Victoria pursuant to Section 27 of the *National Parks Act 1975* to allow for the construction of infrastructure within national parks. Section 27(1) provides that a public authority including distribution, transmission and generation companies within the meaning of the Electricity Industry Act 2000 (Vic) may, with the consent of the Secretary and subject to any conditions, perform its functions and exercise its powers in a national park. This includes construction and operation of a transmission line. Neoen has commenced discussions with Parks Victoria and DELWP on this matter.
- A Cultural Heritage Management Plan which will need to be prepared in conjunction with and assessed by the Gundtij Mirring Traditional Owner Aboriginal Corporation (recognised as a Registered Aboriginal Party pursuant to the *Aboriginal Heritage Act 2006*). Pursuant to Section 52 of the *Aboriginal Heritage Act 2006* a planning permit cannot be granted prior to the approval of the CHMP.
- Approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) if the Project is deemed a controlled action. A referral is being made to the Commonwealth Minister for the Environment under the EPBC Act.
- A permit to 'Take' listed flora under the Flora and Fauna Guarantee Act 1988 (Vic).
- Consents under the Road Management Act 2004 (Vic).

Victorian Planning Provisions

As a Wind Energy Facility, the Project will need to demonstrate specific compliance with the provisions of Clause 19.01 of the State Planning Provisions (Energy)

Particular Provisions

The following Particular Provisions are of relevance to the Project:

Clause 52.17 - Native Vegetation

The purpose of **Clause 52.17** (Native Vegetation) is 'to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved by applying the following three step approach in accordance with the Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2019) (the Guidelines):

- 1. Avoid the removal, destruction or lopping of native vegetation.
- 2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
- 3. Provide an offset to compensate for the biodiversity impact if a permit is granted to remove, destroy or lop native vegetation.

To manage the removal, destruction or lopping of native vegetation to minimise land and water degradation.'

In accordance with **Clause 52.17-1**, a permit is required to remove, destroy or lop native vegetation, including dead native vegetation.

Pursuant to **Clause 52.16-5**, if a permit is required to remove, destroy or lop native vegetation, the biodiversity impacts from the removal, destruction or lopping of native vegetation must be offset, in accordance with the *Guidelines*. The conditions on the permit for the removal, destruction or lopping of native vegetation must specify the offset requirement and the timing to secure the offset.

Clause 52.32 – Wind Energy Facility

The purpose of **Clause 52.32** (Wind Energy Facility) seeks to 'facilitate the establishment and expansion of wind energy facilities, in appropriate locations, with minimal impact on the amenity of the areas'.

In accordance with **Clause 52.32-2** (Use and Development of Land), a permit is required to use and develop land for a Wind energy facility.

Pursuant to the table to **Clause 52.32-2**, development on land described in a schedule to the *National Parks Act 1975* is prohibited unless it is '*principally used to supply electricity to a facility used in conjunction with conservation, recreation, administration or accommodation use of the land*'.

The indicative site area for the *wind energy facility* does not include any land that is described in a schedule to the *National Parks Act* 1975. The option one transmission line route includes land described in a schedule to the *National Parks Act* 1975. As discussed above, approval from Parks Victoria pursuant to Section 27 of the *National Parks Act* 1975 is required to allow for the construction of infrastructure within national parks. Section 27(1) provides that a public authority — including distribution, transmission and generation companies within the meaning of the *Electricity Industry Act* 2000 (Vic) — may, with the consent of the Secretary and subject to any conditions, perform its functions and exercise its powers in a national park. This includes construction and operation of a transmission line. Neoen has commenced discussions with Parks Victoria and DELWP on this matter.

In accordance with **Clause 52.32-3** (Turbine with one kilometre of a dwelling), an application including a proposed turbine within one kilometre of an existing dwelling must be accompanied by:

- A plan showing all dwellings within one kilometres of a proposed turbine
- Written consent of any owners as at the date of the application.

Clause 52.32-4 (Application Requirements) outlines information that must be contained within a planning permit application for a Wind energy facility including site and context analysis, and design response, and mandatory noise assessment.

<u>Clause 52.29 – Land Adjacent to a Road Zone, Category 1, or a Public Acquisition Overlay for a</u> <u>Category 1 Road</u>

The purpose of **Clause 52.29** seeks to *'ensure appropriate access to identified roads'* and *'appropriate subdivision of land adjacent to identified roads'*. This clause applies to land adjacent to a Road Zone, Category 1. In accordance with **Clause 52.29-2**, a permit is required to create or alter access to a road or subdivide land adjacent to a road in a Road Zone, Category 1.

General Provisions

Clause 65 – Decision Guidelines

The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause.

Operational Provisions

Clause 72.01 – Responsible Authority for this Planning Scheme

In accordance with **Clause 72.01-1** (Minister is Responsible Authority) the Minister for Planning is the responsible authority for the use and development of land for a:

- Wind energy facility
- Utility installation used to transmit or distribute electricity generated by a Wind energy facility.

Local government area(s): Glenelg Shire Council

8. Existing environment

Overview of key environmental assets/sensitivities in Project area and vicinity (cf. general description of Project site/study area under section 7):

Flora, fauna and native vegetation

The Project site is within the Glenelg Plain and Bridgewater bioregions. The Glenelg Plain bioregion is predominantly flat and low lying with varied flora including coastal communities of beach and dune vegetation, wet heathlands and woodlands. The Bridgewater bioregion is a thin coastal plain characterised by Calcarenite Dune Woodland and Coastal Dune Scrub with intermittent wetlands. Three threatened ecological communities listed under the *Flora and Fauna Guarantee Act 1988* (FFG Act) have been identified that may occur within proximity of the site:

- Coastal Moonah Woodland Community
- Red Gum Swamp Community No. 1
- Victorian Temperate Woodland Bird Community (including Red-tailed Black Cockatoo)

As the wind farm site and the area corresponding with the option two transmission line route development envelope has been subject to previous disturbance, presence of native vegetation is largely restricted to roadside reserves and small tracts of either regrowth or remnant native vegetation.

If the option one transmission line route is selected, potential impacts on native vegetation will be minimised as the transmission line will be underground below an existing road which traverses the Cobboboonee National Park and Cobboboonee Forest Park.

Thirty-nine migratory species listed under the EPBC Act have the potential to occur within or surrounding the Project site. These include seventeen migratory marine bird species (eleven listed as vulnerable, and three as endangered), four migratory terrestrial species and eighteen migratory wetland species. The endemic South-Eastern Red-Tailed Black-Cockatoo occurs in a small area of south-eastern Australia and is listed as a threatened species. Areas within the eastern end of the site are regulated by Schedule 3 to Clause 42.01 Environmental Significance Overlay, to protect the South-Eastern Red-tailed Black Cockatoo habitat areas (see Figure 8 – Planning overlays).

A total of 21 threatened flora species that are listed under the FFG Act are considered to have a medium likelihood of occurring within the Project area. Of these, seven are listed as vulnerable, and four are listed an endangered under the EPBC Act.

A total of 10 threatened fauna species that are listed under the FFG Act are considered to have a medium to high likelihood of occurring within the Project area. Of these, six are listed as vulnerable within Victoria, three are listed as endangered and one is considered near-threatened.

No part of the wind farm site is located within National or State parks. Three National Parks are located within one kilometre of the wind farm site; Lower Glenelg National Park, Discovery Bay Coastal Park and Cobboboonee National Park (see Figure 2 – Project overview).

The proposed alignment for the underground/overhead transmission line option (option one) bisects a portion of the Cobboboonee National Park, where it would be buried beneath an existing road The development envelope for the overhead transmission line option (option two) is located within two kilometres of Mount Richmond National Park – no works are being considered within Mount Richmond National Park.

Aboriginal and historic heritage

While no Aboriginal heritage sites are recorded within the Project site, there are six Aboriginal cultural heritage places recorded adjacent to the site. A large portion of the Project area covers recognised areas of cultural heritage sensitivity and areas of high archaeological potential, with several sensitive landform-systems that are likely to contain Aboriginal cultural heritage.

The Project site is located within the traditional country of Gunditjmara (Dhauward Wurrung language). Gunditj Mirring Traditional Owners Aboriginal Corporation Registered Native Title

Body Corporate (RNTBC) administers land on behalf of Gundtijmara people subject to a determined native title claim that exists over Crown land and waters around the Project, including state forests, national parks, recreational reserves, river frontages and coastal foreshores. The Gunditj Mirring Traditional Owners Aboriginal Corporation is recognised as a Registered Aboriginal Party (RAP) pursuant to the *Aboriginal Heritage Act 2006*, and are recognised as the primary guardians, keepers and knowledge holders of the Aboriginal cultural heritage of the area.

There are three items of local natural heritage value that are listed on the Glenelg Planning Scheme; Johnstone River, Johnstone Creek and Swan Lake (HO139, HO146, HO156).

Hydrology and hydrogeology

The proposed wind farm site is in a local catchment that is highly modified. The proposed wind farm site consists predominantly of an actively managed and harvested timber plantation. The western and eastern ends of the proposed wind farm site and a large component of the transmission line options and associated development envelopes consist of agricultural land, primarily used for grazing.

The proposed wind farm site is located next to the Glenelg Estuary and Discovery Bay Ramsar Site, which covers approximately 22,289 hectares. The Ramsar site covers the western part of the Lower Glenelg National Park, most of the Discovery Bay Coastal Park and the Nelson Streamside Reserve. The topography of the plantation and the western area of agricultural land within the proposed wind farm site generally falls towards to Ramsar site. This suggests that rainfall on the wind farm site may flow either overland or underground towards the Ramsar site, eventually reaching Discovery Bay. However, no part of the Project is located within the Glenelg Estuary and Discovery Bay Ramsar site, the Lower Glenelg National Park or the Discovery Bay Coastal Park. Transmission line route option one will traverse the Cobboboonee National Park / Forest Park beneath an existing road.

The wind farm site is also located within 10 kilometres of two nationally important wetlands, Long Swamp and the Glenelg River. In addition to this, there are 67 waterbodies located within one kilometre of the site, eight of which are within the site boundary.

The main watercourse within proximity to the Project site is the Glenelg River. Located within the Glenelg Hopkins Catchment, it is classified as a Heritage River under the *Heritage River Act 1992*.

Surface geology in the region consists of a Quaternary deposition associated with coastal dunes, beach sands, swamp deposits and some near shore marine deposits. At the wind farm site, the geology comprises predominantly Pleistocene aeolian dune deposits, with some Holocene coastal and inland dunes with minor swamp deposits; and extrusive basalts, scoria and ash to the southeast of the site.

The surface geology is host to the water table aquifer (Quaternary Aquifer). Depth to water below the ground surface across the site is predominantly less than 10 metres below ground level, with minor variations due to changes in topography.

9. Land availability and control

Is the proposal on, or partly on, Crown land?

 \times No X Yes If yes, please provide details.

Most of the Project is on freehold land including freehold land being used for commercial forestry purposes. Some parts of the Project (including electricity infrastructure) will be located on, over or under Crown land (including National Park, open / public road reserves and unused Government (paper) roads).

The relevant lease and licence arrangements (where applicable) will be finalised with DELWP once planning consent for the Project is obtained. The wind turbines and the battery facility will not be constructed on Crown land.

Current land tenure (provide plan, if practicable):

The land required for the wind farm and the battery storage facility is freehold land.

The land which falls within the development envelopes for the transmission line route options is predominantly freehold land. Some parts of the transmission line development envelopes will be located on, over or under Crown land (including National Park, open / public road reserves and unused Government (paper) roads).

Intended land tenure (tenure over or access to project land):

The private freehold land required for the Project will be leased from the landholders through commercial land leases and agreements with individual landowners.

Relevant lease and licence arrangements for elements of the Project on Crown land will be finalised with DELWP following planning approvals being obtained.

Other interests in affected land (eg. easements, native title claims):

Either Neoen or Ausnet Services will have an easement over the private landholdings associated with the transmission line connection.

Lease and/or licence arrangements will be entered into with the relevant land manager for sections of the transmission line that cross over or under Crown land.

There are no current Native Title applications or determinations which affect the wind farm site. The Schedule of Native Title Determination Applications, the Registered applications for native title, the current Native Title Determinations, the Native Title Determination Outcomes and the Indigenous Land Use Agreements has been reviewed. This reflects the freehold status of the wind farm site.

Much of the Crown (public) land which lies to the south and east of the wind farm site including the Cobboboonee National Park, waterbodies and paper roads under public ownership is covered by a completed Native Title determination. This is held by the Gunditj Mirring Traditional Owners Aboriginal Corporation Registered Native Title Bodies Corporate. Appropriate consultation will be undertaken to determine if an Indigenous Land Use Agreement (ILUA) is required, or if a Cultural Heritage Management Plan will satisfy the Gunditj Mirring Traditional Owners Aboriginal Corporation RNTBC in place of a formal ILUA.

10. Required approvals

State and Commonwealth approvals required for project components (if known):

Commonwealth

The proposal is being referred under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for a decision as to whether it is a 'controlled action' requiring approval under the EPBC Act.

State

The proposal will require the following approvals:

- planning permits pursuant to the *Planning and Environment Act* 1987.
- Planning scheme amendment pursuant to the Planning and Environment Act 1987.
- approval of a Cultural Heritage Management Plan (CHMP) pursuant to the *Aboriginal Heritage Act 2006*.

The proposal may also require the following approvals:

• permit pursuant to the FFG Act for removal of flora species

- authorisation pursuant to the Wildlife Act 1988 for taking of wildlife
- permit pursuant to the Water Act 1989 for works on waterways
- Consents under the Road Management Act 2004.

Have any applications for approval been lodged?

 \times No \times Yes If yes, please provide details.

Approval agency consultation (agencies with whom the proposal has been discussed):

Consultation has been carried out by Neoen including with the following approval agencies:

- Department of Environment and Energy (Commonwealth)
- Department of Environment, Land, Water and Planning (Victoria)
- Glenelg Hopkins Catchment Management Authority
- Parks Victoria
- Gundtij Mirring Traditional Owner Aboriginal Corporation.

