EPBC Act referral

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.

Title of proposal	2021/9137 - Mount Hopeful Wind Farm, 45km south of Rockhampton, QLD

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

Neoen Australia Pty Ltd (Neoen) proposes to develop, construct and operate the Mount Hopeful Wind Farm (the Project), located approximately 45 kilometres (km) south of Rockhampton and 65 km west of Gladstone, Queensland. The Project will be undertaken across 17 freehold properties and local road reserves, covering an area of approximately 16,745 hectares (ha) and referred to as the Study Area.

The Project proposes up to 116 wind turbine generators and associated project infrastructure. The electrical output for each wind turbine generator would be approximately 6 megawatts (MW), giving the Project a total maximum generation capacity of approximately 700 MW.

The Project location was chosen for development because it has a strong wind resource, a nearby high voltage transmission line and a low population density, whilst having access to a strong base of local subcontractors and established transportation corridors. The Project will be compatible with existing grazing and agricultural land uses, offering a diverse and consistent form of revenue to involved farmers. The Project will assist the Queensland Government in achieving its target of 50% renewable generation by 2030 and will further contribute to Australia's commitments to lower greenhouse gas emissions. The Project's proximity to Gladstone would allow it to supply low-cost energy to support the development and expansion of industrial commerce in Central Queensland.

The wind turbine generators will have a horizontal axis and a rotor consisting of three blades with a maximum blade length of up to 90 metres (m) and a maximum hub height of up to 180 m. The selected blade and hub height will be configured so that the total tip height of each wind turbine generator does not exceed 260 m.

Project infrastructure, including ancillary infrastructure, will comprise:

- Wind turbine generators, foundations and associated hardstand infrastructure
- up to 10 temporary wind monitoring towers
- up to 10 permanent wind monitoring towers
- up to six substations,
- a battery energy storage system and ancillary electrical infrastructure
- up to 6 km of high voltage (275 kilovolt (kV)) overhead powerlines
- site operational, maintenance and storage areas
- up to 4 temporary construction compound/laydown areas
- overhead and/or underground power and communication cables
- gravel-capped access roads
- 2 permanent site access points.

Project infrastructure will be located within a 1,973.3 ha development corridor within the Study Area, which has been defined by applying suitable buffers around the proposed infrastructure. This strategy allows for micro-siting and optimisation of the final infrastructure layout, following a detailed engineering design process. To ensure 'worst case' potential impacts are assessed, all technical assessments are based on the entire development corridor area. The actual on-ground disturbance footprint is estimated to be 40-50 % less than that of the development corridor. The Project layout is depicted in Figure 2.1 of the Mt Hopeful Matters of National Environmental Significance (MNES) Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body). The nature of the activities for the proposed action and the potential impacts on the environment are contained within the Preliminary Construction Management Plan (CMP) (Att2-Mt Hopeful_Preliminary Construction Management Plan) including Section 4.0 (Environmental Impacts and Mitigation Measures).

The Project will connect into Powerlink's existing 275kV transmission line, running from Bouldercombe to Calliope River substations, located to the east of the Project.

The construction period is estimated to span 22-30 months (including commissioning and testing activities). The workforce is expected to fluctuate in size throughout this period, with an estimated maximum (peak) construction workforce of 300 employed personnel. The workforce will likely stay in nearby townships. During operations, both on-site and off-site personnel will manage the Project. It is expected that the Project will generate approximately 10 permanent, full-time jobs throughout its 30-year operational life.

Towards the end of its operational life, Neoen may choose to undergo decommissioning and rehabilitation of the land in accordance with a decommissioning management plan and relevant approval conditions. It is possible that Neoen may choose to instead re-power the Project by installing new equipment, but this would be subject to future planning and environmental approvals, land agreements and commercial outcomes.

