EPBC Act referral

Australian Government
Department of Agriculture, Water and the Environment

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Title of proposal	2022/9176 - Keri Keri Wind Farm

Section 1

Summary of your proposed action

1.1 Project industry type Energy Generation and Supply (renewable)

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

The proposed action (the 'Project') is the development of a wind farm that will consist of up to 176 turbine locations with a combined maximum installed capacity of approximately 1,003.2 MW. Large-scale battery storage is also proposed to support stabilising the supply of electricity to the National Electricity Market (NEM).

The Project Area has a total area of 18,055 hectares. Within this Project Area, an area of land designated the subject land has been and will continue to be assessed for biodiversity values, including matters of national environmental significance. The subject land is 2,653 ha in size, which has been defined by a 100 m buffer around a preliminary Project infrastructure layout. For the purpose of defining a development footprint for this referral it is assumed that approximately 20% of the area of the subject land (265 ha) will be required for Project infrastructure, including the construction, operation and decommissioning of:

- up to 176 wind turbine generators, with the following indicative specifications: Blade length (including nacelle): 91.5m; Hub height: 200m; Tip height: 291.5m
- up to three substations and one switching station;
- one operation and maintenance facility;
- up to two batching plants;
- possible temporary onsite workers accommodation camp likely to be located within the footprint of the proposed solar farm (subject to detailed design);
- wind turbine hardstands;
- four temporary and four permanent meteorological monitoring masts;
- overground and underground 33kV reticulation electrical cabling;
- temporary construction laydown areas and compounds;
- ~350 km of underground electrical reticulation and ~33 km of overhead, with reticulation generally following access roads;
- ~13 km of overhead transmission line, connecting the Project to a new switchyard and line cut in at 220kV (existing) or proposed 330kV transmission network;
- switchyard and other electrical equipment providing connection to the existing 220 or 330 kV transmission network;
- 200 MW / 800 MWh lithium ion battery energy storage system (indicative);
- Internal access tracks and road upgrades along the haulage route (as required);
- security fencing and landscaping;
- ancillary activities including temporary gravel pits, water sourcing, visual screening; and
- Site access via the Sturt Highway, Keri Keri Road and internal access roads.

The proposed action will include construction, operation and decommissioning activities which will include native vegetation clearing, excavation, construction of wind turbine foundations and hard stand areas, construction of access roads and laydown areas, construction of ancillary infrastructure and associated temporary construction noise. Construction activities will result in direct impacts to known or potential habitat for listed threatened species and communities through vegetation clearing, earth moving, cut and fill excavation and associated habitat loss. Indirect impacts to areas of retained habitat for MNES may occur through changes to light, noise and hydrology features temporarily during the construction phase. The potential workers accommodation will involve the importation of temporary buildings and facilities which may require native vegetation clearing, excavation, construction of access roads and temporary hardstand areas. Operation of the proposed wind farm will result in potential indirect impacts to birds and bats from blade strike during wind power generation.

Wind Turbine Generators

The turbines will be fixed to a concrete footing and mounted on tubular steel towers, with hardstand areas for installation and maintenance.

Battery Energy Storage System

Battery storage is also proposed to support stabilising the supply of electricity. The proposed action will involve the construction of a Battery Energy Storage System (BESS), which will be located in the south of the Project Area. The BESS facility will have a capacity of up to 200 MW/800 MWh and is likely to use lithium ion technology.

Substations, Switching Station, Electrical Reticulation and Grid Connection

Substations and electrical infrastructure to support the proposed action include up to three substations and one switching station, inclusive of associated transformers, switchgear, protection, communications equipment and a control room. A network of electrical reticulation will connect the wind turbines to the substations. These will generally follow the alignment of

the proposed internal access tracks between the WTGs and the main access road to the substations. A transmission line of approximately 13 km will connect the proposed action to the existing 220 kV or proposed Project EnergyConnect 330 kV transmission networks, which traverse the southern portion of the Project Area.

Other Infrastructure and Associated Works

The Project will also include various supporting infrastructure and associated works including internal access tracks connecting the various proposed action elements and facilitating construction and operational activities, car parking, wind monitoring mast, up to two concrete batching plants, crushing facilities, gravel pits, construction laydown areas, construction and operational compounds including site office and maintenance and storage facilities and security fencing.

Transport Route and Site Access

Access to the Project Area during construction and operations is proposed via the existing road network. Primary access will be via the Sturt Highway, which borders the northern boundary of the Project Area. Secondary access, if required, may be proposed for Keri Keri Road. The transport route of wind turbine components and other proposed action related materials are subject to a Port and Transport Route Assessment, which will be prepared as part of the EIS.

Ancillary Activities

The Project may also include sourcing of gravel, rock and other materials for construction (this may include cut and fill activities and gravel pits within the Project Area); sourcing of water for construction (this may include offsite or onsite water sourcing, including the construction or bores and / or turkey's nests on site); subdivision and boundary adjustments relating to lease arrangements, where required; visual screening, where required; and geotechnical investigations to inform the siting and location of Project layout and infrastructure.

Preliminary Layout

The preliminary layout has been developed following constraints assessments:

- Biodiversity: the assessment noted areas including threatened ecological communities, areas of high abundance of hollow bearing trees, species habitat and riparian / marshland / wetland areas.
- Aboriginal heritage: high archaeological potential represented through elevated areas and site clusters, paleochannel and lunette formations, containing AHIMS sites.
- National parks estate: proximity to the Yanga State Conservation Area, and inclusion of a 230m buffer from boundary.
- Hazards and risks: aviation and hazardous and offensive development
- Visual: prescribed buffers will avoid highest level impact or identify receptors that require the most assessment / mitigation.
- Water: avoidance of riparian corridors and provision of buffers

Existing land management practices will be largely able to co-exist with the Project, with the participating properties continuing to be used for agriculture.

1.3 What is the extent and location of your proposed action?

See Appendix B

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

The Project Area is situated in the Riverina Bioregion and the Murrumbidgee sub-region. The Project Area is situated approximately 820 kilometres (by road) west of Sydney, and 31 kilometres east of Balranald across a total area ofapproximately 1,322 hectares. It is located entirely within the Murray River Local Government Area (LGA) (formerly WakoolLGA prior to council amalgamation) and to the south of the Sturt Highway, on land that is currently used for farming. Thewestern boundary is located immediately adjacent to the Yanga State Conservation Area (Yanga SCA) (separated by KeriKeri Road), managed by NSW National Parks and Wildlife Service (NPWS).

Refer to Section 1.1 and Figure 1-1 of the attached Keri Keri Wind Farm Preliminary Biodiversity Assessment for a map of the Project Area.