Other agencies consulted:

Neoen has commenced consultation with the following other stakeholders:

- Glenelg Shire Council
- Parks Victoria
- AusNet Services
- Port of Portland
- Roma Britnell (State Member for South West Coast)
- Dan Tehan (Federal Member for Wannon)
- Regional Development Victoria
- Hancock Victorian Plantations
- 141 Plantations
- Birdlife Australia
- Keppel Prince Engineering
- Pacific Hydro
- National Wind Farm Commissioner
- Portland Aluminium
- Committee for Portland
- Nelson Coastcare
- Portland Field Naturalists' Club
- Trust for Nature
- Friends of the Great South West Walk

Neoen has actively approached Nature Glenelg Trust for consultation but as of the date of this submission, Nature Glenelg Trust have declined to engage with Neoen.

In addition, Neoen conducted three community drop-in sessions in April 2019, at Nelson, Mt Richmond and Portland. The purpose of these drop-in sessions was to introduce the Project to the community and to seek input and feedback on the Project and the existing environment, to assist with detailed design and environmental and planning assessments.

Neoen is committed to continuing close consultation with Project stakeholders and the community as the Project develops.

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

Preliminary environmental assessments have been completed that identify and outline potential impacts from the Project. The assessments that have been included as attachments to this referral are:

- Flora and fauna assessment (Biosis 2019) (Attachment 1)
- Cultural Heritage Due DiligenceAttac Assessment (CHDDA) (Biosis 2019) (Attachment 2)
- Landscape and visual impact assessment (Green Bean 2019) (Attachment 3)
- Hydrology assessment (Attachment 4)
- Noise assessment (Attachment 5)

Physical environment

Flora and fauna

A preliminary flora and fauna assessment has been undertaken by Biosis in relation to the proposed Kentbruck Green Power Hub (see Attachment 1).

For the preliminary flora and fauna assessment, the 'study area' includes all land that may be directly encompassed by the Project. In addition, information has been obtained from a broader area, including land within five kilometres of the study area (the 'local area'), as it is anticipated that the local area will encompass areas which could be indirectly affected by the Project.

An initial desktop review was undertaken of the local area to obtain relevant flora and fauna information. Subsequent consultation with the Victorian Department of Environment, Land, Water and Planning (DELWP) assisted in determining which threatened and migratory species and ecological communities require investigation. Site investigations have commenced, and a variety of studies are either underway or are planned to be undertaken to coincide with appropriate conditions, such as seasonal, during the upcoming 12 months. This involves the coinciding of surveys to line up with times when particular species are likely to be present or most likely to be detected.

Native vegetation

The Glenelg Plain and Bridgwater bioregions both have over half of the original extent of native vegetation remaining.

The following three ecological communities listed under the FFG Act may occur within proximity to the study area, but are not considered likely to occur within the study area itself:

- Coastal Moonah Woodland Community
- Red Gum Swamp Community No. 1
- Victorian Temperate Woodland Bird Community (including Red-tailed Black Cockatoo)

As majority of the proposed wind farm site is an existing area of softwood plantation, preliminary assessments indicate that there is no realistic likelihood of the Project resulting in a long-term loss of significant areas of any listed ecological communities.

Based on initial desktop studies the following EVCs may be present within the project area (bioregional conservation status is shown in parentheses):

- EVC 48 Heathy Woodland (Least Concern)
- EVC 16 Lowland Forest (Least Concern)
- EVC 23 Herb-rich Foothill Forest (Vulnerable)
- EVC 3 Damp Sands Herb-rich Woodland (Vulnerable)
- EVC 8 Wet Heathland (Least Concern)
- EVC 198 Sedgy Riparian Woodland (Vulnerable)EVC 681 –
- EVC 681 Deep Freshwater Marsh (Vulnerable)

• EVC 53 - Swamp Scrub (Endangered)

While there may be the potential for some native vegetation to be removed for the Project, it is expected that the extent of the direct impact will be low, and any removal is likely to occur in the more common EVCs (Least Concern conservation status). Therefore, there is a low likelihood that any EVCs that might be impacted are endangered or of very high significance. It is also expected that any impacts on native vegetation can be avoided/minimised during the design process.

If option one for the transmission line route is selected, potential impacts on native vegetation will be minimised as the transmission line will be underground below an existing road which traverses the Cobboboonee National Park and Cobboboonee Forest Park. However, due to potential incursion of the trench into tree protection zones, DELWP may require inclusion of assumed loss of adjacent trees. Further discussions with DELWP will be undertaken to agree on an assessment for the underground cable alignment if this option is selected.

Listed flora species

As the field investigations are either underway or yet to have commenced, a database review has generated a list of threatened flora species with the potential to occur in the study area. The likelihood of occurrence indicates the potential for a species to regularly occur within the study area. The likelihood ratings are based on relevant data, assessment of on-site habitats and expert opinion through consultation. They are ranked as negligible, low, medium or high. Species with a likelihood rating of low or negligible are not addressed in this section and are discussed further in Attachment 1.

No threatened flora species identified were assigned a high likelihood of occurrence rating. The following 21 threatened flora species are listed under the FFG Act and considered to have a **medium** likelihood of occurring within the study area:

- Limestone Spider-orchid
- Colourful Spider-orchid
- Scented Spider-orchid
- Mellblom's Spider-orchid
- Ornate Pink-fingers
- Robust Spider-orchid
- Coast Helmet-orchid
- Late Helmet-orchid
- Clover Glycine
- Maroon Leek-orchid
- Coastal Leek-orchid
- Green-striped Greenhood
- Leafy Greenhood
- Coast Dandelion
- Metallic Sun-orchid
- Winter Sun-orchid
- Swamp Everlasting
- Large White Spider-orchid
- Wrinkled Cassinia
- Swamp Diuris
- Small Sickle Greenhood.

Most of these threatened flora species may occur within the study area along roadsides and other less-disturbed portions. The Limestone Spider-orchid, Ornate Pink-fingers, Clover Glycine, Greenstriped Greenhood, Coast Dandelion, Wrinkled Cassinia and Swamp Everlasting are all listed as vulnerable under the EPBC Act. The Colourful Spider-orchid, Mellblom's Spider-orchid, Maroon Leek-orchid and the Metallic Sun-orchid are all listed as endangered under the EPBC Act.

Threatened fauna species

In line with the identified threatened flora species listed above, a database review has generated a list of threatened fauna species with the potential to occur in the study area. The likelihood of occurrence indicates the potential for a species to regularly occur within the study area.

The following threatened fauna species are listed under the FFG Act and considered to have a **high** likelihood of occurring within the study area:

- Brolga
- Little Egret
- Eastern Great Egret
- Blue-billed Duck
- Striped Worm-Lizard

The Brolga has known occurrences at nearby shallow wetlands. Although there is no known habitat within the site, it is likely to fly over the site. In Victoria the Brolga is listed as a vulnerable species and was last recorded in the vicinity of the study area in 2011 at Lake Monibeong.

The Little Egret, Eastern Great Egret and the Blue-billed Duck are all considered highly likely to occur within the study area, in the wetlands adjacent to the wind farm site. They are also considered likely to occasionally fly over the wind farm site. Within Victoria, both the Little Egret and Eastern Great Egret have a conservation status of vulnerable, whereas the Blue-billed Duck has a conservation status of endangered.

The Striped Worm-Lizard has been rated highly likely to occur within the study area and is likely to occur along roadsides and other less disturbed areas of the site. Within Victoria, the Striped Worm-Lizard has a conservation status of near threatened.

The following threatened species are listed under the FFG Act and are considered to have a *medium* likelihood of occurring within the study area:

- Lewin's Rail
- Little Bittern
- Freckled Duck
- White-bellied Sea-Eagle
- Swamp Skink

The Lewin's Rail, Little Bittern, Freckled Duck and White-bellied Sea Eagle are all considered to have a likelihood rating of medium in relation to occurring within the study area. They are likely to inhabit the adjacent wetlands as well as occasionally fly over the wind farm site. The Lewin's Rail and White-bellied Sea Eagle have a conservation status of vulnerable within Victoria, whereas the Little Bittern and Freckled Duck are listed as endangered. The Swamp Skink is considered to have a medium level of likelihood of occurring within the study area and is known to be in the adjacent wet areas. It may also occur in small patches of remnant habitat within the wind farm site. Within Victoria it is listed as a vulnerable species under the FFG Act.

The Glenelg Estuary and Discovery Bay Ramsar Site adjacent to the Project site support migratory bird species. The ecological character description for the Ramsar site sets out specific parameters for Limits of Acceptable Change (LAC) for the Ramsar wetlands. These LAC relate to hydrology, vegetation types, fish diversity and threatened species. LAC are also in place for waterbirds, including the presence of a range of waterbird guilds, Sanderling abundance and the ongoing presence of Hooded Plover. There are no effects associated with the development or operation of the Project that will impact the hydrology of the Ramsar site, or influence vegetation and aquatic species to an extent that will approach or meet the specified limits. There is a low possibility of impacts on bird species through collision with turbines, however these are highly unlikely to be of such a scale that would exceed the LAC.

The development and operation of the proposed Project will entail minimal effects on native vegetation or habitat for any threatened fauna species. As some species may fly through site on occasion, there is the potential for bird and bat collision with turbines. Knowledge of bird and bat movement paths and flight heights for many species is currently limited without more targeted surveys that are yet to be completed. However, due to the height of the turbines the likelihood of impact is considered to be low. Based on initial investigations, there does not appear to be any realistic potential for loss or significant impact on any genetically important population of any endangered or threatened species.

Neoen have entered into discussions with DELWP Environment, including members of the DELWP Environment Barwon South West Region to procure feedback on a draft ecological study program.

This process is ongoing and Neoen have submitted an updated draft study program for further review and comment to DELWP in July 2019.

Hydrology

A preliminary Hydrology Assessment has been undertaken (refer to Attachment 4) which accounts for:

- Regional hydrology
- Receiving water environment
- Groundwater and geological conditions
- Local hydrology
- Water supply
- Design considerations relating to hydrology, surface water and groundwater
- Construction mitigation measures relating to hydrology, surface water and groundwater.

The proposed wind farm site and the proposed transmission line routes are located within the Glenelg Basin and Portland Coast Basin catchment regions. The largest watercourse within the catchment is the Glenelg River which is located north of the proposed wind farm site. Johnstone Creek along with some unnamed creeks are located to the east of the proposed wind farm site and within the development envelope for option 2 for the transmission line.

The proposed wind farm site is not located within a one per cent Annual Exceedance Probability (AEP) flood extent. Available data suggests there is no indication that the wind farm site is subject to flooding. The proposed underground transmission option crosses the one per cent AEP flood extent for the Surrey River. Based on regional topography, rainfall on the Glenelg Basin and Portland Coast Basin discharges into both Discovery Bay and Portland Bay.

Given the proximity of the wind farm site to the Glenelg Estuary and Discovery Bay Ramsar site, there is potential for the Project to threaten or impact the ecological character of the Ramsar site. The Ramsar site is listed as internationally significant due to it providing seasonal habitat for many migratory birds. If the proposed Project was to diminish this value it will be considered a significant impact.

According to the Glenelg Estuary and Discovery Bay Ramsar Site Management Plan, a knowledge gap currently exists in the understanding of the Ramsar site hydrology. Local drainage information on the plantation and the proposed wind farm site is also currently not available. The topography of the plantation and the western area of agricultural land within the proposed site generally falls towards to Ramsar site, and ultimately Discovery Bay. This suggests that rainfall on the wind farm site may flow either overland or underground towards the Ramsar site, eventually reaching Discovery Bay. The agricultural land on the eastern end of the wind farm site has several areas that are indicated to be land subject to inundation.

Surface geology of the wind farm site is predominantly comprised of Pleistocene aeolian dune deposits, with some Holocene coastal and inland dunes with minor swamp deposits, as well as extrusive basalts, scoria and ash towards the south east. The surface geology is host to the water table aquifer, with a water depth below the ground surface across the site predominantly less than 10 metres. Based on data obtained from Spatial Datamart, salinity measured (as total dissolve solids) between 500 and 1,000 mg/L. This classifies water quality as Segment A1-A2 of the SEPP Waters (Groundwater) guidelines suggesting that water quality is good in the area.

There are no readily available water sources nearby the proposed wind farm site, however options to be considered are listed below. Necessary permits will need to be obtained from the relevant authority:

- To locate and pump from the nearest creek or river
- To locate and pump from the nearest bore
- To locate and tap from the nearest water main.

Given the scale of the wind farm site and depending on the approach, it is likely approvals are required from authorities for the water supply required for the construction.

Mitigation measures have been developed for both the construction and permanent works phase. These aim to address impacts associated with flood risks water quality and are outlined in the Preliminary Hydrology Assessment (Attachment 4)

Amenity

Noise

A preliminary noise assessment (preliminary NIA) has been prepared (refer to Attachment 5) using a candidate wind turbine that is representative of the type of turbine that is being considered for the Project. Within the three kilometre assessment area for the preliminary NIA, 26 dwellings were identified and considered as noise sensitive locations.

Noise emissions from the Project are expected to comply at all noise sensitive locations with the base noise limit of 45 dB and 40 dB LA90(10 min), for Stakeholder and Non-Stakeholder dwellings respectively, across all wind speeds, except for one location (Receiver ID 1008315). This location exceeds the Stakeholder dwelling noise limit of 45 dB by 1 dB at rated power hub height wind speed, but complies at all other wind speeds below this. This location has been designated by Neoen as an abandoned dwelling, but will require confirmation at a later stage of the Project.

The high amenity noise limit of 35 dB LA90(10 min) at 6 m/s and below was also considered and only one location exceeds this noise limit, being the previously identified abandoned dwelling (Receiver ID 1008315). This is the same noise sensitive location which is predicted to experience exceedances of the base noise limit and has been identified as an abandoned dwelling by Neoen. Notwithstanding, this abandoned dwelling would be considered a Stakeholder and therefore the high amenity noise limit does not apply.