This referral form should be read in conjunction with the attached supporting documents/spatial information:

- Appendix A, Attachment 1: Mt Hopeful MNES Assessment Report and associated appendices
  - Att1-Pt1-Mt Hopeful MNES Assessment Report_Body

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- o Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A
- o Att1-Pt3-Mt Hopeful MNES Assessment Report_Appendix B-F
- o Att1-Pt4-Mt Hopeful MNES Assessment Report_Appendix G
- o Att1-Pt5-Mt Hopeful MNES Assessment Report_Appendix H
- o Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I
- • Appendix A, Attachment 2: Mt Hopeful Preliminary CMP
- o Att2-Mt Hopeful_Preliminary Construction Management Plan
- • Appendix A, Attachment 3: Mt Hopeful Health, Safety and Environment (HSE) Management Plan
- o Att3-Mt Hopeful_Health Safety Environment Management Plan
- • Appendix B: Study Area Coordinates

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 Study Area refers to the boundaries of 17 land parcels where consent has been granted for development. The list of lot/plans that make up the Study Area are included in Section 1.2, Table 1.1 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body). The Study Area is mountainous, covering 16,745 ha and extending approximately 25 km north-south at the longest point and 16 km east-west at the widest point.

The closest townships are Mount Morgan (approximately 15 km north-west of the Study Area) and Bajool (approximately 15 km north-east of the Study Area). The Study Area is situated within the Local Government Areas (LGA) of the Rockhampton Regional Council and Banana Shire Council.

The predominant land use in both LGAs is rural agriculture, comprising mostly beef cattle grazing and farmland cropping including cotton and lucerne.

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 Study Area covers approximately 16,745 ha, and the development corridor (or footprint) covers approximately 1,973.3 ha. It is estimated that the actual on-ground disturbance footprint will be approximately 40-50 % less than that of the development corridor (or footprint) which is estimated to be 1,183.98 ha – 986.65 ha. The avoidance footprint of the development corridor is therefore expected to be conservatively estimated to be 789.32 ha – 986.65 ha.

1.7 Proposed action location

Address - Glengowan Road, Ulogie, QLD, 4702, Australia

1.8 Primary jurisdiction Queensland

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 31/07/2023
End Date 31/12/2056

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

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The Project has been assessed under the Queensland Planning Act 2016 (Planning Act), specifically State Code 23 – Wind farm development (State Code 23) and State Code 16 – Native vegetation clearing of the State Development Assessment Provisions (State Code 16). A development application for the Project is currently being assessed by the Department of State Development, Infrastructure, Local Government and Planning (DSDILGP), represented by the State Assessment and Referral Agency (SARA), as assessment manager. The Project is considered code assessable under State Code 23, with all wind turbines located at least 1.5 km from sensitive land uses on non-host lots.

Technical studies have been undertaken to support the development application. This includes flora and fauna assessments (including bird and bat studies), landscape and visual impact assessment, noise and vibration studies, traffic impact assessment, preliminary route assessment, stormwater assessment, electromagnetic interference (EMI) studies, aviation impact statement, shadow flicker mapping, a preliminary erosion and sediment control plan and a preliminary construction management plan.

Additional ecological Queensland legislation relevant to the project includes:

- Nature Conservation Act 1992 (NC Act)
- Vegetation Management Act 1999 (VM Act)
- Environmental Offset Act 2014 (EO Act).

A number of secondary approvals will also be required by the Project. This may include waterway barrier works approvals, species management programs, approvals for protected plant removal, stormwater works and additional operational works permits for filling and excavation access works.

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

Neoen has a successful track record of responsive and sustained community engagement, emphasising a genuine, well-planned and flexible approach to engagement practices. Neoen has developed a Community Engagement Plan (CEP) for the Project. The CEP outlines:

- Neoen's framework, objectives and overall approach to community engagement for this Project.
- Further contextual information about nearby local communities, to inform a needs-based engagement approach.
- How Neoen's proposed engagement program will adapt to each phase of the Project (early development, post-approvals, construction and operations); and
- Key Project stakeholders including involved landholders, neighbours, members and organisations within the local community and local, state and federal government bodies.

Through the implementation of the CEP, Neoen aims to:

- Involve the community in the development, construction and operation of the Project
- Respond to questions and concerns from stakeholders, and de-mystify the development process for all interested audiences
- Collaborate with the community to ensure that local advice and insight are shaping the approach to engagement
- Empower the community to shape key elements of the project, such as co-designing the long-term framework of a community benefits program.