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

The Project Area has a total area of 18,055ha, of which 2,653ha has been subject to detailed biodiversity surveys. The proposed development infrastructure (the development footprint) will occupy approximately 531ha, or 2.9% of the Project Area. This is inclusive all Wind Farm infrastructure, Battery Energy Storage System (BESS) and potential temporary workers accommodation, located within the footprint of the proposed solar farm (subject to confirmation during further detailed design). Based on the anticipated project design, which will be subject to further refinement and detail, the total land project area is 18,055ha, with up to 531ha impacted as part of the disturbance footprint. Within the Project Area approximately 17,524ha will not be developed and impacts in these areas. A map of the subject land, showing the development footprint is shown on

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Figure 3-1 of the attached Keri Keri Wind Farm Preliminary Biodiversity Assessment.

1.7 Proposed action location

Other - Approximately 11 km east of the intersection of the Sturt Highway and Keri Keri Road, Keri Keri.

1.8 Primary jurisdiction New South Wales

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

☐ Yes ☑ No

1.10 Is the proposed action subject to local government planning approval?

☐ Yes ☑ No

1.11 Provide an estimated start and estimated end date for the proposed action

Start Date 01/04/2024
End Date 01/04/2056

1.12 Provide details of the context, planning framework and state and/or local Government requirements

The Project involves development for the purpose of electricity generating works using wind power, will have a capital investment value of more than $30 million. Therefore, the Project is classified as State Significant Development under Part 4 of the EP&A Act and will be assessed in accordance with Schedule 1 of the Planning Systems State and Regional SEPP (formerly the State and Regional Development SEPP).

The Biodiversity Offsets Scheme applies to state significant development and state significant infrastructure projects, unless the Secretary of the Department of Planning and Environment determines that the Project is not likely to have a significant impact. As this is a SSD development and there are recorded biodiversity values within the Project Area, application of the BAM and the preparation of a Biodiversity development assessment report (BDAR) will be required.

A Significant Impact Assessment has been undertaken for MNES known or likely to be present, and these will be further assessed within the EIS. This Project is being referred to the Australian Government Minister for the Environment.
The consent authority for the Project is expected to be the NSW Minister for Planning.

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

Community and Stakeholder Engagement will be managed in accordance with a project-specific Community and Stakeholder Consultation Plan. The CSCP has been prepared to align with the principles of the:
- 'International Association for Public Participation (IAP2) Spectrum Model',
- 'Undertaking Engagement Guidelines for State Significant Projects', and the following Clean Energy Council (CEC) guidelines:
- 'Community Engagement Guidelines for the Australian Wind Industry';
- 'Best practice Community Engagement in Wind Development'; and
- 'Community Engagement Guidelines for Building Powerlines for Renewable Developments'.

A variety of methods have been or will be implemented to facilitate community and stakeholder engagement, to ensure that the unique requirements of each stakeholder group are being met. Consultation methods will continue to be updated throughout each phase of the Project, as new stakeholders are identified, or as key contacts for stakeholder groups change. Key consultation methods will include:
- Emails / phone calls / factsheets / website / 1800 number / newsletters;
- Face-to-face meetings;

- Community information sessions;
- Community open days;
- Door knocking;
- Advertising in local newspapers;
- Information hub (during construction);
- Briefings and presentations;
- Meetings;
- Site tours; and
- Public notification.

Consultation will be undertaken with the following list of key stakeholders which have been identified for the Project:
- Host landowners;
- Neighbours;
- Nearby towns (e.g. Balranald, Hay, Moulamein);
- Local businesses;
- Project partners (e.g. suppliers, manufacturers and other contractors);
- Emergency services (e.g. Fire and Rescue NSW, NSW Rural Fire Service, NSW Police);
- Community / sporting groups;
- Local schools;
- Key industry groups and chambers of commerce;
- Local media;
- Environmental bodies / interest groups;
- Local indigenous groups and Registered Aboriginal Parties;
- Advocacy groups;
- Local councils (Murray River Council, Hay Shire Council);
- Members of Parliament;
- State Government agencies and departments (Department of Planning and Environment, Transport for NSW, Department of Regional NSW etc.);
- Federal Government departments (Department of Environment, Department of Infrastructure and Regional Development, Department of Agriculture, Water and Environment);
- Electricity / utility network service providers;
- Job network and training providers;
- Education and training providers; and
- Other infrastructure developers.

In addition to general public consultation undertaken for the project, consultation with Aboriginal stakeholders will be undertaken as part of the Projects Aboriginal Cultural Heritage Assessment. Consultation for this assessment would be undertaken in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010. Requests for information on potentially interested Aboriginal stakeholders was requested from several government agencies on the 12 January 2022 including:
- Heritage NSW;
- Murray River Council;
- Murray Local Land Services;
- Relevant Local Aboriginal Land Council (LALC);
- NTS Corp;
- National Native Title Services; and
- The Office of the Registrar.

An advertisement requesting registrations of interest in the process of community consultation was also placed in the Guardian on 18 January 2022. Invitations to register interest in Aboriginal community consultation has been issued to all groups identified from the responses received from the preliminary government agency contact. Those Aboriginal persons or groups (Registered Aboriginal Parties [RAPS] who register their interest in the Project will subsequently be consulted regarding the proposed heritage assessment methodology, heritage values and significance of the Project Area and proposed management measures for Aboriginal heritage values across the Project Area.

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

The following environmental studies have been conducted to support this submission:
- Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022). Report prepared to support Scoping Report and EPBC Act referral for the Project. Two ecologists undertook a field survey of the Project Area in late spring 2021.
- MNES significant impact assessments (ERM, 2022). These assessments are included in Appendix D of the attached Keri

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Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022).

The following reports will be completed for the Project:
- Biodiversity Development Assessment Report (BDAR)
- Environmental Impact Statement (EIS)

1.15 Is this action part of a staged development (or a component of a larger project)?

☑ Yes ☐ No

1.15.1 Provide information about the larger action and details of any interdependency between the stages/components and the larger action

The broader Keri Keri Renewable Energy Project also includes a proposed 400MWac solar farm located in the south west portion of the Wind Farm Project Area. The Keri Keri - Solar Farm is subject to a separate state significant development application and separate EPBC referral. However, the Keri Keri Solar Farm may share ancillary infrastructure to be constructed and operated under the Keri Keri Wind Farm Project, including substation, batching plant, road access, internal road network, and operations and maintenance facilities. This is detailed further in the Keri Keri Solar Farm EPBC referral.

1.16 Is the proposed action related to other actions or proposals in the region?

☑ Yes ☐ No

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation)

Acciona proposes to develop the broader Keri Keri Renewable Energy Project. The Keri Keri Renewable Energy Project is proposed to include wind and solar electricity generation and battery storage. This referral refers the Wind Farm and battery storage components only. A separate referral will be submitted for the proposed Solar Farm, noting the NSW DPE requirement to submit separate state significant development applications for the wind and solar aspects of the broader Keri Keri Renewable Energy Project.