Cumulative noise impacts associated with the operation of the Project and the nearby Portland Wind Energy Project (PWEP) were considered, however none were identified due to the significant setback distance between the two wind farms.

The Project is therefore not expected to have significant noise impacts on noise sensitive locations. As the final development plans are prepared, further noise studies will be conducted to show compliance with limits for noise sensitive locations.

Landscape character and key viewpoints

A Preliminary Landscape and Visual Impact Assessment (preliminary LVIA) has been undertaken and prepared by Green Bean (2019) (Attachment 3). The preliminary LVIA identifies relevant zones and overlays including the Farming Zone and significant Landscape Overlay (SLO1) as defined in the Glenelg Shire Council Planning Scheme. A consolidated description of the zones and overlays relevant to the Project is provided in Section 12 of this referral form. The Glenelg Shire Council Planning Scheme attributes SLO1 to the Glenelg River Estuary and Surrounds. Refer to Figure 7 – Planning zones and Figure 8 – Planning overlays for the zone and overlay controls applicable to the Project.

For the preliminary LVIA, the landscape character surrounding the wind farm site has been determined as a singular landscape unit. However, the assessment recognises that there are localised and specific characteristics occurring within the landscape unit, include major landscape features identified in the Glenelg Planning Scheme:

- Glenelg River
- Mount Richmond National Park
- Lower Glenelg National Park

Other key landscape features are also situated within and surrounding the Project site include:

- Discovery Bay and Coastal Park (incorporating the Great South West Walk)
- Lower Glenelg National Park and Glenelg River corridor
- Kentbruck plantation and
- Various flora and scenic reserves

The landform within and surrounding the Project exhibits simple and repeating patterns of

topographical forms with limited variety. Landcover is simple and predictable where defined by pine plantation and native tree cover within National Parks. Plantation areas are also dynamic and subject to change through harvesting. Agricultural land, including cropping and pastoral fields, create a regular and uniform appearance. Landcover increases in complexity across the Discovery Bay Coastal Park becoming irregular across dunes and water bodies. Low density rural settlement is generally dispersed east and west of the Project site, consisting largely of small-scale farmsteads and individual rural dwellings.

In assessing the landscape character's sensitivity to change, a set of criteria were applied that are based on established good industry practice and are broadly outlined in the National Wind Farm Development Guidelines (Draft v2.4). The landscape within and surrounding the Project site is considered to have a medium sensitivity to change because of the proposed Project. Some landscape characteristics beyond the Project site (Discovery Bay Coastal Park and sections of the Great South West Walk) will be more affected by the Project, which may result in visually dominant alterations to the perceived landscape character. The Project should seek to use existing landscape elements and features where practicable to mitigate these potential impacts.

Potential visual effects resulting from the construction and operation of the Project would primarily be determined by a combination of receiver sensitivity and the magnitude of visual effects. This combination then provides the rating of visual effect for viewpoints. The following considerations of potential visual effects is an assessment based on preliminary concept design that is likely to be refined following the completion of further environmental investigations. A further consideration of potential visual effects will be undertaken to address any refinements to the concept design.

Views from urban areas (Nelson)

The Project would be unlikely to have any significant visual effect on most Nelson residents. Views towards the western section of the wind farm site would be visible from areas within the eastern part of Nelson. However, views towards the wind farm site from the majority of Nelson would be partially restricted by development and built structures within the urban area. Potential views would also be disrupted by discrete areas of vegetation together with the screening influence of undulating landforms. Project

Views from publicly accessible locations

Majority of public open spaces and recreational areas are located within surrounding localities, where both distance and existing vegetative cover are likely to partially screen potential views toward the wind farm site. Most of the Great South West Walk (around 220 kilometres), including areas nearby the Project site within the Lower Glenelg or Cobobboonee National Parks, are likely to be completely screened by extensive stands of vegetation. These include the sections along the Glenelg River which are understood by Neoen to be the most popular sections. Where the Great South West Walk follows the Discovery Bay beach, the visual effect of the Project will be more significant. Views towards the Project within the Lower Glenelg National Park would be screened from day use and camping areas.

Views from local roads

The Project is likely to be partially screened from the Portland Nelson Road, and views from other minor roads will be influenced by both landform and vegetation alongside road corridors. Views from travelling vehicles will be transitory in nature and generally short term.

Views from agricultural land

The Project would have the potential to impact people engaged in predominantly farming activities, where views toward wind turbines would occur from surrounding agricultural areas. Views towards the turbines will occur from a wide area of surrounding agricultural land, however the sensitivity of visual impacts is less for those employed or carrying out work in rural areas compared to potential views from residential dwellings. The sensitivity of individual view locations will also depend on the perception of the viewer.

Views from other rural residential dwellings (outside of Nelson)

Several residential dwellings within the landscape surrounding the wind farm site would be screened by tree and/or windbreak shelter planting. It is possible not all residential dwellings would have direct or significant views toward the Project. Overall the Project is not predicted to significantly increase the magnitude of visual impact for most dwelling locations surrounding the Project area.

The preliminary LVIA determined that the Project would be unlikely to result in any significant cumulative visual impacts arising from visibility between other proposed and operation wind farms.

Traffic and transport

The Project will result in a substantial temporary increase in construction traffic during the construction period. Following construction, operational traffic to and from the Project will be negligible.

Construction traffic volumes have been estimated using the indicative concrete and crushed rock estimates and are set out in Table 11-1. These estimates are for a predicted nine month period during which most civil construction (ie turbine construction) would be carried out. The construction methodology and program, along with construction material requirements and construction vehicle movements will be further developed and assessed in the planning permit application for the project.

Vehicle	Estimated trips	Estimated number of trips
	(one way), total unless	per month ¹
	otherwise indicated	
Concrete truck	29,500	3,300
Truck (crushed rock) ²	25,800	2,900
Truck (aggregate)	16,500	1,800
Truck (cement)	8,300	920
Truck (sand)	8,300	900
Truck (water)	3,600	400
Semi-trailer (steel)	400	40
Workers vehicles (light vehicles)	Up to 60 per day	1,260
Escort vehicles (light vehicles)		250
Heavy over dimensional vehicle	1,100	100
Blades (one vehicle per blade)		
Tower section (five vehicles per		
tower)		
Nacelle (one vehicle per nacelle)		

Table 11-1 – Estimated construction traffic volumes

Table notes:

1. Assumes nine-month civil construction program

2. Vehicles carrying crushed rock may be less than estimated where on site material is suitable for use

The wind farm site will be accessed via the state-controlled Portland-Nelson Road which intersects the site. The A1 Princes Highway connects Portland and Heywood to Mt Gambier and further afield and is around 15 kilometres north of the Project. A number of local roads intersect with Portland-Nelson Road in the vicinity of the Project, however these are anticipated to be used by low volumes of predominantly local traffic.

This Portland-Nelson road is currently used by heavy vehicles transporting plantation timber from the numerous plantations in the vicinity to the Port of Portland and / or other processing facilities, as well as local and tourist traffic. The Portland-Nelson Road is used as an alternative to the A1 Princes Highway by some vehicles.

Consideration of access permits and approvals from VicRoads will be required if construction or operational activities impede on the Portland-Nelson Road.

The Project will seek to use existing access points used as part of the existing forestry operations to facilitate the delivery of wind turbines and other components. These intersections and access points will be upgraded where necessary. All site access points to the wind farm site will be located to/from the Portland-Nelson Road. There will also be a requirement for new and or upgraded site access points to provide construction and/or operational access to the battery storage facility and the transmission line (dependent on final route selection).

It is anticipated that wind turbines and associated infrastructure will be transported to the site from Portland (either the Port of Portland, nearby manufacturing facilities and/or storage areas in the vicinity). The sources of this infrastructure will be determined following a procurement process.

As identified above in Section 3, raw materials for the Project are anticipated to be sourced from providers external to the wind farm site. There is a potential opportunity to use existing limestone material from within the site for road base materials for access tracks, however it is not anticipated that this material will be suitable for turbine foundations. Raw material will therefore need to be transported to the site. These materials include concrete and crushed rock. Concrete will be primarily used for the construction of turbine foundations and ancillary infrastructure, with crushed rock to be primarily used for access tracks and turbine hardstands. Indicative quantities required for these materials are around 210,000m³ for concrete, and 260,000m³ for crushed rock.

It is anticipated at this preliminary stage that the Project would not have a significant impact on the performance or safety of the existing road network and will not require substantial upgrades or improvements to road infrastructure. The wind farm site is accessible at multiple existing locations which will be upgraded as needed to provide for access for over-size and/or over-dimensional loads. The Portland-Nelson Road already accommodates heavy vehicle movements, and any impacts resulting from temporary changes to the road network will be able to be mitigated through the use of the alternative A1 Princes Highway route to the north of the Project, which services the same, major regional towns as the Portland-Nelson Road.

The Project will ensure that local access, including access to Nelson, Mt Richmond and tourist facilities in the vicinity including the Great South West Walk will be retained.

To ensure that potential traffic impacts are identified, and appropriate management measures are put in place, a traffic impact assessment will be prepared as part of future application documents and will identify:

- Current and future uses of the road network in the vicinity of the Project, including uses for commercial and tourism purposes.
- Existing traffic conditions of the site and surrounds, including proposed freight routes from Portland and local quarries.
- Estimated heavy and light vehicle traffic that will be generated by the construction and operation of the Project.
- Potential impacts on the surrounding road network.
- Management and mitigation measures to avoid or minimise identified potential impacts.

The outcomes of this traffic impact assessment will be documented in a future Traffic Management Plan that will be prepared in accordance with relevant guidelines and in consultation with key stakeholders including VicRoads and Glenelg Shire Council.

Airfields and aerodromes

Portland Airport is a CASA Certified Airport and is located about 30 kilometres to the east of the wind farm site and south of the option 2 transmission line development envelope. In addition, there are two private airstrips located near the wind farm site; Nelson Aerodrome and a smaller airstrip within the timber plantation north of the wind farm site. The Victorian Airports map included below shows the location of the nearby airports in the area surrounding the Kentbruck plantation.

Nelson Aerodrome is an uncertified Aeroplane Landing Area (ALA) located on the Portland Road at Nelson. The Nelson ALA has a 620 metre long grass runway oriented east/west (RWY09/27), two substantial aircraft hangars and associated aircraft apron (parking) areas. It is owned by the Nelson Aeroplane Company which specialises in maintenance and restoration of vintage aircraft, as well as undertaking maintenance of small light aircraft and ultra-light aircraft. The Nelson ALA is used once or twice a week for aircrafts arriving and departing for scheduled maintenance (verbal advice

provided to the Project team by the operator of the Nelson ALA).

In consultation with the Nelson Aeroplane Company, it was determined that the Project is far enough away from the ALA as to not affect aircraft operations. It was agreed that the Project would pose a low risk to aircrafts arriving and departing from the east due to the increased clearance altitude required over the wind farm site. This is further mitigated by the fact that aircraft taking off from that direction turn right toward the low ground of the coast immediately after take-off. Continual discussion with pilots who use the ALA will also be undertaken by the Nelson Aeroplane Company.

Overall, the Project is considered to be situated at enough of a distance from the Nelson Aerodrome as to not impact on the operation of the ALA.

As part of any future application document an aviation impact assessment will be prepared to investigate local aircraft movements having regard to the locations and use of nearby airfields, to determine the potential risk of impacts on aviation operations from the Project. This will include identification of relevant consultation carried out with key stakeholders including the Civil Aviation Safety Authority and Air Services Australia, as well as the operators of nearby airfields.



features to contain Aboriginal heritage. This initial desktop assessment indicated the potential for unidentified Aboriginal cultural heritage material to be present within the study area. A targeted site inspection was therefore undertaken on 1,2 and 3 April 2019. During these inspections a number of Aboriginal sites were located, including isolated stone artefacts, low, medium and high density artefact scatters and shell middens.

A large portion of the Project area covers recognised areas of cultural heritage sensitivity and areas of high archaeological potential, with a number of sensitive landform-systems that are likely to contain Aboriginal cultural heritage. The geomorphology of the area, its proximity to both the ocean and fresh water sources, as well as the availability of flint stone along Discovery Bay will have made this area ideal for past inhabitants. Any future impact to these areas should involve subsurface testing to substantiate the presence of further archaeological material.

Large sections of the current wider study area have been subject to significant ground disturbance. These areas are associated with the radiata pine plantations, as well as areas associated with the mechanical construction of roads, tracks, and farm infrastructure. It is possible that there are Aboriginal cultural heritage places, objects or human remains within areas determined to no longer be of cultural heritage significance due to significant ground disturbance. The presence of Aboriginal cultural heritage material located during the site visit also illustrates that the disturbance in the study area has not negated the presence of Aboriginal cultural heritage.

Based on the results of the preliminary Cultural Heritage Due Diligence Assessment, there is still potential for Aboriginal cultural heritage to be present throughout the Project area. Areas in question include the proposed underground or overhead transmission line options that run through the Cobboboonee National Park and discrete locations near the Mount Richmond National Park.

Under the *Aboriginal Heritage Act 2006*, a mandatory Cultural Heritage Management Plan (CHMP) is required if any component of the Project cannot avoid areas of cultural heritage sensitivity that have not been subject to significant ground disturbance.

Appropriate consultation will be undertaken to determine if an Indigenous Land Use Agreement (ILUA) is required, or if a Cultural Heritage Management Plan will satisfy the Gunditj Mirring Traditional Owners Aboriginal Corporation RNTBC in place of a formal ILUA.

Historic heritage

A database review was undertaken of historical cultural heritage records in the vicinity of the Project area including the Victorian Heritage Register and Inventory, National Heritage List and Commonwealth Heritage List and Local Council Heritage Overlays and Planning Schemes. No previously recorded historical places or features recorded within the Project area were identified.