Community consultation activities undertaken to date include face to face meetings with landholders and neighbours, regular phone/email exchanges, online surveys, information booklet distribution and two community information sessions which were held in 2021. The materials presented by Neoen at in-person events include photo montages (providing a visual representation of the Project from various viewpoints), project maps and general facts about wind energy projects. Further meetings and events are planned for 2022 and expected to continue throughout the development and construction phase.

Neoen have met in person with Rockhampton Regional Council and Banana Shire Council on a number of occasions (including mayors, Chief Executive Officers , executive managers and officers). Both councils have expressed their support for the project, and representatives from each council attended a community information session in May 2021.

The Project also has a live website (https://mounthopefulwindfarm.com.au/), email address and 1800 enquiries phone line. The website allows for people to submit their feedback on the Project via an online form, and for local suppliers and contractors to register their details for updates on future employment and business opportunities related to the Project. As the Project nears construction, a public information session will be held to provide information on opportunities for local suppliers and contractors.

Neoen has also engaged with Agencies and members of Parliament in relation to the Project, including, but not limited to:

- Commonwealth Department of Agriculture, Water and Environment (DAWE)
- Queensland State Assessment and Referral Agency (SARA)
- Civil Aviation and Safety Authority (CASA) and Airservices Australia
- Queensland Department of Resources (DoR)
- Queensland Department of Transport and Main Roads (DTMR)
- Queensland Rural Fire Service
- Gladstone Ports Authority
- State Ministers (Mr Colin Boyce, MP - Member for Callide and Mr Stephen Andrew, MP – Member for Mirani)
- Federal Ministers (Mr Ken O'Dowd, MP - Member for Flynn).

Neoen have met in-person with the Gaangalu Nation People on several occasions, and the process of establishing a Cultural Heritage Management Plan (CHMP) with the Gaangalu Nation people under Part 7 of the Aboriginal Cultural Heritage

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Act 2003 is underway, with public notification completed.

Neoen have also contacted the Darumbal People to discuss the Project and will pursue a Cultural Heritage Agreement with respect to a section of the Project Study Area that will provide a transmission connection.

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

Numerous environmental assessments have been conducted to support Project approvals including seasonal and targeted ecological assessment throughout the Study area and development corridor. These include:

- Terrestrial flora baseline surveys, including the assessment of threatened ecological communities
- Targeted threatened flora surveys, primarily for Cycas megacarpa
- Bird and bat utilisation surveys, across 2 years and multiple seasons
- Terrestrial fauna baseline surveys
- Targeted threatened fauna surveys
- Bioregional desktop assessment of Cycas megacarpa, koala (Phascolarctos cinereus) and greater glider (Petauroides volans).

The context, methodology and outcomes of the above assessments are provided in the Mt Hopeful MNES Assessment Report and associated appendices:

- Att1-Pt1
- Att1-Pt2
- Att1-Pt3
- Att1-Pt4
- Att1-Pt5
- Att1-Pt6

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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Section 2

Matters of national environmental significance

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

greater glider (Petauroides volans)

Impact

The Project was assessed as having a significant impact on the greater glider (refer to Section I.2.2.2 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded three times from within or immediately adjacent to the Study Area, including one record in a patch of Eucalyptus moluccana woodland in the Study Area that intersects the development corridor. Approximately 43.8 ha of suitable breeding habitat and 904.8 ha of suitable foraging habitat occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process. With the exception of E. moluccana woodland, the relative absence of vegetation communities with suitable hollows in the Study Area indicates that a population is unlikely to persist beyond a low density within the Study Area.

A Bioregional Significance Assessment undertaken for the species found the Study Area to be of regional significance due to its role in providing connectivity and dispersal opportunities for the species along the Ulam Range (refer to Appendix H of the Mt Hopeful MNES Assessment Report (Att1-Pt5-Mt Hopeful MNES Assessment Report_Appendix H)). The Project may interfere with the recovery of the species by reducing the availability of habitat in the regional context, albeit in a limited manner.