The Project Area is situated near Project EnergyConnect, which is a proposed 330 kV transmission line between South Australia and New South Wales with a total length of 900 km. This connection will allow for the energy generated at Keri Keri Wind Farm to be supplied to the NEM. The Project Area is located within the boundaries of the proposed South-West Renewable Energy Zone (REZ), which is being developed in the areas surrounding Hay in the South-West region of NSW.

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Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☑ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☑ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☐ Yes ☑ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☑ Yes ☐ No

Species or threatened ecological community

Chariot Wheels Maireana cheelii

Impact

Multiple observations of the Chariot Wheels were recorded within the Project Area during the ERM 2021 field surveys and is therefore known to occur.

In New South Wales, extant populations of the Chariot Wheels are only known to occur in the western Riverina IBRA bioregion, mostly between Hay and Deniliquin but extending as far west as Moulamein (Mavromihalis, 2010b).

The Project Area consists of potential habitat for the species, presented as PCTs 44 and PCT 164. These PCTs make up 13,977 ha of suitable habitat within the Project Area. The total area of habitat within the subject land is 2,181 ha. The Project is estimated to impact on approximately 436 ha of potential Chariot Wheels habitat, comprising 3% of the total suitable habitat within the Project Area.

Walked field traverses were undertaken within suitable habitat during ERM field surveys, which targeted the species. These surveys presented 17 hours. As aforementioned, records of the species were made during both survey efforts. Further surveys will be undertaken in subsequent field surveys to inform an EIS.

The Chariot Wheels Recovery Plan (Mavromihalis, 2010b) states that since the year 2000, plants have been recorded in about 15 populations, with most plants occurring in just six populations, five in Victoria and one in New South Wales, with four on private property and two along roadsides. The Recovery Plan (Mavromihalis, 2010b) also states that it is likely that more populations exist, particularly on roadsides and private properties. The Project Area is near the limit of the species range, and has been conservatively concluded to be an important population.

Potential impacts to Chariot Wheels are described in Appendix D, Table D-4 of the theKeri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022) and include direct loss of up to 436ha, or 3.1% of potential habitat in the Project Area, through vegetation clearing and construction of the project. Indirect impacts include changes to surface water hydrology affecting vegetation quality and introduction of weeds also causing degradation of supporting habitat for Chariot Wheels:

Attached to this referral is the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022), that details the methods, field survey results, potential impacts and mitigation measures associated with the proposed development. The outcomes of a significant impact assessment for the Chariot Wheels concluded that there is potential to be a significant impact

to the species (ERM, 2022).

Species or threatened ecological community

Plains-wanderer Pedionomus torquatus

Impact

The vast majority of records of Plains Wanderers in NSW over the last 30 years come from an area of the western Riverina bounded by Hay and Narrandera on the Murrumbidgee River in the north, the Cobb Highway in the west, the Billabong Creek in the south, and Urana in the east (OEH, 2022). However, there are records from 6.4km NE of the boundary from 1964, and 3.5km west from as recently as 2020. The 2020 record is from a Songmeter audio recording within the Yanga SCA. Previous field surveys completed by others within the Project Area completed six evening and six morning diurnal transects, and three nights of nocturnal spotlight surveys targeting the Plains-wanderer, making a total of 15 survey hours for the species. No Plains-wanderers were observed during the survey effort. As the species has been recently recorded in close proximity, and preferred habitat is present, this species is considered likely to occur within the Project Area. Presence of the Plains-wanderer within the Project Area has been conservatively assumed.

The extent of occurrence for the species is estimated to be 930 000 km2 (Garnett et al., 2011). However Garnett et al. (2011) estimated the actual area of occupancy to be 330 km2, with a continuing declining trend. Given the historically low population size and the fragmented distribution of the Plains-wanderer, all areas in which birds are found, and any regions where the species is likely to occur, represents habitat critical to the survival of the species (Garnett et al., 2011).

Preferred habitat for the species is present within the Project Area associated with PCT 44 which totals 1,353 ha. The area of Plains-wanderer habitat within the subject land is 259 ha. The extent of likely impact to Plains-wanderer habitat as a result of the development footprint is estimated to be 52 ha, which is 3.8% of the available habitat in the Project Area. All potential habitat is considered critical to the survival of the species.

Potential impacts to Plains-wanderer are described in Appendix D, Table D-3 of the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022) and include direct loss of up to 52ha, or 3.8% of potential habitat in the Project Area through vegetation clearing and construction of the project. Indirect impacts include changes to surface water hydrology affecting vegetation quality and noise impacts during construction phase. Introduction of weeds during construction and maintenance phases also have the potential to modify areas of preferred grassland habitat used by Plains-wanderer

Attached to this referral is the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022), that details the habitat mapping, methods, field survey results, potential impacts and mitigation measures associated with the proposed development. The outcomes of a significant impact assessment for the Plains Wanderer concluded that there is potential to be a significant impact to the species as a result of the Project (ERM, 2022).

Species or threatened ecological community

Mossgiel Daisy Brachyscome papillosa

Impact

The Mossgiel Daisy is known to occur mainly from Mossgiel to Urana, in south western NSW with sites around Jerilderie, Hay Plain, Willandra Lakes, and north to Ivanhoe. The species is found primarily in clay soils on Bladder Saltbush (Atriplex vesicaria) and Cotton Bush (Maireana aphylla) plains but also in grassland and in Grey Box (Eucalyptus macrocarpa)–Cypress Pine (Callitris spp.) woodland (DEWHA, 2008). This species occurs within the Lachlan, Lower Murray Darling, Murray, Murrumbidgee and Western (NSW) Natural Resource Management Regions. The closest record of the species is located 11.7 km west of the Project boundary from 2001, and records exist more recently from 2014 and 2015 approximately 15.5km north of the Project Area at the Nimmie-Caira landholding.

The Project Area is within the known distribution and consists of suitable habitat for the species. Habitat is present on site in the form of PCTs 13, 44, 153, 159, 160 and 164. These PCT's make up 14,195ha of the Project Area.

Walked field traverses were undertaken within suitable habitat during field surveys, which targeted the species during field surveys completed by ERM in 2021. These surveys presented 21 hours. Potential Mossgiel Daisy specimens were observed during 2022 field surveys in summer, samples of which were collected and have been submitted to the National Herbarium of NSW for confirmation. Results are yet to be obtained. For the purpose of this assessment, the presence of the species is assumed. The amount of suitable habitat for Mossgiel Daisy in the subject land is 2,215ha, with an estimated 443ha impacted

as a result of the potential development footprint. This impact represents 3.1% of the available habitat for this species in the Project Area.

This assumed population has been conservatively concluded to be an important population in the Project Area due to the following reasons. Firstly, there is an absence of detailed population data for the Project Area. Additionally, the Mossgiel Daisy was potentially observed during the Spring 2022 field surveys, and records exist from 11 to 16 km from the site as recently as 2015.