A further investigation into the land use history of the study area revealed European occupation began in the first few years of the 19th century. The area was primarily used for pastoral and agricultural industries, with tallow, beef, dairy produce and potatoes being the major exports from the region in the early 1840s. Agricultural activities then turned into forestry, with the stripping of wattle bark beginning in the 19th century. The Forests Commission established exotic softwood species plantations in the region in the 1920s, with more planting of radiata pine at Kentbruck taking place after the Second World War during the 1950s.

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project? \times NYD \times No \times Yes If yes, answer the following questions and attach details.

What investigation of native vegetation in the project area has been done? (briefly describe)

Detailed surveys and investigations for native vegetation communities have not been undertaken yet. Limited fieldwork has been undertaken by Biosis to broadly characterise the general types of vegetation communities that are present, along with desktop studies and database assessments. A preliminary flora and fauna assessment is included in Attachment 1.

What is the maximum area of native vegetation that may need to be cleared?

× NYD Estimated area(hectares)

As the Project is in the early stages of design development, a maximum area of native vegetation that may need to be cleared has not yet been determined. Native vegetation mapping and quality assessments will be carried out once a more refined design for the project has been developed.

However, it is not expected that the total area of cleared native vegetation will be significant as the wind farm is predominantly located within actively managed and harvested exotic plantation and on previously cleared agricultural land. While there may be the potential for some native vegetation to be removed for the Project, it is expected that the extent of the direct impact will be low, and any removal is likely to occur in the more common EVCs (Least Concern conservation status). In addition, the presence of existing access tracks which will be used by the Project will assist in minimising the extent of remnant roadside vegetation that will need to be cleared.

If option one for the transmission line route is selected, potential impacts on native vegetation will be minimised as the transmission line will be underground below an existing road which traverses the Cobboboonee National Park and Cobboboonee Forest Park. However, this option still poses a risk to native vegetation due the potential incursion of the trench into tree protection zones. Further discussions with DELWP will be undertaken to agree on an assessment for the underground cable alignment if this option is selected.

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

x N/A approx. percent (if applicable)

Which Ecological Vegetation Classes may be affected? (if not authorised as above) × NYD × Preliminary/detailed assessment completed. If assessed, please list.

The following three ecological communities listed under the FFG Act may occur within proximity to the study area, but are not considered likely to occur within the study area itself:

- Coastal Moonah Woodland Community
- Red Gum Swamp Community No. 1
- Victorian Temperate Woodland Bird Community (including Red-tailed Black Cockatoo)

Based on initial desktop studies the following EVCs may be present within the project area (bioregional conservation status indicated in parentheses):

- EVC 48 Heathy Woodland (Least Concern)
- EVC 16 Lowland Forest (Least Concern)
- EVC 23 Herb-rich Foothill Forest (Vulnerable)
- EVC 3 Damp Sands Herb-rich Woodland (Vulnerable)
- EVC 8 Wet Heathland (Least Concern)
- EVC 198 Sedgy Riparian Woodland (Vulnerable) EVC 681 Deep Freshwater Marsh (Vulnerable)
- EVC 53 Swamp Scrub (Endangered)

The results of the preliminary assessment indicate that as the great majority of the proposed wind farm site is an existing area of introduced softwood plantation, there is a low likelihood that any Ecological Vegetation Classes that might be impacted are endangered or of high conservation significance. While there may be the potential for some native vegetation to be removed for the Project, it is expected that the extent of the direct impact will be low, and any removal is likely to occur in the more common EVCs (Least Concern conservation status).

Have potential vegetation offsets been identified as yet?

 \times NYD \times Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

Refer to the preliminary fauna and fauna assessment (Biosis, 2019) for further details (Attachment 1).

Any future application document will be informed by a detailed flora and fauna assessment and the requirements of relevant guidelines.

NYD = not yet determined

Flora and fauna

What investigations of flora and fauna in the project area have been done? (provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

Biosis has prepared a preliminary flora and fauna assessment of the study area (Biosis, 2019). See Attachment 1.

Currently, detailed field surveys and investigations for most FFG Act listed flora and fauna species have not been undertaken. However, targeted field surveys have been carried out for these FFG Act and EPBC Act listed fauna species:

- Growling Grass Frog
- Australasian Bittern
- Southern Bent-wing Bat
- Migratory shorebirds

A program for future environmental studies to be undertaken is currently under development by Neoen and the Project team. Neoen have now submitted an updated draft study program for further review and comment to DELWP, which is summarised in Appendix 3 of the accompanying ecology report. A seasonal survey program will be undertaken to determine the degree to which bird and bat species utilise the Project site, and the potential for impacts on listed species.

Database reviews have been done to provide information about flora and fauna within five kilometres of the study area, as there is potential for indirect effects from the Project to occur within this zone. Many of the biodiversity databases used are maintained by the Victorian Government Department of Environment, Land, Water and Planning (DELWP) of the Australian Government Department of the Environment and Energy (DoEE). Records from the following databases were collated and reviewed:

- DELWP's Victorian Biodiversity Atlas (VBA), including the 'VBA_FLORA25, FLORA100 & FLORA Restricted' and 'VBA_FAUNA25, FAUNA100 & FAUNA Restricted' datasets
- DoEE's Protected Matters Search Tool for matters protected by the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- BirdLife Australia Atlas of Australian Birds, including Shorebirds 2020 data extraction.

Have any threatened or migratory species or listed communities been recorded from the local area?

- \times NYD \times No \times Yes If yes, please:
- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the Project site or nearby.

Species listed under the EPBC Act and FFG Act that have been recorded in recent surveys or past observations, and their likelihood of occurrence within five kilometres of the study area of species is addressed in Table 12-1. A wider search area of 30 kilometres identified only two additional bird and bat species that have the potential of occur. These species have also been included in the table.

There is the potential for a range of species listed in Table 12-1 to fly through the site. These may be moving between adjacent habitats or undergoing seasonal movements. Some of these species may fly within rotor swept height and be at risk of collision. The level of bird utilisation of the site has not yet been assessed, A program of seasonal utilisation surveys is planned to assess potential impacts.

As detailed flora and fauna assessments of the study area are either underway or yet to commence, species identified during initial desktop studies have been assigned a likelihood of

occurrence rating based on expert opinion, information in relevant biodiversity databases and reports, and an assessment of the habitats on site.

Species	Conservations status		Date of	Likelihood of occurrence (within 5km	
Elora	EPBC	FFG	VIC	last record	of study area)
Glistening Saltbush Atriplex billardierei		L		1980	Low likelihood of occurring No suitable habitat within 5km of the study area
Limestone Spiderorchid <i>Caladenia calcicola</i>	VU	L		1983	Medium likelihood of occurring May occur along roadsides and other less disturbed portions of the site, on sandy soils over limestone
Colourful Spiderorchid <i>Caladenia colorata</i>	EN	L		2003	Medium likelihood of occurring May occur along roadside and other less disturbed portions of site, on calcareous sands and sandy loams
Scented Spiderorchid Caladeina fragrantissima		L		2015	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, on sandy loams
Mellblom's Spiderorchid <i>Caladenia hastata</i>	EN	L		2013	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in remnant patches of coastal heath or heathy woodlands and on margins of wet depressions
Ornate Pinkfingers <i>Caladenia ornata</i>	VU	L		2003	Medium likelihood of occurring May occur along roadside and other less-disturbed portions of site, in remnant patches of heathy or grassy woodlands
Robust Spiderorchid Caladenia valida		L		2012	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in remnant patches of coastal heath and heathy woodland
Large White Spider- orchid <i>Caladenia venusta</i>		L		1944	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in remnant patches of coastal heath and heathy woodland. Existing records in near Portland and Heywood
Curly Sedge Carex tasmanica		L		2015	Low likelihood of occurring Limited suitable habitat within the study area
Wrinkled Cassinia Cassinia rugata	VU	L			Medium likelihood of occurring Potentially present within Cobbobonee National Park close to the Surrey River and its tributaries
Small Milkwort Comesperma polygaloides		L		1991	Low likelihood of occurring Limited suitable habitat
Coast Helmetorchid Corybas despectans		L		2016	Medium likelihood of occurring May occur along roadsides and other less disturbed portions of site, on sandy soils associated with Coast Tea-tree and/or Moonah
Late Helmetorchid Corybas sp. aff. diemenicus (Coastal)		L		2008	Low likelihood of occurring Limited suitable habitat
Swamp Diuris Diuris palustris		L		1994	Medium likelihood of occurring Relatively recent records in the

Table 12-1 EPBC and FFG Act listed species

				Cashmore (Bats Ridge Wildlife Reserve) area
Rough Eyebright		L	1770	Low likelihood of occurring
Large-fruit Yellow- gum Eucalyptus leucoxylon subsp. megalocarpa		L	2010	Limited suitable habitat
Clover Glycine Glycine Latrobeana	VU	L	2015	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in remnant patches of grassland or grassy woodland
Gorae Leek-orchid Prasophyllum diversiflorum	EN	L	1947	Low likelihood of occurring Generally limited to basalt soils subject to seasonal inundation. No suitable habitat
Maroon Leek-orchid Prasophyllum frenchii	EN	L	2009	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in grassland and grassy woodland environments on sandy or black clay loam soils
Coastal Leekorchid Prasophyllum litorale		L	2016	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in coastal heath on sand over moisture- retentive clays
Pale Leek-orchid Prasophyllum pallidum s.l.	VU	L	1980	Low likelihood of occurring Not a recognised taxon within Victoria
Greenstriped Greenhood Pterostylis chlorogramma	VU	L		Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site
Leafy Greenhood Pterostylis cucullata	VU	L		Low likelihood of occurring May occur along roadsides and other less disturbed portions of site, in remnant and sheltered patches of coastal scrub and heath
Leafy Greenhood Pterostylis cucullata subsp. cucullata		L	2001	Medium likelihood of occurring May occur along roadsides and other less disturbed portions of site, in remnant and sheltered patches of coastal scrub and heath
Small Sickle Greenhood <i>Pterostylis lustra</i>		L	2001	Medium likelihood of occurring Nearby records are limited to wet areas within Cobboboonee Forest Park
Coast Dandelion Taraxacum cygnorum	VU	L	1991	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, on calcareous soils
Metallic Sunorchid Thelymitra epipactoides	EN	L	2000	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, on sandy loams or loamy sands, primarily in coastal heaths, grasslands and woodlands
Winter Sunorchid Thelymitra epipactoides	EN	L	2000	Medium likelihood of occurring May occur along roadsides and other less-disturbed portions of site, in coastal heath or, more commonly, heathy woodland
Swamp Everlasting Xerochrysum palustre	VU	L		Medium likelihood of occurring May occur on the margins of swamps and wetlands, on black cracking clay soils

Fauna					
Common Bent-wing Bat (southern ssp.) <i>Miniopterus</i>	CR	L	Endanger ed	2012	High likelihood of occurring Suitable habitat nearby; likely to fly within site
					There are 10 known roost caves within 30 km of the project boundary. Exact locations of these caves are not available to the project team, however DELWP have indicated known roost caves at the following locations: McLennans Punt, Currans Creek,
					Kate's slide and Cave G3, Guano, Amphitheatre, 1886, Dry Creek, Bats Ridge, Portland Cave and the Bridgewater maternity cave.
Swamp Antechinus Antechinus minimus	VU	L	Near threatened	2006	Medium likelihood of occurring Suitable habitat nearby; may utilise limited portions of site
Southern Brown Bandicoot Isoodon obesulus	EN	L	Near threatened	2013	Medium likelihood of occurring Suitable habitat nearby; may utilise limited portions of site
Heath Mouse Pseudomys shortridgei	EN	L	Near threatened	2010	Medium likelihood of occurring Suitable habitat nearby; may utilise limited portions of site
Australasian Bittern Botaurus poiciloptilus	EN	L	Endanger ed	1992	Medium likelihood of occurring Suitable habitat nearby; likely to fly over site occasionally
Calyptorhynchus banksii graptogyne Red-tailed Black- Cockatoo (south- eastern)	EN	L	Endanger ed	2014	Medium likelihood of occurring Suitable habitat nearby; likely to fly over site occasionally
Orange-bellied Parrot Neophema chrysogaster	CR	L	Endanger ed	2000	Medium likelihood of occurring Suitable habitat nearby; likely to fly over site occasionally
Growling Grass Frog Litoria raniformis	VU	L	Endanger ed	2002	Medium likelihood of occurring Suitable habitat nearby; may utilise limited portions of site
Regent Honeyeater Anthochaera phrygia	CR	L	cr	1958	Negligible likelihood of occurring Not suitable habitat
Great Knot Calidris tenuirostris	CR	L	Endanger ed	2012	Negligible likelihood of occurring Suitable habitat nearby; but unlikely to fly over site
Greater Sand Plover Charadrius Ieschenaultia	VU		Endanger ed	1980	Negligible likelihood of occurring Suitable habitat nearby; but unlikely to fly over site
Spot-tailed Quoll Dasyurus maculatus	EN	L	Endanger ed	1999	Low likelihood of occurring Suitable habitat nearby; may occasionally visit limited portions of site
Swift Parrot Lathamus discolor	CR	L	Endanger ed	2011	Negligible likelihood of occurring No suitable habitat
Yarra Pygmy Perch Nannoperca obscura	VU	L	Vulnerable	1991	Negligible likelihood of occurring No streams offering habitat on-site
Australian Sea Lion Neophoca cinerea	VU			1987	Negligible likelihood of occurring No suitable habitat
Nankeen Night Heron Nycticorax caledonicus			Near threatened	2001	High likelihood of occurring Likely in adjacent wetlands; likely to fly over site occasionally
Variegated Pygmy Perch Nannoperca variegata	VU	L	Vulnerable	2001	Negligible likelihood of occurring No streams offering habitat on-site
	1	1	1	1	