Potential impacts including disruptions to the breeding cycle of the population during construction, will be managed through the Project's Construction Environmental Management Plan (CEMP) with specific measures for greater glider. These measures include the inspection of hollows for greater gliders by qualified fauna spotters prior to felling and the 'slow felling' of hollow bearing trees to minimise the chances of injury or death.

Species or threatened ecological community

Northern quoll (Dasyurus hallucatus)

Impact

The Project was assessed as having a significant impact on the northern quoll (refer to Section I.2.1.1 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded from one location in the Study Area. Approximately 110.9 ha of suitable breeding habitat and 995.4 ha of suitable foraging habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor

represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The recovery plan for the species states that remnant populations that persist alongside threats (including populations in Queensland that have persevered despite cane toad invasion) are considered important. Therefore, the population that occurs within the Study Area is considered an important population. Habitat within the Study Area may constitute critical habitat for the species for the following reasons:

- The Study Area contains rocky habitats, primarily ranges and treed creek lines
- The Study Area contains structurally diverse woodland/ forest containing large diameter trees, termite mounds and hollow logs.
- The Study Area contains habitat that provides shelter for breeding.

Given the linear nature of the Project, the high mobility of this species and the availability of foraging and breeding habitat in the region, long term impacts to the population are considered unlikely. The risk of short-term impacts to the population will be minimised through a phased approach to habitat clearance in addition to the implementation of the Project's CEMP with specific measures for northern quoll. These measures include pre-clearance trapping and relocation of any captured individuals as well as searches of remnant areas, including denning habitat, prior to and during clearing activities.

Species or threatened ecological community

Squatter pigeon (southern) (Geophaps scripta scripta)

Impact

The Project is not expected to have a significant impact on the squatter pigeon (southern) (refer to Section I.2.2.4 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded in the Study Area exclusively from previously disturbed areas, mainly on formed tracks. Approximately 26.8 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Project's CEMP will include provisions to limit and reduce potential impacts on fauna, including the following measure specifically for the squatter pigeon: appropriate speed limits (40 km/hr or less) and signage will be implemented across the site to limit the potential for vehicle collisions.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for squatter pigeon is Moderate, based on Moderate likelihood and Moderate consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Monitoring and management actions relating to birds and bats will be undertaken in accordance with a Project Bird and Bat Adaptive Management Plan (BBAMP). The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

Species or threatened ecological community

White-throated needletail (Hirundapus caudacutus)

Impact

The Project is not expected to have a significant impact on the white-throated needletail (refer to Section I.2.2.5 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded in the Study Area during Bird and Bat Utilisation surveys. Given the wide-ranging aerial nature of the species, approximately 1,080.2 ha of suitable foraging habitat occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Bird and Bat Utilisation risk assessment determined that the overall turbine collision risk rating for white-throated needletail is Very High, based on a High likelihood and High consequence of collisions, reflecting the Vulnerable status of the species and the frequency at which the species occurs within the rotor swept area (RSA) (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Given the flight behaviour of the species and known occurrence within the Study Area, the mortality of individual birds may occur during the lifetime of the Project, particularly whilst the species is present in Australia (October - March). The potential impact on this species would be managed by the Project BBAMP, which governs the operational and compliance reporting response following any confirmed mortality event.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

Species or threatened ecological community

Collared delma (Delma torquata)

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Impact

The Project is not expected to have a significant impact on the collared delma, given the extremely small area of impact to potential habitat (refer to Section I.2.2.1 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 0.04 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Project's CEMP will include provisions to limit and reduce potential impacts on fauna.

Species or threatened ecological community

Koala (Phascolarctos cinereus)

Impact

The Project is not expected to have a significant impact on the koala (refer to Section I.2.2.3 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 1,028.2 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process. Habitat within the development corridor was assessed in accordance with Table 4 within the EPBC Act referral guidelines for the vulnerable koala as not comprising habitat critical to the survival of the koala (scoring a total of four).