Potential impacts to Mossgiel Daisy are described in Appendix D, Table D-5 of the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022) and include direct loss of up to 443ha, or 3.1% of potential habitat in the Project Area through vegetation clearing and construction of the project. Indirect impacts include changes to surface water hydrology affecting vegetation quality and introduction of weeds, also causing degradation of supporting habitat for Mossgiel Daisy.

Attached to this referral is the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022), that details the methods, field survey results, potential impacts and mitigation measures associated with the proposed development. The outcomes of a significant impact assessment for the Mossgiel Daisy concluded that there is likely to be a significant impact to the species as a result of the Project (ERM, 2022).

Species or threatened ecological community

Winged Peppercress Lepidium monoplocoides

Impact

Winged Pepper-cress has not been recorded during field surveys within the Project Area, however there is a record 12.2km north west of the Project Area from 2001.

Winged Pepper-cress occurs in open, sparsely vegetated sites in a range of habitats on heavy clay or clay-loam soils. Sites are seasonally flooded or prone to waterlogging, in arid to semi-arid areas with an average rainfall range of 200–450mm per year. The mean average annual rainfall for Keri Keri NSW is 209.1 mm (WillyWeather). The predominant vegetation is usually grasslands, wetlands and floodplain woodlands dominated by Eucalyptus coolabah and Eucalyptus largiflorens, and chenopod shrublands dominated by Atriplex, Maireana and/or Nitraria species, but the seasonally waterlogged sites preferred by Winged Pepper-cress also support a number of moisture dependent herbs, such as Marsilea spp. (Nardoo) (Mavromihalis, 2010a).

Suitable habitat is present on the Project Area in the form of PCTs 13, 17, 159, 153 and 163. Further surveys are required to determine if all areas of these PCTs are likely to be seasonally flooded. If not these areas will be excluded from the suitable habitat as they would no longer meet the habitat preference for the species. The suitable habitat present in the Project Area based on associated PCTs totals 2,931ha. The area of Winged Pepper-cress habitat within the subject land is 309ha, with an estimated impact to 62 ha which is 2.1% of the suitable habitat within the Project Area. This small percentage of disturbance is unlikely to result in significant impact on the species.
11 flora transects making up 24 person hours of survey effort were undertaken for the species during the ERM Spring 2021 survey period. No Winged Pepper-cress were observed despite significant rainfall during the winter season. Further flora transects will be undertaken targeting the species during summer surveys to meet survey requirements. Prior to these surveys, it is assumed the species is present within the Project Area.

Potential impacts are described in Appendix D, Table D-2 of the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022) and include direct loss of up to 62ha or 3.1% of potential habitat in the Project Area through vegetation clearing and construction of the project. Indirect impacts include changes to surface water hydrology affecting vegetation quality and introduction of weeds.

Attached to this referral is the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022), that details the methods, field survey results, potential impacts and mitigation measures associated with the proposed development. The outcomes of a significant impact assessment for the Winged Pepper-cress concluded that there is potential for there to be a significant impact to the species as a result of the Project (ERM, 2022).

Species or threatened ecological community

Growling Grass Frog Litoria raniformis

Impact

The Growling Grass Frog is currently widespread throughout the Murray River valley, and has been recorded from six Catchment Management Areas in NSW, including the Murrumbidgee. The nearby Yanga National Park provides critical

habitat for one of the largest known populations of the Growling Grass Frog (Litoria raniformis) (DPIE, 2020). The Yanga National Park has connectivity to the Project Area through the adjacent Yanga State Conservation Area.

Reviews of ALA and BioNET show no recent records within the Project Area. The Growling Grass Frog has, however, been recorded approximately 12.5 km north and 12.5 km north east of the Project Area in 2011. During the ERM Spring 2021 field surveys one night of amphibian surveys was undertaken, however no records of the species were made. The Growling Grass Frog survey effort was reduced due to weather conditions impacting site access. The survey effort was subsequently insufficient to meet survey guidelines, therefore presence of the species has been assumed.

The Growling Grass Frog is found mostly amongst emergent vegetation, including Typha sp. (bullrush), Phragmites sp. (reeds) and Eleocharis sp. (sedges), in or at the edges of still or slow-flowing water bodies such as lagoons, swamps, lakes, ponds and farm dams (Robinson 1993; NSW DEC 2005a). Grassland provides habitat for foraging, dispersal and shelter, and may also provide overwintering sites for the species. The species is also known to occur in lignum shrublands (S. Wassens undated, pers. comm. cited in NSW DEC 2005a).

Suitable habitat has been identified within the Project Area. Such suitable habitat is associated with lignum shrublands (PCT 17), artificial dams with emergent vegetation and drainage lines. The total area of potential Growling Grass Frog habitat within the Project Area is mapped as 148ha. The amount of Growling Grass Frog habitat within the subject land is 3.0ha, with the majority of these areas likely to be able to be avoided as part of the detailed design process. There is potential for impacts to 0.6ha of Growling Grass Frog habitat within a likely development footprint.

Due to the pronounced decline of the species in NSW, any viable population is considered as an important population for the persistence and recovery of the species. For this species, a viable population is one that is not isolated from other populations or water bodies, such that it has the opportunity to interact with other nearby populations or has the ability to establish new populations when water bodies fill and become available (DEWHA, 2009). Interaction with nearby populations and colonisation of newly available water bodies occurs via the dispersal of individual frogs across suitable movement habitat (DEWHA, 2009).

The presumed population of Growling Grass Frogs within the Project Area is located approximately 12 km south of known populations of the species, and is connected through the Yanga National Park and Yanga State Conservation Area. However, the main population is located on the northern side of the Sturt Highway, which may act as a barrier to species dispersal. There are mapped watercourses and drainage lines within the Project Area, which would allow for connectivity to waterbodies. The Abercrombie Creek is ephemeral, and was observed to be dried during all survey efforts, despite significant rainfall. It is unlikely that the presumed population of Grass Growling Frogs within the Project Area would be considered an important population of the species.

Potential impacts are described in Appendix D, Table D-1 of the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022) and include direct loss of up to 0.6ha, or 0.4% of the potential habitat in the Project Area through vegetation clearing and construction of the project, including impacts to existing farm dams that have the potential to be used as breeding and foraging habitat. Indirect impacts include changes to surface water hydrology affecting vegetation and water quality. Introduction of weeds also has the potential to alter habitat composition around farm dams and waterways. Noise and light impacts during construction may also effect calling behavior of these frogs during breeding seasons. These indirect impacts will be temporary during construction phase and will be adequately mitigated and minimised to avoid a significant impact to any confirmed Growling Grass Frog habitat.

Attached to this referral is the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022), that details the methods, field survey results, potential impacts and mitigation measures associated with the proposed development. The outcomes of a significant impact assessment for the Growling Grass Frog concluded that there is unlikely to be a significant impact to the species as a result of the Project (ERM, 2022).