Plains-wanderer Pedionomus	CR	L	Endanger ed		Negligible likelihood of occurring Outside known range; no suitable
torquatus					habitat
Night Parrot Pezoporus occidentalis	EN		rx		Negligible likelihood of occurring Outside known range; no suitable habitat
Australian Grayling Prototroctes maraena	VU	L	Vulnerable		Negligible likelihood of occurring No streams offering habitat
Baillon's Crake Porzana pusilla palustris		L	Vulnerable	2000	Medium likelihood of occurring Potentially present in wetlands near the study area
Smoky Mouse Pseudomys fumeus	EN	L	Endanger ed	2005	Negligible likelihood of occurring Outside known range; no suitable habitat
Grey-headed Flying- fox <i>Pteropus</i>	VU	L	Vulnerable		Negligible likelihood of occurring Outside known range
poliocephalus					
Australian Painted- snipe <i>Rostratula australis</i>	EN		Endanger ed		Low likelihood of occurring Suitable habitat nearby; likely to fly over site occasionally
Fairy Tern <i>Sternula nerei</i> s	VU	L	Endanger ed	2000	Negligible likelihood of occurring Suitable habitat nearby; but unlikely to fly over site
Hooded Plover Thinornis rubricollis	VU	L	Vulnerable	2011	Negligible likelihood of occurring Suitable habitat nearby; but unlikely to
Emu Dromaius novaehollandiae			Near threatened	2015	High likelihood of occurring Suitable habitat
King Quail Synoicus chinensis		L	Endanger ed	1966	Negligible likelihood of occurring Outside regular distributional range of the species
Little Buttonquail Turnix velox			Near threatened	1980	Low likelihood of occurring May occur occasionally
Lewin's Rail <i>Lewinia pectoralis</i>		L	Vulnerable	1981	Medium likelihood of occurring Likely to inhabit adjacent wetlands; may occasionally fly over site
Black-faced Cormorant Phalacrocorax fuscescens			Near threatened	2013	Negligible likelihood of occurring Rarely flies inland of coast
Pied Cormorant Phalacrocorax varius			Near threatened	2009	Medium likelihood of occurring Likely to inhabit adjacent wetlands; may fly over site
Whiskered Tern Chlidonias hybridus			Near threatened	2000	Low likelihood of occurring Known from adjacent wetlands; may fly over site
Gull-billed Tern Gelochelidon nilotica macrotarsa		L	Endanger ed	1999	Low likelihood of occurring Likely to inhabit adjacent wetlands; may fly over site
Caspian Tern Hydroprogne caspia		L	Near threatened	2012	Low likelihood of occurring Likely to inhabit adjacent wetlands; may fly over site
White-fronted Tern Sterna striata			Near threatened	1992	Negligible likelihood of occurring No suitable habitat
Little Tern Sternula albifrons sinensis		L	Vulnerable	2004	Negligible likelihood of occurring No suitable habitat
Pacific Gull Larus pacificus			Near threatened	2005	Negligible likelihood of occurring Likely to inhabit adjacent wetlands; may fly over site
Ruddy Turnstone Arenaria interpres			Vulnerable	2005	Negligible likelihood of occurring No suitable habitat
Sooty Oystercatcher			Near threatened	2014	Negligible likelihood of occurring
	1	1	Î.	1	

fuliginosus					
Grey Plover			Endanger	2010	Negligible likelihood of occurring
Pluvialis squatarola			ed		No suitable habitat
Whimbrel			Vulnerable	1949	Negligible likelihood of occurring
Numenius					No suitable habitat
phaeopus					
Black-tailed Godwit			Vulnerable	2006	Negligible likelihood of occurring
Limosa limosa					No suitable habitat
Grey-tailed Tattler		L	Endanger	1980	Negligible likelihood of occurring
Tringa brevipes			ed		No suitable habitat
Common Sandpiper			Vulnerable	2015	Negligible likelihood of occurring
Actitis hypoleucos					No suitable habitat
Wood Sandpiper			Vulnerable	2001	Negligible likelihood of occurring
Tringa glareola					No suitable habitat
Common			Vulnerable	2015	Negligible likelihood of occurring
Greenshank					No suitable habitat
Tringa nebularia					
Marsh Sandpiper			Vulnerable	2003	Negligible likelihood of occurring
Tringa stagnatilis					No suitable habitat
Terek Sandpiper		L	Endanger	2000	Negligible likelihood of occurring
Xenus cinereus			ea		No suitable habitat
Pectoral Sandpiper			Near		Negligible likelihood of occurring
Calidris melanotos			Inreatened		No suitable habitat
Sanderling			Near	2015	Negligible likelihood of occurring
Calidris alba			threatened		No suitable habitat
Latham's Snipe			Near	2008	Medium likelihood of occurring
Gallinago hardwickii			threatened		Likely to inhabit adjacent wetlands; may
Puch Stoppourlow		1	Endongor	1079	occasionally fly over site
Bush Stonecunew		L	ed	1976	Low Internood of occurring May occur in adjacent land: may fly
Durninus grailanus					over site occasionally
Brolga		L	Vulnerable	2011	High likelihood of occurring
Grus rubicunda		_			Known from adjacent wetlands; likely to
					fly over site occasionally
Royal Spoonbill			Near	2015	High likelihood of occurring
Platalea regia			threatened		Likely in adjacent wetlands; likely to fly
					over site occasionally
Little Egret		L	Endanger	2005	High likelihood of occurring
Egretta garzetta			eu		Likely in adjacent wetlands; likely to fly
Intermediate Earet		1	Endanger	2012	Low likelihood of occurring
Ardea intermedia		L	ed	2012	Rare in South Victoria: may use
plumifera					adjacent wetlands: may fly over site
					occasionally
Eastern Great		L	Vulnerable	2015	High likelihood of occurring
Egret					Likely in adjacent wetlands; likely to fly
Ardea alba modesta					over site occasionally
Nankeen Night			Near	2001	High likelihood of occurring
Heron			Inreatened		Likely in adjacent wetlands; likely to fly
Nycticorax					over site occasionally
		1	Endoncor	1040	Modium likelihaad of accurring
		L	ed	1949	likely in adjacent wetlands: likely to fly
			04		over site occasionally
Magpie Goose		L	Near	2008	Low likelihood of occurring
Anseranas			threatened		May use adjacent wetlands; may fly
semipalmata					over site occasionally
Australasian			Vulnerable	2011	High likelihood of occurring
Shoveler					Likely in adjacent wetlands; likely to fly
Spatula rhynchotis					over site occasionally
Freckled Duck		L	Endanger	2003	Medium likelihood of occurring
Stictonetta naevosa			eu		Likely in adjacent wetlands; likely to fly
Hordbood			Vulnorable	2014	Uver site occasionally
			VUINEIADIE	2014	Likely in adjacent wetlands: likely to fly
Ayuiya ausudiis	I			1	LINGLY IT AUJACETIL WELIATIUS, IIKELY LU IIY

				over site occasionally
Blue-billed Duck	L	Endanger	1999	High likelihood of occurring
Oxyura australis		ed		Likely in adjacent wetlands; likely to fly
) (she e ve la la	0045	over site occasionally
Musk Duck		vuinerable	2015	High likelihood of occurring
DIZIUTA IUDALA				over site occasionally
Spotted Harrier		Near	2001	Low likelihood of occurring
Circus assimilis		threatened	2001	Little suitable habitat
Grev Goshawk	L	Vulnerable	2000	Low likelihood of occurring
Accipiter				Little suitable habitat
novaehollandiae				
White-bellied	L	Vulnerable	2005	Medium likelihood of occurring
Sea-Eagle				Likely in adjacent wetlands; likely to fly
Haliaeetus				over site occasionally
leucogaster	· · · ·) (she e ve la la	4070	
Square-tailed Kite	L	vuinerable	1978	Low likelihood of occurring
Lophoictinia isura		Vulnarabla	2010	Intrequent occurrence in region
Black Falcon	L	vuinerable	2010	Infrequent occurrence in region
Rarking Owl	1	Endanger	2003	Negligible likelibood of occurring
Ninox connivens		ed	2003	Little suitable habitat
Powerful Owl	L	Vulnerable	2013	Negligible likelihood of occurring
Ninox strenua				Little suitable habitat
Masked Owl	L	Endanger	2002	Negligible likelihood of occurring
Tyto		ed		Little suitable habitat
novaehollandiae				
Diamond Dove	L	Near	1941	Negligible likelihood of occurring
Geopelia cuneata		threatened		Rare in the region
Major Mitchell's	L	Vulnerable	1957	Negligible likelihood of occurring
Cockatoo				Outside regular distributional range of
Lophocroa				the species
Flogant Parrot		Vulnerable	2005	Negligible likelihood of occurring
Neonhema elegans		Vulliciable	2005	Rare in the region
Ground Parrot	1	Endanger	2001	Negligible likelihood of occurring
Pezonorus wallicus		ed	2001	May occur in adjacent coastal heaths
				but little suitable habitat on site
Azure Kingfisher		Near	2005	Negligible likelihood of occurring
Alcedo azurea		threatened		No streams offering suitable habitat
White-throated		Vulnerable	2009	High likelihood of occurring
Needletail				Likely to fly over site during migration
Hirundapus				period in Australia
caudacutus				
Black-eared Cuckoo		Near	1978	Low likelihood of occurring
Chrysococcyx		threatened		Sparse occurrence in region
osculans				
Hooded Robin	L	Near	1994	Low likelihood of occurring
Melanodryas		threatened		Little suitable habitat
cucullata				
Spotted Quailthrush		Near	2012	Negligible likelihood of occurring
Cinclosoma		threatened		No suitable habitat
punctatum				
Grey-crowned		Endanger	1950	Negligible likelihood of occurring
Babbler		eu		INO SUITADIE NADITAT
Pomatostomus				
		Neer	2000	Neelleikle Risting of the state
Brown Treecreeper		inear threatened	2000	Negligible likelinood of occurring
		Vulnorable	1000	Negligible likeliheed of a survive
Unestnut rumped		vuinerable	1980	No suitable babitat
Calamonthus				
overboovaius				
Specklod Marblar		Vulnerable	10/0	Low likelihood of occurring
Speckled warbler		vuinerable	1940	Low incentiood of occurring

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Chthonicola					Little suitable habitat		
sagittatus							
Rufous Bristlebird		L	Near	2015	Low likelihood of occurring		
Dasyornis			threatened		Known from adjacent coastal heaths,		
broadbenti					but little suitable habitat on site		
Common Dunnart			Vulnerable	1960	Low likelihood of occurring		
Sminthopsis murina					Little suitable habitat		
murina							
White-footed		L	Near	1978	Low likelihood of occurring		
Dunnart			threatened		Little suitable habitat		
Sminthopsis							
leucopus							
Eastern Pygmy		L	Near	2006	Low likelihood of occurring		
possum			threatened		Known from adjacent coastal heaths,		
Cercartetus nanus					but little suitable habitat on site		
Southern Myotis			Near	2004	Low likelihood of occurring		
Myotis macropus			threatened		May flow over limited portions of site		
					when moving between suitable habitats		
Striped Worm-		L	Near	2010	High likelihood of occurring		
Lizard			threatened		Likely to occur along roadsides and		
Aprasia striolata					other less disturbed portions of site		
Swamp Skink		L	Vulnerable	2005	Medium likelihood of occurring		
Lissolepis coventryi					Known from adjacent wet areas; may		
					occur in small patches of remnant		
Four tood Okink			Neer	2000	habitat within site		
Four-toed Skink			threatened	2006	High likelihood of occurring		
Hemiergis peronii			incatched		other less disturbed portions of site		
Southern Toadlet			Vulnerable	2011	High likelihood of occurring		
Pseudonhrvne			Vaniorabio	2011	Likely to occur in low-lying roadsides		
semimarmorata					and other less disturbed portions of site		
NE Grampians			Endanger	1999	Low likelihood of occurring		
Rush Yabby			ed	1000	Known from wetlands in adjacent land.		
Geocharax falcata					Little suitable habitat on-site.		
Hairy Burrowing			Vulnerable	2008	I ow likelihood of occurring		
Cravfish				2000	Little potential habitat		
Engaeus sericatus							
Portland Burrowing			Vulnerable	2014	Nealigible likelihood of occurring		
Cravfish					No streams offering habitat on-site		
Engaeus strictifrons					5		
Glenela Spiny	EN	L	Endanger	2015	Nealigible likelihood of occurring		
Cravfish		-	ed	2010	No streams offering habitat on-site		
Fuastacus					3		
bispinosus							
Ancient Greenling		L	Endanger	2008	Low likelihood of occurring		
Damselfly		-	ed		Known from adjacent wetlands but little		
Hemiphlebia					suitable habitat on-site		
mirabilis							
Squeak beetle		L	Vulnerable	1973	Nealigible likelihood of occurring		
Hvarobia					No streams offering habitat on-site		
australasiae					-		
Little Galaxias	1	1	Vulnerable	1991	Negligible likelihood of occurring		
Galaxiella					No streams offering habitat on-site		
toourtkoourt					-		
Dwarf Galaxias	VU	L	Endanger		Negligible likelihood of occurring		
Galaxiella pusilla			ed		No streams offering habitat on-site		
Glenelg Mussel	CR	L	Endanger		Negligible likelihood of occurring		
Hyridella			ed		No streams offering habitat on-site		
(Protohyridella)					-		
glenelgensis							

*Likelihood of occurrence indicates the potential for a species or ecological community to occur regularly within the study area. It is based on expert opinion, information in relevant biodiversity databases and reports, and an assessment of the habitats on site. Likelihood of occurrence is ranked as negligible, low, medium, high or recorded.

EPBC: EN = endangered listed threatened species; VU = vulnerable listed threatened species; FFG: L = listed as threatened species

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

The following listed threatening processes may be exacerbated by the Project pending further assessments to be carried out:

- The loss of some individual birds from collision with turbines
- Invasion of native vegetation by "environmental weeds"
- The spread of Phytophthora cinnamomi from infected sites into parks and reserves,
- including roadsides, under the control of a state or local government authority
- Use of Phytophthora-infected gravel in construction of roads, bridges and reservoirs.