A Bioregional Significance Assessment undertaken for the species found the Study Area holds limited significance to this species given the low-density of koala records within the region and the absence records within the Study Area (refer to Appendix H of the Mt Hopeful MNES Assessment Report (Att1-Pt5-Mt Hopeful MNES Assessment Report_Appendix H)). However, given the presence of large expanses of suitable habitat within the Study Area, it may be considered significant in the regional recovery of the koala.

The Project's CEMP will include provisions to limit and reduce potential impacts on fauna.

Species or threatened ecological community

Cycas megacarpa

Impact

The Project was assessed as having a significant impact on Cycas megacarpa (refer to Section I.1.1.1 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded in the Study Area. Targeted field surveys were undertaken throughout the survey programme and an estimation of the distribution and density was undertaken using spatial analysis via an Inverse Distance Weighted interpolation algorithm. This analysis determined that approximately 1,328.4 ha of habitat for the species occurs in the development corridor (3.3 ha of high density areas, 165.6 ha of moderate density areas and 1,159.5 ha of low density areas). The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

A Bioregional Significance Assessment undertaken for the species found the population within the Study Area is considered an important population based on (a) a lower-bound population estimate of 3,603 individuals, which makes the population a viable population, and (b) the presence of a range of development classes with many reproductive age adults (>1 m) (refer to Appendix G of the Mt Hopeful MNES Assessment Report (Att1-Pt4-Mt Hopeful MNES Assessment Report_Appendix G)).

Potential impacts to the species will be managed through a species-specific management plan that will include the following requirements:

- Pre-clearance surveys to confirm the location, extent, numbers, and age class of the population within the development corridor, with all efforts made to avoid impacts to high-density areas and large reproductive-age individuals.
- Vegetation clearing requirements and methods to reduce impacts to surrounding individuals and their habitat.
- Specific weed management measures to reduce impacts on the long-term integrity of the remaining habitat and population including high-biomass weeds.
- Erosion, sedimentation, and dust management requirements specific to the species.
- Translocation and propagation methods, protocols, reporting requirements and performance criteria for individuals that would otherwise be removed through clearing for the Project.
- Reporting requirements and performance measures.

Species or threatened ecological community

Cossinia (Cossinia australiana)

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

Impact

The Project is not expected to have a significant impact on cossinia (refer to Section I.1.1.2 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 46.1 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

Several measures will be put in place to reduce the potential for impacts to threatened flora, including the undertaking of pre-clearance surveys and preparation of a species management plan should a threatened species be located.

Species or threatened ecological community

Decaspermum struckoilicum

Impact

The Project is not expected to have a significant impact on Decaspermum struckoilicum (refer to Section I.1.1.3 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 46.1 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

Several measures will be put in place to reduce the potential for impacts to threatened flora, including the undertaking of pre-clearance surveys and preparation of a species management plan should a threatened species be located.

Species or threatened ecological community

Quassia (Samadera bidwillii)

Impact

The Project is not expected to have a significant impact on quassia (refer to Section I.1.2.1 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 46.1 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

Several measures will be put in place to reduce the potential for impacts to threatened flora, including the undertaking of pre-clearance surveys and preparation of a species management plan should a threatened species be located.

2.4.2 Do you consider this impact to be significant?

☑ Yes ☐ No

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

☑ Yes ☐ No

Migratory species

Rufous fantail (Rhipidura rufifrons)

Impact

The Project is not expected to have a significant impact on rufous fantail (refer to Section I.3.2.3 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded three times in the Study Area. Approximately 52.0 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process. Given the potential absence or infrequent use of the development corridor by this species and the availability of foraging habitat within the broader region, this habitat is not regarded as important.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for rufous fantail is Minor, based on a Moderate likelihood and Minor consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Potential impacts to the species will be managed under the Project BBAMP. The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

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Migratory species

Spectacled monarch (Symposiarchus trivirgatus)

Impact

The Project is not expected to have a significant impact on spectacled monarch (refer to Section I.3.2.5 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded twice in the Study Area. Approximately 46.1 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process. Given the potential absence or infrequent use of the development corridor by this species and the availability of foraging habitat within the broader region, this habitat is not regarded as important.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for spectacled monarch is Minor, based on a Moderate likelihood and Minor consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Potential impacts to the species will be managed under the Project BBAMP. The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