Species or threatened ecological community

Natural Grasslands of the Murray Valley Plains TEC

Impact

The Natural Grasslands of the Murray Valley Plains TEC is listed as ‘Critically Endangered’ under the EPBC Act and is highly likely to occur within the Project Area based on vegetation integrity plots (BAM plots) undertaken during field surveys. The Project Area is within the range of the TEC, predominately across the southern parts of the Riverina Bioregion in NSW. Within its range, the TEC occurs predominately on flat, alluvial lowland plains with heavy-textured grey, brown and red clays. Many occurrences are associated with Quaternary alluvial sediments.

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Minimum patch size for the Natural Grasslands of the Murray Valley Plains was determined by analysis of known patch sizes across the ecological community (TSSC, 2012). The ecological community now occurs in a highly fragmented state and patches are generally small in size, with most being less than 100 ha in area. Consequently, impacts to patches of the ecological community that are 0.04 ha in size and of high diversity are likely to be significant. The size of the patch identified within the Project Area is to be determined during upcoming field surveys. The area of the associated PCT (PCT 44) across the Project Area is 1,353ha. The area within the subject land is 259ha, with an estimated impact to 52ha of the TEC.

Potential impacts are described in Appendix D, Table D-6 of the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022) and include direct loss of up to 52ha, or 3.8% of potential habitat in the Project area, through vegetation clearing and construction of the project. Indirect impacts include changes to surface water hydrology affecting vegetation and water quality, leading to introduction of weeds and other non-grassland species.

Attached to this referral is the Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022), that details the methods, field survey results, potential impacts and mitigation measures associated with the proposed development. The outcomes of a significant impact assessment for the Natural Grasslands of the Murray Valley Plains TEC concluded that the proposed development in the Project Area has the potential to lead to a significant impact to the Natural Grasslands of the Murray Valley Plains TEC (ERM, 2022).

2.4.2 Do you consider this impact to be significant?

☑ Yes ☐ No

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

☐ Yes ☑ No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☑ No

2.7 Is the proposed action likely to be taken on or near Commonwealth land?

☐ Yes ☑ No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

☐ Yes ☑ No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

☐ Yes ☑ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☑ No

2.11 Is the proposed action to be taken by a Commonwealth agency?

☐ Yes ☑ No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

☐ Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

☐ Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

Detail on the flora and fauna values within the Project Area is described in Section 4 and Section 5 of the attached Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022).

The Riverina Bioregion is characterised by extensive riverine floodplains, and is often dominated by chenopod shrublands and grasslands. The climate is semiarid with low, winter-dominant rainfall, hot summers and cool winters. Large portions of land within the Project Area have been disturbed, and are characterised by grazed native and modified grasslands resulting from vegetation clearing and livestock grazing. Majority of the woodland patches contain remnant stands of mature Black Box (Eucalyptus largiflorens) with a shrub understory. Some patches also contain or predominately consist of Allocasuarina sp., Casuarina sp., Acacia spp., Hakea spp. or Eremophila sp.. These woodland patches are isolated across the site.

The western boundary of the Project Area is located immediately adjacent to the Yanga State Conservation Area (Yanga SCA), managed by NSW National Parks and Wildlife Service (NPWS). The Yanga SCA has connectivity to the Yanga National Park and Yanga Nature Reserve. The creation of the parks initiated the first large-scale protection and conservation of River Red Gum (Eucalyptus camaldulensis) in New South Wales. The River Red Gum forests are an iconic value of the parks and are part of the third-largest contiguous stand of River Red Gum forest in Australia. Other significant vegetation protected by the parks includes Black Box woodland, Lignum shrubland, Nitre Goosefoot shrubland and three endangered ecological communities.

A review of the state vegetation type mapping for the Riverina region (Version v1.2 - VIS_ID 4469) and other publicly available information has been undertaken to access existing vegetation mapping information within the Project Area. This mapping was further refined based on the ERM Spring 2021 survey observations and BAM plot data, resulting in a total of nine (9) PCTs being identified across the Project Area.

The site was observed to be dominated by PCT 164, ‘Cotton Bush open shrubland of the semi-arid (warm) zone’ which covers 12,624.1 Ha, 69.9% of the Project Area and areas of high quality grasslands in the form of PCT44 is present across the landscape.

A likelihood of occurrence assessment was undertaken to determine whether threatened species may be present within the Project Area. The data that was utilised to formulate this assessment was from the NSW BioNET Atlas Online database search and Protected Matters Search Tool. The data collected included records within an approximately 10 km radius of the Project Area as well as information from previous reports within the Project Area. This assessment concluded eight (8) EPBC Act or BC Act listed fauna species, to be likely or known to occur within the Project Area

Four (4) threatened fauna species are known to occur within the Project Area. These include:
- White-fronted Chat (Epthianura albifrons), listed as Vulnerable under the BC Act, identified within the Project Area during field surveys;
- Black Falcon (Falco subniger), listed as Vulnerable under the BC Act, identified within the Project Area during field surveys;
- Little Eagle (Hieraaetus morphniodes), listed as Vulnerable under the BC Act, identified within the Project Area during field surveys. Nests for the species were also observed; and
- Major Mitchell’s Cockatoo (Lophochroa leadbeateri), listed as Vulnerable under the BC Act, identified within the Project Area during field surveys.

The following four (4) threatened fauna species are considered likely to occur within the Project Area based on the Likelihood of Occurrence Assessment:
- Spotted Harrier (Circus assimilis), listed as Vulnerable under the BC Act;
- Growling Grass Frog (Litoria raniformis), listed as Endangered under the BC Act and Vulnerable under the EPBC Act;
- Plains-wanderer (Pedionomus torquatus), listed as Endangered under the BC Act and critically Endangered under the EPBC Ac; and
- Grey-crowned Babbler (Pomatostomus temporalis temporalis), listed as Vulnerable under the BC Act.

No birds listed as Migratory under the EPBC Act have been identified on the Project Area, nor been considered known or likely to occur within the Project Area based on the Likelihood of Occurrence Assessment.

During the initial Bird Utilisation Survey, five (5) raptor species were considered to be vulnerable to wind turbine collision, and were recorded within the proposed Rotor Swept Area, however the level of use of the site by these species was considered low.

Further field surveys targeting threatened species and those at risk of wind turbine collision will be conducted in accordance with the BAM to inform an EIS.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

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

Water sources are scarce across this landscape. The ephemeral Abercrombie Creek and Channel occur within the Project Area, alongside several unnamed areas of hydrology including artificial dams, natural depressions, billabongs, natural drainage lines, irrigation channels, troughs and areas of seasonal wetland inundation. The Project area drains into the Murrumbidgee River catchment.

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

No soil testing was undertaken during the field surveys, however Mitchell landscapes data and OEH (2017) data shows that the Project Area is made up of grey, brown, and red clays; siliceous sands; and red and brown earths.