The degree to which birds utilise the wind farm site has not yet been assessed, however there is potential for a range of species to fly through the site, either occasionally or regularly. These movements could be attributed to species moving between adjacent habitats or undertaking seasonal movements. A survey of seasonal site utilisation is planned to be undertaken.

The Southern Bent-wing Bat is known to occur in the area, with ten known roost caves within 30 kilometres of the project boundary. Given this proximity, there is potential for this species to fly through the wind farm site, presenting a potential collision risk (with turbines). To determine the level of activity and utilisation of the wind farm site by this species, a 12-month monitoring program involving acoustic monitoring at a range of heights will be undertaken.

The objective of investigating Southern Bent-wing Bats at the Kentbruck Wind Farm site and environs is to obtain relative measures of the species flight activity to support an informed assessment of the potential risk of collisions for the configuration and specifications of turbines at the site.

There is potential for direct removal of native vegetation, which could in turn lead to habitat removal. As the project is still in the preliminary design and development phase, the extent of native vegetation removal has not yet been determined. While most of the Project is to be constructed within a radiata pine plantation, there may be potential direct or indirect impacts on habitat for threatened plants, mammals or reptiles. Ensuring these areas are identified and avoided will be a priority during the design development process. Targeted surveys, as well as native vegetation mapping and quality assessments will be carried out once a more refined design for the project has been developed.

Without best-practice management construction activities from the Project may also result in increased sedimentation within drainage lines and waterways. Key sites where downstream sedimentation would impact on significant waterways and aquatic species will be identified, and strict sediment control measures will be implemented across the Project. It is not expected that downstream impacts from sedimentation will impact on the adjacent Ramsar site with the implementation of these control measures.

The existing landscape for the Project is comprised predominantly of radiata pine plantation with small sections of cleared agricultural land at the eastern and western extents. The age of the plantation varies across each plot and harvesting will continue during construction and operation of the Project. Around three per cent of the total plantation is harvested each year, further contributing to the dynamic composition of this exotic landscape.

This past and ongoing land use means that the introduction of Project-related infrastructure is unlikely to materially change or exacerbate the level of fragmentation, or impact on fauna movements.

In addition, the EPBC Act and the FFG Act identifies loss of terrestrial climatic habitat by anthropogenic emissions if greenhouse gases as a key threatening process. As a wind energy facility and therefore a renewable energy Project, the Project would provide a new form of low greenhouse gas emissions generation in the NEM.

Are any threatened or migratory species, other species of conservation significance or Version 6: Nov 2018

listed communities potentially affected by the project?

- \times NYD \times No \times Yes If yes, please:
- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

Migratory species listed under the EPBC Act that have previously been recorded or are predicted to occur within five kilometres of the study area are outlined below in Table 12-2. Additional bird and bat species that may occur within 30 kilometres of the study area have also been included. These include Baillon's Crake and Regent Honeyeater. Each species has been assigned a likelihood of occurrence rating based on expert opinion, information in relevant biodiversity databases and reports, and an assessment of the habitats on site.

As noted above, the degree to which birds use the wind farm site has not yet been assessed, however there is potential for a range of species to fly through the site, either occasionally or regularly. These movements could be attributed to species moving between adjacent habitats or undertaking seasonal movements. A survey of seasonal site utilisation is planned to be undertaken.

To date, shorebird surveys have been completed during November 2018 and February 2019 with the rest of the surveys to be completed during the winter months of 2019 and November 2019. Survey methods will involve obtaining information from local sources of ornithological knowledge and focusing on primary habitats to determine possible routes between core habitats and to characterise potential indirect effects. Only two species have been identified as having a high likelihood of occurring within the study area.

Common name	Most recent record	Likelihood of occurrence in study area	Rationale for likelihood ranking
Caspian Tern <i>Hydroprogne caspia</i>	2012	Low	No suitable habitat; may fly over site occasionally
Crested Tern Thalasseus bergii	2015	Negligible	No suitable habitat
Little Tern Sternula albifrons	2004	Negligible	No suitable habitat
Common Tern Sterna hirundo	1979	Negligible	No suitable habitat
Arctic Jaeger Stercorarius parasiticus	2006	Negligible	No suitable habitat
Ruddy Turnstone Arenaria interpres	2005	Negligible	No suitable habitat
Grey Plover Pluvialis squatarola	2010	Negligible	No suitable habitat
Double-banded Plover Charadrius bicinctus	2015	Negligible	No suitable habitat
Oriental Plover Charadrius veredus	1980	Negligible	No suitable habitat
Eastern Curlew Numenius madagascariensis	PMST	Negligible	No suitable habitat
Whimbrel <i>Numenius phaeopus</i>	1949	Negligible	No suitable habitat
Little Curlew Numenius minutus	PMST	Negligible	No suitable habitat; rarely occurs in Victoria
Bar-tailed Godwit Limosa lapponica	PMST	Negligible	No suitable habitat
Grey-tailed Tattler Tringa brevipes	1980	Negligible	No suitable habitat

Table 12-2 EPBC Act and FFG Act listed migratory species

Common Sandpiper	2015	Negligible	No suitable habitat		
Common Greenshank Tringa nebularia	2015	Negligible	No suitable habitat		
Marsh Sandpiper Tringa stagnatilis	2003	Negligible	No suitable habitat		
Terek Sandpiper Xenus cinereus	2000	Negligible	No suitable habitat		
Curlew Sandpiper Calidris ferruginea	2006	Negligible	No suitable habitat		
Sharp-tailed Sandpiper Calidris acuminata	2010	Negligible	No suitable habitat		
Broad-billed Sandpiper Limicola falcinellus	1980	Negligible No suitable habitat			
Pectoral Sandpiper Calidris melanotos	PMST	Negligible	No suitable habitat		
Red-necked Stint Calidris ruficollis	2015	Negligible	No suitable habitat		
Red Knot Calidris canutus	PMST	Negligible	No suitable habitat		
Sanderling Calidris alba	2015	Negligible	No suitable habitat		
Latham's Snipe Gallinago hardwickii	2008	Low	No suitable habitat; but uses freshwater wetlands so may fly over site occasionally		
Osprey Pandion cristatus	1956	Negligible	No suitable habitat; rarely occurs in Victoria		
White-throated Needletail <i>Hirundapus caudacutus</i>	2009	High	Likely to fly over site during migration period in Australia		
Fork-tailed Swift Apus pacificus	2007	High	Likely to fly over site during migration period in Australia		
Rufous Fantail Rhipidura rufifrons	2012	Medium	May occur in treed habitat during migration to SE Australia		
Satin Flycatcher Myiagra cyanoleuca	2012	Medium	May occur in treed habitat during migration to SE Australia		
Baillon's Crake Porzana pusilla palustris	2000	MediumPotentially present in wetlands near the study area			
Regent Honeyeater Anthochaera phrygia	1958	Negligible	Not suitable habitat, project site is currently out of range of this species		

The following threatened flora species are listed under the FFG Act and/or considered to be of conservation significance within Victoria, and have a medium likelihood of occurring within the study area:

- Limestone Spider-orchid
- Colourful Spider-orchid
- Scented Spider-orchid
- Mellblom's Spider-orchid
- Ornate Pink-fingers
- Robust Spider-orchid
- Coast Helmet-orchid
- Late Helmet-orchid
- Clover Glycine
- Maroon Leek-orchid
- Coastal Leek-orchid
- Green-striped Greenhood
- Leafy Greenhood
- Coast Dandelion
- Metallic Sun-orchid

- Winter Sun-orchid
- Swamp Everlasting
- Large White Spider-orchid
- Wrinkled Cassinia
- Swamp Diuris
- Small Sickle Greenhood.

The following threatened fauna species are listed under the FFG Act and/or considered to be of conservation significance within Victoria, and have a high or medium likelihood of occurring within the study area:

- Lewin's Rail
- Brolga
- Little Egret
- Eastern Great Egret
- Little Bittern
- Freckled Duck
- Blue-billed Duck
- White-bellied Sea-Eagle
- Striped Worm-Lizard
- Swamp Skink

Threatened flora and fauna species with a low likelihood of occurring are discussed in more detail in Attachment 1 (Preliminary flora and fauna assessment). The process for assessment of potential impacts on Brolga *Antigone rubicunda* is being undertaken in compliance with *Interim guidelines for the assessment, avoidance, mitigation and offsetting of potential wind farm impacts on the Victorian Brolga population 2011* (DSE 2012).

The following three ecological communities listed under the FFG Act may occur within proximity to the study area, but are not considered likely to occur within the Project site itself:

- Coastal Moonah Woodland Community
- Red Gum Swamp Community No. 1
- Victorian Temperate Woodland Bird Community (including Red-tailed Black Cockatoo).

The development and operation of the proposed Project will entail minimal effects on native vegetation or habitat for any threatened fauna species. There does not appear to be any realistic potential for loss or significant impact on any genetically important population of any endangered or threatened species. Preliminary assessments also indicate that there is no realistic likelihood that the Project would result in the long-term loss of a significant area of any listed ecological community.

Is mitigation of potential effects on indigenous flora and fauna proposed?

x NYD \times No \times Yes If yes, please briefly describe.

As noted above, detailed flora and fauna assessments of the study area are either underway or yet to commence. Resultant from these studies will be the identification of specific measures to manage potential effects on indigenous flora and fauna.

In tandem with the ongoing carrying out of detailed flora and fauna assessments, the design of the Project will continue to occur. This will be an iterative process that will respond to ongoing environmental and technical studies and will allow Neoen to consider several potential mitigations early in the design development process. These may include the siting of infrastructure away from areas of known or potential habitat or dispersal areas for threatened or listed species and communities. The outcomes of these investigations along with recommended mitigation will be documented in future application documents and will be developed in consultation with DELWP and other relevant authorities.

Other information/comments? (eg. accuracy of information)

13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 Gl/yr)?

 \times NYD \times No \times Yes If yes, indicate approximate volume and likely source.

Water will be required during construction primarily for road construction, dust suppression and turbine foundations. Operational water requirements are expected to be substantially less than one gigalitre per year (<1GL/yr).

Water to be used during construction and operation will be sourced from either or a combination of on-site storages, on site tanks, on site bores or from potential off-site locations. Water sources for the construction and operation of the Project will be confirmed during detailed design.

The use of water from registered bores or from waterways within or outside of the site will be conducted in accordance with the requirements of Wannon Water and the Glenelg-Hopkins Catchment Management Authority (GHCMA). The use of existing bores or the construction of new bores will be subject to the licencing provisions administered by these agencies. An assessment of potential impacts on groundwater users and beneficial uses will be carried out as part of any future application documents if groundwater is to be used for construction and/or operation of the Project.

Will the project discharge waste water or runoff to water environments? NYD X No X Yes If yes, specify types of discharges and which environments.

There is the potential for small volumes of water to be discharged to receiving water environments during construction. This would primarily be run-off from hardstand and access track surfaces during rainfall events, with a negligible risk of waste water runoff due to the relatively low volumes of waste water generated during construction and the existence of well understood mitigation measures typical for Projects of this scale and complexity.

A qualitative assessment of the potential for waste water or runoff to impact on receiving water environments will be carried out as part of any future planning application.

The preliminary hydrology assessment included in Attachment 4 recommends that in order to manage potential run off, the design of Project should consider the following:

- utilising existing access roads where possible within the plantation
- any new access roads and Project infrastructure should avoid existing local overland flow paths where possible
- new hardstand areas proposed to support new wind turbines should be placed outside of existing overland flow paths.
- critical infrastructure should be built above the AEP flood level and placed outside of any local overland flow paths where possible.

Are any waterways, wetlands, estuaries or marine environments likely to be affected? NYD X No Yes If yes, specify which water environments, answer the following questions and attach any relevant details.

The proposed wind farm site and proposed transmission line options are located within the Glenelg Basin and Portland Coast Basin catchment regions. Based on data available from the GHCMA, there are creeks located to the east of the wind farm site, including Johnstone Creek and some unnamed creeks. The largest watercourse within proximity is the Glenelg River which is located north of the proposed wind farm site. The proposed wind farm site is also located next to a Ramsar listed wetland (Glenelg Estuary and Discovery Bay Ramsar Site), which covers approximately 22,289 hectares. In addition, the proposed underground transmission line route crosses Surrey River and Mt Kincaid Creek. The proposed overhead transmission line route crosses Wattle Hill Creek.

There are no anticipated impacts to these identified waterways and Ramsar listed wetland, as the preliminary design of the wind farm site has avoided these areas. The proposed footprint of the wind farm site represents only a small proportion of the catchment overall. Environmentally

sensitive construction measures will be employed to ensure the Project's construction does not discharge waste water and runoff to water environment. This will involve ensuring construction activities are effectively managed in accordance with EPA publications 480 Environmental Guidelines for Major Construction Sites and 275, Construction Techniques for Sediment Pollution Control. Further mitigation measures include the use of sediment control fences downstream of work areas, as well as constructing sediment basins to collect silty runoff and allow sediment to settle out prior to discharging.

Are any of these water environments likely to support threatened or migratory species?

As outlined in Section 12, there is the potential for EPBC Act listed migratory species to occur within a five-kilometre radius of the study area. The nearby Ramsar site consists of shallow wetlands and beaches and is considered a suitable habitat for some of these migratory species. Of these listed species, only two species are considered to have a high likelihood of flying over the site during migration periods.

Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'?

 \times NYD \times No \times Yes If yes, please specify.

The Glenelg Estuary and Discovery Bay Ramsar site has been designated a wetland of international significance under the Ramsar Convention since 2018. The Ramsar site is listed as internationally significant due to it providing seasonal habitat for many migratory birds. It consists of the estuaries, a beach and dune system, and freshwater wetlands. The Ramsar site covers the western part of the Lower Glenelg National Park, most of the Discovery Bay Coastal Park and the Nelson Streamside Reserve. As it is located to the south and north of the proposed wind farm site, with no elements of the Project located within the Ramsar site, it is not anticipated to be significantly impacted. Temporary sediment basins may be used in order to control the quality of surface water runoff during construction, so as to not affect the adjacent Ramsar site.