The current vegetation communities' link with the underlying soil character and in particular show the low-lying clay soils supporting lignum, Nitre Goosefoot and Canegrass while the plains support Cotton Bush.

Patches of woodland vegetation are isolated across the site and coincided with black soil, natural depressions that hold water seasonally and billabongs. Majority of the woodland patches contained mature Black Box (Eucalyptus largiflorens) and a shrub understory. Some patches also contained or predominately consisted of Allocasuarina sp., Casuarina sp., Acacia spp., Hakea spp. or Eremophila sp.

Vegetation on site is further discussed in Section 3.1 of this referral.

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

There are Areas of Outstanding Biodiversity Value (AOBV) within the Project Area. These areas are associated with the ephemeral Abercrombie Creek, which is mapped through the southern boundary of the Project Area. During ecological field surveys all watercourses and hydro lines were observed to be dry, despite substantial rainfall during the winter and spring seasons.

Within the regional context of the property, there are outstanding natural features protected within the following parks:
- The Yanga State Conservation Area, located immediately adjacent to the western section of the Project Area;
- The Yanga National Park; and
- The Yanga Nature Reserve.

These areas are shown in Figure 1-1 of the attached Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022). This includes the location of the Conservation Area, Nature Reserve and National Park and the alignment of Abercrombie Creek through the Project Area.

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

The native vegetation communities within the Project Area are described in Section 4.1 of the attached Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022).

The Project Area is a total of 18,055 ha, of which 2,653 ha (14.7%) occurs within the subject land. Vegetation relevant to the Project Area can be described as being predominantly open grasslands and shrublands, with sparse and isolated woodland patches. Areas of grassland have been identified as habitat for the Plains-wanderer, with areas of grasslands and shrublands being identified as habitat for Chariot Wheels, Winged Pepper-cress, and the Mossgiel Daisy. The site also contains small areas of lignum swamplands, which have the potential to provide habitat for the Growling Grass Frog, in addition to artificial dams across the Project Area.

There are small patches of remnant woodland vegetation across the landscape, Black Box communities (PCT 13) totals 11.7 ha, 0.064 % of the total Project Area. This PCT has been avoided during development of the preliminary Project design.

The vegetation within the subject land has is influenced by agricultural uses. Currently the Project Area is utilised for grazing sheep. There is a total of nine (9) PCTs present, including one TEC, per the BC and EPBC Act. This TEC is the Natural Grasslands of the Murray Valley Plains and coincides with areas of Plains-wanderer habitat.

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

The overall terrain of the Project Area is flat, with elevation across the project area around 68-70m ASL. The main topographic features within the area are the depressions of former relict lakes, Black Box swamps and drainage channels, and the higher elevation of the lunettes and sand dunes. Relief is generally only few metres difference. When traversing the landscape however, the differences are noticeable, and the different relief is linked to the soils and hydrology and therefore the vegetation mosaic.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

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

The Project Area contain areas of remnant vegetation, cleared grazing land and native grasslands and shrublands. There are large portions of land within the Project Area that have been disturbed, and are characterised by grazed native and modified grasslands resulting from vegetation clearing and livestock grazing. However, despite the disturbance, patches of grassland and shrubland across the landscape are in relatively high condition. Woodland vegetation is present as remnant stands only, with two small stand of Black Box present on the western boundary with connectivity to Yanga State Conservation Area, and considerably small patches across the landscape also contain Allocasuarina sp., Casuarina sp., Acacia spp., Hakea spp. or Eremophila sp. These woodland patches are isolated across the site and presented in low condition.

Field assessments identified introduced species in the Project Area. This included the European rabbit (Oryctolagus cuniculus), Common Starling (Sturnus vulgaris) and Paterson's curse (Echium plantagineum). While not recorded, it was noted that the Project Area would likely provide suitable habitat for other introduced fauna including the feral cats and red foxes. It was also noted in the PMST that further flora and fauna introduced species are likely to occur across the Project Area.

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

There are no identified Commonwealth Heritage Places or other places that have heritage values relevant to the project area.

3.9 Describe any Indigenous heritage values relevant to the project area

Aboriginal Heritage Assessment for the project is currently underway, with the information summarised here sourced from existing publicly available reports as referenced in the below paragraph and not containing an culturally sensitive information. Preliminary desktop assessment has included review of existing regional predictive models as well as a search of the NSW Aboriginal Heritage Information Management System (AHIMS). The extensive search of the AHIMS database was completed on 22 December 2021. The search results indicated that six Aboriginal heritage sites had previously been registered within the Project Area. Site types identified included burials, earth mounds, artefact sites and areas of Potential Archaeological Deposit (PAD).

Regionally, Aboriginal occupation has been dated to a significant antiquity with excavations at Lake Mungo approximately 126 km north-west of the Project Area have dated Aboriginal occupation as far as 40,000 years before present. Localised predictive models of the Murrumbidgee Province undertaken by Colin Pardoe as part of the Murrumbidgee Province Aboriginal Cultural Heritage Study (Pardoe and Martin, 2011) has identified that Aboriginal sites have the potential to be located across a variety of soil and landform features across the region. Pardoe identified that the greatest concentration of sites are found in close proximity to water sources however noted that there was some variation in site concentrations based on the proximity to specific water source types. Pardoe further noted that Aboriginal sites had the potential to exist a large distance from the closest water source with sites in Pardoe’s study noted to exist up to 12 km from minor streams. Based on Pardoe’s predictive modelling a large portion of the Project Area is located within a landscape, which is sensitive for the presence of Aboriginal sites and values.

Preliminary biodiversity assessment undertaken for the project has confirmed the sensitivity of the landscape through the identification of three sites containing Aboriginal ancestral remains. Additional sites identified during the biodiversity assessment included culturally modified trees and hearth deposits. The presence of this variety of sites suggest complex and prolonged land use by Aboriginal people in the region.

The Aboriginal heritage values of the Project Area would be further detailed and delineated.

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

Freehold

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

Existing Use
The field survey identified the majority of the Project Area as cleared land that is used for rural purposes, specifically grazing sheep.

Proposed Use
The proposed development is a Wind Farm that will consist of up to 176 wind turbine generators (WTGs) with an approximate maximum installed capacity of 1003.2 MW. The wind turbines will have a proposed hub height of up to 200 m and tip height of up to 291.5 m.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

The proposed development is inclusive of a Battery Energy Storage System (BESS) facility with a capacity of up to 200 MW/800MWh and all ancillary infrastructure associated with the operation of the wind farm and BESS.

The broader Keri Keri Renewable Energy Project also includes a proposed 400 MWn/500 MWp solar farm located in the south west portion of the Project Area. The Keri Keri Solar Farm is subject to a separate state significant development application, however it may share ancillary infrastructure to be constructed and operated under the Keri Keri Wind Farm project, including substations, road access and internal road network, and operations and maintenance facilities.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 4

Measures to avoid or reduce impacts

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

A summary of potential mitigation measures relevant to biodiversity is provided in Section 6 of the attached Keri Keri Wind Farm Preliminary Biodiversity Assessment Report (ERM, 2022).

Potential impacts of the proposed activities will be managed in a manner consistent with the management approaches for wind farm activities, and, where relevant, additional measures will be implemented.

To effectively avoid and minimise impacts associated with the Project, the following management recommendations have been suggested for each identified impact:

Loss of existing native vegetation:
- Areas of remnant and regrowth vegetation to be avoided at the design and micro siting stages, where practicable.
- Areas of threatened flora and fauna habitat will be avoided at design and micro siting stages, where practicable.
- If vegetation clearing is required, a Vegetation Management Plan will be implemented to ensure that clearing is undertaken in accordance with legislative standards and requirements.
- To assist in the preservation of the threatened ecological community identified on site, it is recommended that a buffer zone of at least 30 metres be maintained from the outer edge of an identified patch.

Weed and pest control
- A Pest Management Plan will be developed and implemented for the Project. This will include measures such as vehicle wash downs, weed certification and obligations to stick to access tracks throughout the Project Area.
- Weed management and control methods will depend upon the location, weed species identified, the degree of the infestation, relevant landholder agreement or conduct and compensation agreements provisions, and local, state and national regulatory requirements.
- Imported material able to transport weed seed will be assessed to ensure they are free of contamination, disease and invasive weeds.
- Weeds of National Significance (WoNS) and Invasive species will be identified and monitored in the Project Area. Appropriate weed monitoring will occur to ensure new weed species are identified, recorded and managed appropriately.

Mortality or injury to native fauna
- During vegetation clearing activities fauna management will be implemented that includes pre-clearing surveys, fauna spotter-catcher supervision and methods to reduce impacts as set out in a fauna management plan.
- No driving will occur in unauthorised areas, and in other areas will be carried out at safe speeds adopted to the road conditions.
- Injured, sick or dead fauna will be recorded and reported during construction. This can be carried out by a fauna spotter-catcher.

Impacts from turbine collision to bats and birds
- Areas of bird habitat including known nests will be avoided in the design and then further avoided when micro siting occurs, where practicable
- Development of a Bird and Bat Management Plan that considers the impacts that will occur to birds and mitigation measures to address these.
- Additional measures could include locating turbines away from key bird and bat habitats (waterways and drainage lines) where practicable

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

As a result of a detailed ecological assessment including the desktop study and field survey results, MNES protected by the EPBC Act that were recorded or considered likely, or known to occur within the Project Area and which may be impacted by the proposed development, are five threatened species. These species include:

One (1) EPBC Act listed species known to occur on site based on observations during the field surveys:
- Chariot Wheels (Vulnerable)

One (1) EPBC Act listed Threatened Ecological Community known to occur on site based on observations during the field surveys:
- Natural Grasslands of the Murray Valley Plains (Critically Endangered)

A further four (4) EPBC Act listed species are considered likely to occur based on records in the locality and the presence of

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preferred habitat:
- Plains-wanderer (Critically Endangered)
- Winged Pepper-cress (Endangered)
- Mossgiel Daisy (Vulnerable)
- Growling Grass Frog (Vulnerable)

Potential impacts to these species and community are addressed in the Preliminary Biodiversity Assessment Report (ERM 2022). Based on the current Project design there is likely to be habitat disturbance to the known species (Chariot Wheels) and TEC, and potential habitat disturbance for each of the likely four (4) species. These disturbances will be further explored within the EIS. Initial efforts to minimise effects on these species are discussed in section 3.12 of this referral.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☑ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

Impacts are limited to listed threatened species and threatened ecological communities. Other MNES do not occur in the project area.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

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

ACCIONA has a satisfactory record of responsible environment management. ACCIONA has constructed the Mt Gellibrand Wind Farm, Mortlake Wind Farm, Waubra Wind Farm and the Gunning Wind Farm. These have all been constructed under comprehensive Environmental Management Plans (EMP). These EMP's include a range or protection measures and processes to ensure environmental values are protected during the construction and operation of these wind farms, including regular internal and

ACCIONA is a global company with highly developed environmental policies, standards, procedures and practices. In Australia, its work is governed by its global commitment to sustainability, reflected in its contribution toward meeting the Sustainable Development Goals. It has developed a Sustainability Master Plan that guides all decision-making in relation to its operation that includes social, economic and environmental outcomes. No actions have been taken against ACCIONA for environmental breaches.

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

None

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

☑ Yes ☐ No

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

ACCIONA has has a number of key policies. Copies of these policies are provided in the attached ACCIONA Environment, Biodiversity, Climate Change and Water Policy

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

☑ Yes ☐ No

6.4.1 EPBC Act No and/or Name of Proposal

2020/8773 (Aldoga Solar Farm Project), 2020/8759 (MacIntyre Wind Energy Precinct), 2022/9174 (Keri Keri Solar Farm)

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

Preliminary Biodiversity Assessment Report (ERM, 2022)

Reliability

High – Resource provided by suitably qualified consultants

Uncertainties

Nil

Reference source

DPIE (2020). Yanga National Park, Yanga, State Conservation Area, and Yanga Nature Reserve Plan of Management. Online resource https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/yanga-national-park-plan-of-management-200477.pdf

Reliability

High – Government agency publication

Uncertainties

Nil

Reference source

Mavromihalis, J. (2010b). National Recovery Plan for the Chariot Wheels Maireana cheelii. Department of Sustainability and Environment, Melbourne. Available from: http://www.environment.gov.au/biodiversity/threatened/recovery-plans/national-recovery-plan-chariot-wheels-maireana-cheelii. In effect under the EPBC Act from 13-Aug-2010 as Maireana cheelii.

Reliability

High – Government agency publication

Uncertainties

Nil

Reference source

Robinson, M. (1993). A Field Guide to Frogs of Australia. Chatswood, NSW: Reed.

Reliability

High – Recognised field guide for frog species in Australia

Uncertainties

Nil

Reference source

NSW Department of Environment and Conservation (NSW DEC) (2005a). Southern Bell Frog (Litoria raniformis) Draft Recovery Plan. Sydney, NSW Department of Environment and Conservation (DEC). Available from: http://www.environment.nsw.gov.au/resources/nature/recoveryplanDraftSouthernBellFrog.pdf

Reliability

High – Government agency publication

Uncertainties

Nil

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Reference source

DEWHA (2009) EPBC Act Policy Statement: Significant Impact Guidelines for the vulnerable growling grass frog Litoria raniformis. The Department of the Environment, Water, Heritage and the Arts, Canberra, ACT. www.environment.gov.au/epbc.

Reliability

High – Government agency publication

Uncertainties

Nil

Reference source

Threatened Species Scientific Committee (TSSC) (2012). Commonwealth Listing Advice on Natural Grasslands of the Murray Valley Plains. Department of Sustainability, Environment, Water, Population and Communities. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/117-listing-advice.pdf. In effect under the EPBC Act from 08-Sep-2012.