In addition, the wind farm site is also located within 10 kilometres of two nationally important wetlands, Long Swamp and the Glenelg River. There are no anticipated impacts on these wetlands due to the separation distance between the Project and these wetlands and the negligible anticipated short or long term impacts on hydrology in the catchment or water quality.

Could the project affect streamflows?

 \times NYD \times No \times Yes If yes, briefly describe implications for streamflows.

The Project is not expected to affect streamflows or generate significant amounts of run off. As the proposed wind farm site is in a highly modified landscape, the development is not expected to greatly alter the overall use of the existing area. Therefore, catchment characteristics, such as imperviousness, will not be significantly impacted. To reduce the risk of affecting streamflows and run off, Project design considerations will be factored in throughout the design phase. These considerations include critical infrastructure being built above the AEP flood level, as well as being placed outside of any local overland flow paths where possible. If new access roads are proposed to cross existing overland flow paths, appropriate mitigation measures will be considered and implemented to maintain existing surface water conditions.

Could regional groundwater resources be affected by the project? \times NYD \times No \times Yes If yes, describe in what way.

Depth to water below the ground surface across the site is predominantly less than 10 metres below ground level, with minor variations due to changes in topography. Specific turbine details will be developed following a tendering process which will take place once planning approvals have been granted. An indicative wind turbine showing dimensions can be seen in Figure 4.

As the Project's design phase is still in the preliminary stages, consideration into designing the turbine foundations will consider the depth to groundwater across the wind farm site. Subject to geotechnical assessments to be completed, the turbine foundations will consist of concrete gravity or rock anchor foundations. Foundations will be approximately four metres deep, and

therefore not anticipated to impact on groundwater resources.

Could environmental values (beneficial uses) of water environments be affected? X NYD X No X Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)

The Project is not anticipated to affect beneficial uses. Based on data obtained from Spatial Datamart, water table salinity measured (as total dissolve solids) between 500 and 1,000 mg/L. This classifies water quality as Segment A1-A2 of the SEPP Waters (Groundwater) quidelines suggesting that water quality is good in the area. Beneficial uses associated with Segment A1-A2 include the following:

- protection of water dependent ecosystems and species
- potable water supply acceptable
- potable mineral water supply
- agriculture and irrigation irrigation
- agriculture and irrigation stock watering
- industrial and commercial
- water based recreation primary contact recreation
- buildings and structures
- geothermal (new)
- cultural and spiritual values.

As turbine foundations are not anticipated to intersect groundwater resources, these beneficial uses are therefore not likely to be affected by the Project.

Could aquatic, estuarine or marine ecosystems be affected by the Project? \times NYD

 \times No \times Yes If yes, describe in what way.

As outlined above, aquatic, estuarine and marine ecosystems are not anticipated to be affected by the Project. Measures will be taken to ensure the adjacent Ramsar site (Glenelg Estuary and Discovery Bay Ramsar Site) is not impacted by the Project during construction or operation.

Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?

X Yes If yes, please describe. Comment on likelihood of effects and × No associated uncertainties, if practicable.

The Project is not anticipated to have major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long term. The risk of affecting marine or water environments is significantly reduced after the construction phase of the Project once the site has been re-established. Mitigation measures will be implemented to manage short term risks during construction that are typical of Projects of this type and scale and that will ensure there are no long-term major effects on the health of these ecosystems.

Is mitigation of potential effects on water environments proposed? \times NYD \times No \times Yes If yes, please briefly describe.

Mitigation measures have been proposed within the preliminary hydrology assessment for the potential effects of the Project on water environments. These are focused on mitigating flood risk and water quality impacts throughout both the construction of the Project and during its operation.

Construction

Flood risk:

- Design temporary access roads on grade to allow surface water flows across site and retain existing flow paths.
- Reinstate the drainage system if it is impacted during construction.
- Ensure upstream and downstream boundaries are suitably graded with the construction site surfaces/platform level.
- Construct temporary on-site storage and conveyance structures to control runoff from construction sites.

- Potential requirement to construct a temporary sediment basin to control the quality of surface water runoff to avoid runoff into the adjacent Ramsar site.
- Regular inspections and clean up the relevant supporting infrastructure after major storms.

Water quality:

- Ensure construction activities are effectively managed by best practice pollution prevention strategies in accordance with EPA publications 480 Environmental Guidelines for Major Construction Sites and 275, Construction Techniques for Sediment Pollution Control.
- Minimise the extent of disturbed areas and reinstate as soon as possible.
- Obtain the necessary works on waterways permit from the Glenelg Hopkins Catchment Management Authority (GHCMA) and other relevant authority.
- Minimise works in waterways, only work in waterways when dry and reinstate ground quickly following completion.
- Employ sediment control fences downstream of work areas.
- Construct sediment basins to collect silty runoff and allow sediment to settle out prior to discharging (consider the use of flocculants where appropriate) and to ensure that sediment is removed and disposed accordingly if the design capacity is reduced by the sediment build up.

Permanent Works

Flood risk:

While the proposed wind farm site will not greatly alter the overall land use of the existing area, and will not have a significant impact on the catchment characteristics i.e. imperviousness, to reduce the risk of flooding as a result if the works the design should consider the following where applicable:

- Critical infrastructure be built above the AEP flood level, with freeboard, as required by the relevant planning authority Design of access roads on grade to retain existing flow paths
- The designing of culverts for waterway crossings should limit afflux and not increase water levels on neighbouring properties, subject to the requirements of the relevant approval authority
- To have on-site storage and conveyance structures if/as required (e.g. ditches to manage runoff from access roads, rainwater harvesting on the control room)
- If the proposed drainage is connecting to any existing assets (e.g. irrigation storage ponds and channels), regular assessments are required for their integrity and ongoing safety and to upgrade them if necessary
- Regular inspections and clean up the relevant supporting infrastructure after major storms.

Water quality:

It is anticipated that the proposed wind farm site will result in a reduced risk of surface water contamination once the site has been re-established after the construction phase. However, to manage this risk, the Project should consider and include the following where applicable:

- Maintain all pollution control measures until the site is fully re-vegetated.
- Road drainage infrastructure such as table drains should be designed to minimise velocities and prevent scour.
- Regular inspections and clean up the relevant supporting infrastructure after major storms.

These measures will be further developed as the Project design development process progresses.

Other information/comments? (eg. accuracy of information)

Refer to the preliminary hydrology assessment (Attachment 4)

14. Landscape and soils

Landscape

Has a preliminary landscape assessment been prepared?

 \times No \times Yes If yes, please attach.

A preliminary LVIA has been undertaken by Green Bean and can be found in Attachment 3.

Is the Project to be located either within or near an area that is:

• Subject to a Landscape Significance Overlay or Environmental Significance Overlay? NYD NO X Yes If yes, provide plan showing footprint relative to overlay.

The proposed wind farm site is partially located within an area subject to both a Significant Landscape Overlay Schedule 1 (SLO) and Environmental Significance Overlays (ESO) as outlined in Figure 8. Transmission line option one is also subject to Environmental Significance Overlay Schedule 3.

Significant Landscape Overlay Schedule 1 (*Glenelg River Estuary and Surrounds*) recognises the regionally significant landscape and aims to protect the locally significant views and vistas. A proportion of the western extent of the wind farm site is located within this SLO1. The majority of the wind farm site that coincides with this SLO1 is located in existing timber plantation.

Environmental Significant Overlay Schedule 1 *(Coastal Areas)* (ESO1) recognises the Glenelg Shire's coastline as a significant environmental resource and long-term public asset.

Environmental Significance Overlay Schedule 3 (South-Eastern Red-tailed Black Cockatoo habitat Areas) (ESO3) aims to protect and conserve the critical habitat of the endangered South-eastern Red-tailed Black Cockatoo species.

The wind farm site is a highly modified landscape comprised predominantly of radiata pine plantation with small sections of cleared agricultural land at the eastern and western extents. In accordance with section 2.1.4 of the Development of Wind Energy Facility Guidelines, the proposed wind farm site is not located within any National Parks, State Parks, Coastal Parks. A portion of the western end of the wind farm site is located within a SLO1 under the Glenelg Planning Scheme, however the land within the wind farm site to which this overlay applies is forestry and cleared agricultural land.

While the proposed wind farm site is located within proximity to a Ramsar site and three National Parks, it is not situated within these areas due to their recognised landscape and environmental values. The siting of the project is consistent with section 2.1.4 of the Development of Wind Energy Facility Guidelines. The ongoing design and development of the Project, along with the impact assessment will ensure the Project is appropriately sited in consideration of the surrounding landscape conditions and relevant policy and guidelines.

Identified as of regional or State significance in a reputable study of landscape values? NYD X No X Yes If yes, please specify.

The Coastal Spaces Landscape Assessment Study (2006) notes Character Areas 1.1 Far West Coastal Hills and 1.2 Discovery Bay Dunes and Hinterland as occurring within or near the Project site. The Victorian Guidelines identified the Coastal Spaces Landscape Assessment Study as a strategic landscape study that identified visually significant landscapes surrounding the Project site.

The Coastal Spaces Landscape Assessment notes the Glenelg River Estuary & Surrounds as having Regional Significance, stating that this area is:

- Visually significant as the confluence of the Glenelg River estuary, the Southern Ocean and the coastal edge.
- Characterised by a strong intersection of landscape elements sea, beaches, sand dunes and remnant vegetations.

• Valued by the community as a wetlands habitat and as one extremity of the Great South West Version 6: Nov 2018

Walk.

The Coastal Spaces Landscape Assessment also notes the Discovery Bay Coast as having State Significance stating that this area is:

- Visually significant for the dramatic sweep of its long dune backed bay with its rugged open beaches and sense of remoteness.
- Characterised by a vast mobile dune system extending some three kilometres inland.
- Valued by the community for its wild untamed character.

The Project would consider the objectives and values set out for these features during the design development process. Any future application would include a detailed landscape and visual impact assessment that would assess the Project in the context of these identified landscape values.

• Within or adjoining land reserved under the National Parks Act 1975?

The wind farm site is not located within land reserved under the *National Parks Act 1975*, however, three National Parks are located within one kilometre of the wind farm site; Lower Glenelg National Park, Discovery Bay Coastal Park, and Cobboboonee National Park. Transmission line route option one is proposed to traverse the Cobboboonee National Park / Forest Park beneath an existing road.

Within or adjoining other public land used for conservation or recreational purposes?
 NYD X No X Yes If yes, please specify.

Much of the public land proximate to the Project area lies to the south and east of the wind farm site including the three National Parks identified above, and various waterbodies such as the Glenelg River. These areas that located near the Project site are popular recreational destinations used for camping and hiking. The Project site is also located near the Great South West Walk, a 250 kilometre popular hiking trail, which passes through all three National Parks. Most of the walk (around 220 kilometres), including areas nearby the Project site within the Lower Glenelg or Cobobboonee National Parks, are likely to be completely screened by extensive stands of vegetation. These include the sections along the Glenelg River which are understood to be the most popular sections.

Is any clearing vegetation or alteration of landforms likely to affect landscape values?

As the Project is in the early stages of development and specific details will be refined following planning approvals and further environmental investigations, the extent of vegetation clearing is still yet to be determined. However, at this stage works involved with the construction of the Project, including removal of plantation trees, is not considered to have any significant potential impact on existing landscape values within, or beyond the immediate Project site.

The preliminary LVIA determined potential visual effects based on preliminary concept design that is likely to be refined following planning approvals and further investigations. The Project is unlikely to have a significant visual impact on the urban character of Nelson, where the majority of views towards the wind farm site from residential locations would be screened by adjoining residences, tree cover and local landform topography. The majority of public open spaces and recreational areas are those associated and located within surrounding localities, where the influence of both distance and existing vegetative cover is likely to partially screen potential views toward the wind farm site. The Project is likely to be partially screened from the Portland Nelson Road. In addition, the dynamic and constantly changing nature of views from moving vehicles will tend me short term and transitory in nature. The low number of rural residential dwellings beyond the Project will be impacted to the extent they have views toward the Project. In many instances these views are limited due to planting.

Is there a potential for effects on landscape values of regional or State importance? NYD X No X Yes Please briefly explain response.

Some key characteristics of the landscape character area will be impacted by the Project and will Version 6: Nov 2018

result in major and visually dominant alterations to perceived characteristics of the landscape character area. These key characteristics include the coastal fringe and foreshore areas of the Discovery Bay Coastal park and a small section of the Great South West Walk, along Discovery Bay beach, which have both been identified as areas of Regional Significance.

While the proposed wind farm site is located within proximity to a Ramsar site and three National Parks, it is not situated within these areas due to their recognised landscape and environmental values. The siting of the project is consistent with section 2.1.4 of the Development of Wind Energy Facility Guidelines.

The ongoing design and development of the Project, along with the impact assessment will ensure the Project is appropriately sited in consideration of the surrounding landscape conditions and relevant policy and guidelines.

Is mitigation of potential landscape effects proposed?

 \times NYD \times No \times Yes If yes, please briefly describe.

This LVIA has considered a preliminary concept design and wind turbine layout for the Project, as it is still in the early stages of development and design. Therefore, mitigation measures have not yet been proposed.

Other information/comments? (eg. accuracy of information)

Refer to preliminary landscape and visual impact assessment (Green Bean 2019) (Attachment 3)

Note: A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils? X NYD X No X Yes If yes, please briefly describe.

As the Project is still in the preliminary design phase, detailed investigations into acid sulfate soils or highly erodible soils are yet to be undertaken. However, the design of any infrastructure, including this Project, should consider the presence of acid sulfate soils (ASS). If ASS are disturbed and exposed to air, oxidation can occur leading to the production of sulphuric acid. This can then affect waterways, wetlands and estuaries and lead to impacts on flora and fauna. This is an important consideration due to the proximate location of the adjacent Ramsar site and other surrounding waterbodies.

Are there geotechnical hazards that may either affect the Project or be affected by it? X NYD X No X Yes If yes, please briefly describe.

There are no known geotechnical hazards that may affect the Project or be affected by it. Further environmental investigations will be undertaken during the design and development phase of the Project after planning approvals have been granted.

Other information/comments? (eg. accuracy of information)

15. Social environments

Is the Project likely to generate significant volumes of road traffic, during construction or operation?

 \times NYD \times No \times Yes If yes, provide estimate of traffic volume(s) if practicable.

The Project will result in a substantial temporary increase in construction traffic during the construction period. Following construction, operational traffic to and from the Project will be negligible. It is expected that construction activities will be undertaken over a two-year period with a workforce of at least 200 full-time equivalent employees directly engaged on the Project.

The wind farm site will be accessed via the state-controlled Portland-Nelson Road which intersects the site. The A1 Princes Highway connects Portland and Heywood to Mt Gambier and further afield and is around 15 kilometres north of the Project. A number of local roads intersect with Portland-Nelson Road in the vicinity of the Project, however these are anticipated to be used by low volumes of predominantly local traffic.

The Project will seek to use existing access points used as part of the existing forestry operations to facilitate delivery of Project components. The Project will ensure that local access, including access to Nelson, Mt Richmond and tourist facilities in the vicinity including the Great South West Walk will be retained.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

 \times NYD \times No \times Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

Noise emissions from the Project are expected to comply at all noise sensitive locations with the base noise limit of 45 dB and 40 dB LA90(10 min), for Stakeholder and Non-Stakeholder dwellings respectively, across all wind speeds, with the exception of one location (Receiver ID 1008315). This location has been designated by Neoen as an abandoned dwelling but will require confirmation at a later stage of the Project. Location of these dwellings can be seen in Figure 6. Cumulative noise impacts associated with the operation of the Project and the nearby Portland Wind Energy Project (PWEP) were considered, however none were identified due to the significant setback distance between the two main wind farm developments. The Project is therefore not expected to have significant noise impacts on noise sensitive locations.

Construction activities associated with the Project include the construction of the turbines, potential new access tracks, underground or overhead transmissions lines as well as the battery storage facility. Potential impacts are likely to include dust emissions; however, these are limited to the duration of the construction process and will not continue throughout the Project's operation. Environmentally sensitive construction measures will be employed to ensure that potential amenity impacts during construction is minimised.

The Project will seek to use existing access points used as part of the existing forestry operations to facilitate delivery of Project components. The Project will ensure that local access, including access to Nelson, Mt Richmond and tourist facilities in the vicinity including the Great South West Walk will be retained. Effects on traffic conditions will be limited to the construction phase and will not create ongoing long-term impacts. In order to manage potential traffic impacts, a Traffic Management Plan that will be prepared in accordance with relevant guidelines and in consultation with key stakeholders including VicRoads and Glenelg Shire Council.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport? NYD X No X Yes If yes, briefly describe the hazards and possible implications.

There is not considered to be potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport. It is anticipated at this preliminary stage that the Project would not have a significant impact on the

performance or safety of the existing road network and will not require substantial upgrades or improvements to road infrastructure. Appropriate construction techniques will be implemented to ensure potential amenity impacts during construction is minimised.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

 \times NYD \times No \times Yes If yes, briefly describe potential effects.

No potential for displacement of residences or severance of residential access to community resources has been identified. The closest townships with community facilities to the wind farm are Nelson around five kilometres to the east of the wind farm and Portland around 30 kilometres west of the wind farm. No significant impacts on access to community facilities and services or residences in the vicinity of the Project are expected.

Are non-residential land use activities likely to be displaced as a result of the Project?

The wind farm site is located within an area primarily used for commercial forestry, with small sections of grazing within the wind farm site boundary at the eastern and western ends. Neither of these non-residential land use activities are likely to be displaced as a result of the Project.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries? NYD X No X Yes If yes, briefly describe the potential effects.

Changes in non-residential land use activities are not expected to occur or cause potential adverse effects on local residents/communities, social groups or industries.

Is mitigation of potential social effects proposed?

Mitigation measures for potential social effects will be proposed as the design and development of the Project becomes more refined.

Mitigation of potential construction traffic impacts will be subject to a detailed Traffic Management Plan to be prepared post planning permit approval. The final turbine model that is selected for use by the Project would need to comply with planning approval requirements and other relevant criteria as they relate to noise levels at surrounding noise sensitive locations. An updated noise compliance assessment would also typically be required once final turbines for the Project are selected. This would be carried out prior to construction of the Project. Measures will be taken during construction of the Project to manage potential amenity impacts include dust and noise emissions. These measures will be determined as further investigations are undertaken and Project design is finalised.

Other information/comments? (eg. accuracy of information)

Cultural heritage

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the Project area?

× No If no, list any organisations that it is proposed to consult.

The preliminary CHDDA has recommended that Neoen provide assessment findings to Gunditj Mirring Traditional Owner Aboriginal Corporation (GMTOAC) to gather cultural knowledge, oral histories and cultural values for the study during the completion of the CHMP. The GMTOAC is recognised as a Registered Aboriginal Party (RAP) pursuant to the *Aboriginal Heritage Act 2006*. Therefore, the GMTOAC are recognised as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage of the study area. A preliminary meeting has been held with a RAP representative to present the Project. Appropriate consultation must also be undertaken with the Gunditj Mirring Traditional Owners Aboriginal Corporation Registered Native Title Body Corporate prior to the commencement of the project.

Yes If yes, list the organisations so far consulted.

What investigations of cultural heritage in the Project area have been done? (attach details of method and results of any surveys for the Project & describe their accuracy)

An initial desktop review was undertaken to identify any recorded Aboriginal places within and around the Project site. No registered Aboriginal places were found within the Project area. Predictive modelling was undertaken to assess the potential of environmental landforms and features to contain Aboriginal heritage. The four main datasets analysed were the proximity to water sources, existence of remnant vegetation, local high points and slope classes. This initial desktop assessment indicated the potential for unidentified Aboriginal cultural heritage material to be present within the study area.

Therefore, a targeted site investigation was undertaken on 1, 2 and 3 April 2019. A number of Aboriginal sites were located including isolated stone artefacts, low, medium and high density artefact scatters and shell middens. The predictive modelling findings were confirmed during the field surveys as Aboriginal cultural material was identified.

Further details on the investigations of cultural heritage can be found in Attachment 2.

Is any Aboriginal cultural heritage known from the Project area?

- \times NYD \times No \times Yes If yes, briefly describe:
 - Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the Project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

The Project area is located within the traditional Country of Gunditimara (Dhauward Wurrung language) and coincides with the GMTOAC RAP area.

There are no Aboriginal places recorded within the Project site, however there are six Aboriginal heritage places recorded adjacent to the Project area:

- Site 2 Sutton Rocks Survey Area, VAHR 7121-0022
- Site 1 Sutton Rocks Survey Area, VAHR 7121-0060
- Site 3 Sutton Rocks Survey Area, VAHR 7121-0061
- Macfarlane's Swamp 1, VAHR 7121-0295
- Macfarlane's Swamp 2, VAHR 7121-0296
- Macfarlane's Swamp 3, VAHR 7121-0297

Across all of the Project site there is archaeological potential. Recent site surveys in April 2019 identified Aboriginal cultural material across the four main landscape systems that broadly sit within the Project area; the Discovery Bay Land System, Nelson Land-System and the Follett and Kanawinka Land Systems. During these inspections a number of Aboriginal sites were located, including isolated stone artefacts, low, medium and high density artefact scatters and shell middens.

The preliminary CHDDA determined there is still potential for Aboriginal cultural heritage to be present throughout the Project area. Areas in question include the proposed underground or overhead transmission line options that run through the Cobboboonee National Park and discrete locations near the Mount Richmond National Park.

The areas of archaeological potential identified in the modelling generally correspond to the landforms of greater archaeological sensitivity, such as proximity to water, remnant vegetation, local high points and slope classes and soil types.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the Project area?

 \times NYD \times No \times Yes If yes, please list.

Currently, there are no cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the Project area.

Is mitigation of potential cultural heritage effects proposed?

 \times NYD \times No \times Yes If yes, please briefly describe.

Mitigation measures are not yet proposed, however a mandatory CHMP will be required under the *Aboriginal Heritage Act 2006* if any components of the proposed Project cannot avoid areas of cultural heritage sensitivity that have not been subject to significant ground disturbance, and the activity is listed as high impact pursuant to the Regulations. The CHMP will include measures to manage and mitigate potential impacts to both known and unknown sites of Aboriginal cultural heritage.

Other information/comments? (eg. accuracy of information) Refer to cultural heritage due diligence assessment (Biosis 2019) (Attachment 2)

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the Project facility will consume/generate?

- × Electricity network. If possible, estimate power requirement/output
- × Natural gas network. If possible, estimate gas requirement/output
- **x** Generated on-site. If possible, estimate power capacity/output
- \times Other. Please describe.

Please add any relevant additional information.

The aim of the Kentbruck Green Power Hub Project is to generate approximately 3,300 gigawatt hours (GWH) per annum, of renewable energy to supplement Victorian and Australian energy supply, through the development of a viable wind energy facility. The Project will power around 500,000 households. These calculations are preliminary and subject to final design.

What are the main forms of waste that will be generated by the Project facility?

- × Wastewater. Describe briefly.
- × Solid chemical wastes. Describe briefly.
- × Excavated material. Describe briefly.
- \times Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

Majority of these waste forms will be generated during the construction phase of the Project. Material excavated during the construction, will be either be re-used on site where practicable or removed off-site to a licensed landfill facility. During its operation, the Project will not generate any significant volumes of waste.

What level of greenhouse gas emissions is expected to result directly from operation of the Project facility?

- × Less than 50,000 tonnes of CO₂ equivalent per annum
- \times Between 50,000 and 100,000 tonnes of CO₂ equivalent per annum
- Between 100,000 and 200,000 tonnes of CO₂ equivalent per annum
- More than 200,000 tonnes of CO₂ equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

The Project will reduce Australia's carbon emissions by around 3.5 million tonnes of carbon dioxide annually. These calculations are preliminary and subject to final design.

17. Other environmental issues

Are there any other environmental issues arising from the proposed Project? X No X Yes If yes, briefly describe.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential					
X Siting: Please describe briefly					
× Design: Please describe briefly					
Environmental management: Please describe briefly.					
X Other: Please describe briefly					
Add any relevant additional information.					
A feature of this proposed Project is co-location of a large proportion of the wind turbines and associated infrastructure with an operating forestry plantation. Co-location achieves a more efficient use of land already disturbed and minimises impact on land being used for conservation or other productive purposes.					
 Neoen's selection of the Kentbruck Green Power Hub Project for further feasibility assessment was informed by an understanding of the available wind resource, the proximity of a possible electricity transmission network connection point, site access and environmental and planning constraints including: Land use and tenure Locations of dwellings and other sensitive receptors The boundaries of National Parks and Ramsar wetland sites Areas of ecological sensitivity 					
As indicated in previous sections in this referral form, the Project is in the early stages of development and specific details will be refined following the completion of further environmental investigations including (but not limited to) targeted ecological surveys and complex cultural heritage assessment. At this stage, Neoen is committed to ongoing active consideration of siting and design responses that will avoid or minimise potential significant impacts.					
19. Other activities					

Are there any other activities in the vicinity of the proposed Project that have a potential for cumulative effects?

 \times NYD \times No \times Yes If yes, briefly describe.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the Project? X No X Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

A program for future environmental studies is currently under development by Neoen and the Project team.

Neoen have entered into discussions with DELWP Environment, including members of the DELWP Environment Barwon South West Region to procure feedback on a draft ecological study program. This process is ongoing and Neoen have submitted an updated draft study program for further review and comment to DELWP in July 2019.

Consultation program

Has a consultation program conducted to date for the Project?

No \times Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

As outlined in Section 10 of this referral form, Neoen conducted three community drop-in sessions in April 2019, at Nelson, Mt Richmond and Portland. These sessions were widely advertised and promoted in the local media and were well attended. The purpose of these drop-in sessions was to introduce the Project to the community and to seek input and feedback on the Project and the existing environment, to assist with detailed design, and to inform on environmental and planning assessments. Seven Project team members were on hand to answer questions on a range of key topics – biodiversity, transmission, the planning process and other topics. Community members were encouraged to complete feedback surveys and provide input on the Project's proposed community benefit-sharing program.

As part of its efforts to inform the community, Neoen has also proactively reached out to local council, State and Federal Members of Parliament, as well as many local organisations active in the region. This outreach to local groups includes both government and non-government organisations.

Neoen is continuing to consult with key Project stakeholders and the community.

Has a program for future consultation been developed? NYD No X Yes If yes, briefly describe.

Neoen is committed to continuing close consultation with Project stakeholders and the community as the Project develops.

Neoen has developed a detailed Community Relations Plan which outlines future consultation and engagement.

Neoen will continue to hold face-to-face meetings with near neighbours, and keep them updated through the Project website and newsletters, as well as hosting further community sessions as the project progresses

Authorised person for proponent:

......State Leader (Victoria).....(position), confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature -

Date 19/07/2019

Person who prepared this referral:

I,David Knight.....(full name),

......Principal Environmental Planner......(position), confirm that the information contained in this form is, to my knowledge, true and not misleading.

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19/07/2019

Signature _

Date













(minimum lower bla sweep height)	ade 45m		



KENTBRUCK GREEN POWER HUB

Figure 4 – Indicative Wind Turbine Dimensions











Figure 9 – Aerial Photo Location A6 – View from south from above Johnson's Road corridor



Figure 10 – Aerial Photo Location A6 – View west from Portland Nelson Road corridor



Figure 11 – Aerial Photo Location A11 – View south east from above the Portland Nelson Road