Reliability

High – Government agency publication

Uncertainties

Nil

Reference source

OEH 2017, Digital soil mapping of key soil properties over NSW, Technical Report, NSW Office of Environment and Heritage, Sydney.

Reliability

High – Government agency publication

Uncertainties

Nil

Reference source

Pardoe, C & Martin, S (2011) Murrumbidgee Province Cultural Heritage Study, report prepared for NSW National Parks and Wildlife Service

Reliability

High – Publicly available report prepared for a government agency publication

Uncertainties

Nil

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8

Proposed alternatives

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

☑ Yes ☐ No

8.0 Provide a description of the feasible alternative

Alternatives have previously been considered in forming the current Project. These alternatives have been discounted for the reasons detailed below.

Alternative Project location

As part of the site identification process, Acciona undertook engagement with Murray River Shire Council to identify potential areas for renewable energy development in the locality, prior to engaging with the host landholders. A project of this magnitude requires significant land area, proximity to existing or proposed transmission networks and available network capacity, and many alternative sites may be limited in providing these critical elements.

The Project Area is identified as a highly suitable site for the proposed wind farm development. Due to the wind resource, sparsely populated locality, the proposed route of Project EnergyConnect, and being located within the South-West REZ, it is considered that the site is optimal for wind energy generation.

Alternative Project layout options

The Project layout and number of turbines proposed in this Scoping Report have been determined on the basis of the anticipated generation capacity on the NSW-SA interconnector (Project EnergyConnect), early constructability analysis, and preliminary fatal flaw studies in 2020.

The preliminary layout, whilst indicative, has considered the preliminary constraints assessments completed by NGH in 2020. Key constraints included:

- Biodiversity: including threatened ecological communities, areas of high abundance of hollow bearing trees, candidate species habitat and riparian / marshland / wetland areas.
- Aboriginal heritage: areas of high archaeological potential and AHIMs sites; and
- National parks estate: proximity to the nearby Yanga State Conservation Area, including potential bird and bat collision risks, reduction in ecological connectivity, impacts to cultural heritage and reduced visual amenity.

The preliminary layout includes consideration of the outcomes of the preliminary constraints assessment, including the application of a 3 km buffer from a WTG to a dwelling (visual and noise), heritage sites, high value plant community types and riparian areas.

8.1 Select the relevant alternatives related to your proposed action

☐ Timeframes
☐ Locations
☐ Activities

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

8.25 Do you have another alternative?

☐ Yes ☑ No

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Section 9

Person proposing the action

9.1.1 Is the person proposing the action an organisation or business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	ACCIONA ENERGY AUSTRALIA GLOBAL PTY LTD
Business name	
ABN	54600910647
ACN	
Business address	Level 38, Melbourne Central Tower, 360 Elizabeth Street, Melbourne, 3000, Victoria, Australia
Postal address	
Main Phone number	+61 3 9027 1032
Fax	
Primary email address	jamie.mcgilp@acciona.com
Secondary email address	

9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the EPBC Regulations because I am:

☐ Small business
☑ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Regulation 5.21A of the EPBC Regulations

☐ Yes ☑ No

9.1.3 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Jamie
Last name	McGilp
Job title	Senior Manager, Business Development
Phone	+61 3 9027 1032
Mobile	+ 61 428 373 394
Fax	
Email	jamie.mcgilp@acciona.com
Primary address	Level 38, Melbourne Central Tower, 360 Elizabeth Street, Melbourne, 3000, Victoria, Australia
Address	

Declaration: Person proposing the action (To be signed by the person at 9.1.3)

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

Signature: ....  Digitally signed by Jamie McGilp DN: cn=Jamie McGilp, o=ACCIONA, ou, email=jamie.mcgilp@acciona.com, c=AU Date: 2022.03.07 10:23:58 +11'00' **..... Date:** 07/03/2022

I, _____, the person proposing the action, consent to the designation of _____ as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:.....Date: .....

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent an organisation or business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	ACCIONA ENERGY AUSTRALIA GLOBAL PTY LTD
Business name	
ABN	54600910647
ACN	
Business address	Level 38, Melbourne Central Tower, 360 Elizabeth Street, Melbourne, 3000, Victoria, Australia
Postal address	
Main Phone number	+61 3 9027 1032
Fax	
Primary email address	jamie.mcgilp@acciona.com
Secondary email address	

9.2.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Jamie
Last name	McGilp
Job title	Senior Manager, Business Development
Phone	+61 3 9027 1032
Mobile	+ 61 428 373 394
Fax	
Email	jamie.mcgilp@acciona.com
Primary address	Level 38, Melbourne Central Tower, 360 Elizabeth Street, Melbourne, 3000, Victoria, Australia
Address	

Declaration: Proposed Designated Proponent

I, Jamie McGilp **,the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.**

Signature: ....  Digitally signed by Jamie McGilp
DN: cn=Jamie McGilp, o=ACCIONA, ou, email=jamie.mcgilp@acciona.com, c=AU
Date: 2022.03.07 10:23:58 +11'00'

..... Date: 07/03/2022

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)

9.3.1 Is the referring party an organisation or a business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	ACCIONA ENERGY AUSTRALIA GLOBAL PTY LTD
Business name	
ABN	54600910647
ACN	
Business address	Level 38, Melbourne Central Tower, 360 Elizabeth Street, Melbourne, 3000, Victoria, Australia
Postal address	
Main Phone number	+61 3 9027 1032
Fax	
Primary email address	jamie.mcgilp@acciona.com
Secondary email address	

9.3.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Jamie
Last name	McGilp
Job title	Senior Manager, Business Development
Phone	+61 3 9027 1032
Mobile	
Fax	
Email	Jamie.mcgilp@acciona.com
Primary address	Level 38, Melbourne Central Tower, 360 Elizabeth Street, Melbourne, 3000, Victoria, Australia
Address	

Declaration: Referring party (person preparing the information)

I, Jamie McGilp **, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.**

Signature: ... Digitally signed by Jamie McGilp DN: cn=Jamie McGilp, o=ACCIONA, ou, email=jamie.mcgilp@acciona.com, c=AU Date: 2022.03.07 10:23:58 +11'00' **..... Date:** 07/03/2022 **.....**

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A

Attachment

Document Type	File Name
action_area_images	KKWF_Subject_land.shp
supporting_tech_reports	*0617753_KeriKeri Wind Farm_ Preliminary Biodiversity Assessment_ F01.pdf
supporting_tech_reports	Att 1-Preliminary Biodiversity Assessment-ERM-2022_v2.pdf
corp_env_policy_docs	Att 2-ACCIONA_Environment_Policy.pdf

* NOT PUBLISHED - SUPERSEDED

Appendix B

Coordinates

Area 1
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