Migratory species

White-throated needletail (Hirundapus caudacutus)

Impact

The Project is not expected to have a significant impact on the white-throated needletail (refer to Section I.2.2.5 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was recorded in the Study Area during Bird and Bat Utilisation surveys. Given the wide-ranging aerial nature of the species, approximately 1,080.2 ha of suitable foraging habitat occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for white-throated needletail is Very High, based on a High likelihood and High consequence of collisions, reflecting the Vulnerable status of the species and the frequency at which the species occurs at RSA (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Given the flight behaviour of the species and known occurrence within the Study Area, the mortality of individual birds may occur during the lifetime of the Project, particularly whilst the species is present in Australia (October - March). The potential impact on this species would be managed by the Project BBAMP, which governs the operational and compliance reporting response following any confirmed mortality event.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

Migratory species

Fork-tailed swift (Apus pacificus)

Impact

The Project is not expected to have a significant impact on fork-tailed swift (refer to Section I.3.1 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 1,080.2 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for fork-tailed swift is Moderate, based on a High likelihood and Low consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Potential impacts to the species will be managed under the Project BBAMP. The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

Migratory species

Black-faced monarch (Monarcha melanopsis)

Impact

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

The Project is not expected to have a significant impact on the black-faced monarch (refer to Section I.3.2.1 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 46.1 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for black-faced monarch is Minor, based on a Moderate likelihood and Minor consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Potential impacts to the species will be managed under the Project BBAMP. The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

Migratory species

Oriental cuckoo (Cuculus optatus)

Impact

The Project is not expected to have a significant impact on the oriental cuckoo (refer to Section I.3.2.2 of Appendix I.3.2.2 of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 1,080.2 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for oriental cuckoo is Minor, based on a Moderate likelihood and Minor consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Potential impacts to the species will be managed under the Project BBAMP. The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

Migratory species

Satin flycatcher (Myiagra cyanoleuca)

Impact

The Project is not expected to have a significant impact on the satin flycatcher (refer to Section I.3.2.5 of Appendix I of the Mt Hopeful MNES Assessment Report (Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I)). This species was not recorded in the Study Area. Approximately 1,034.1 ha of suitable habitat for the species occurs in the development corridor. The amount of suitable habitat in the development corridor represents the maximum impact area for the species, noting this area of impact is expected to be 40-50% less as an outcome of the detailed design process.

The Bird and Bat Utilisation risk assessment determined the overall turbine collision risk rating for satin flycatcher is Minor, based on a Moderate likelihood and Minor consequence of collisions (refer to Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A)). Potential impacts to the species will be managed under the Project BBAMP. The strategy of the BBAMP is to monitor and mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management.

The Project's CEMP will also include provisions to limit and reduce potential impacts on fauna.

2.5.2 Do you consider this impact to be significant?

☑ Yes ☐ No

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

☐ Yes ☑ No

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

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

The Study Area occurs within a mountainous area along the Ulam Range that is sparsely settled and mostly used for light grazing and livestock production. Large areas of the Study Area have undergone clearing in the past. The Study Area currently supports regrowing eucalypt communities and areas of cleared land.

A search of the Protected Matters Search Tool (PMST) indicated the potential presence of 4 threatened ecological communities (TECs), 40 threatened flora and fauna species and 17 migratory fauna species. Refer to Section 5.0 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

Flora surveys involved the classification and mapping of vegetation in accordance with State guidelines. Flora surveys also included targeted surveys for Cycas megacarpa throughout the survey programme to assess the extent of species occurrence and relative densities within the Study Area. Refer to Section 4.2.1 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

Fauna surveys utilised a range of methods recommended in State and Commonwealth guidelines including bird surveys, spotlighting, mammal trapping, pitfall trapping, call playback, active searches, camera trapping, acoustic monitoring, harp trapping, koala Spot Assessment Technique (SAT), fauna habitat assessments and incidental observations. Targeted surveys for threatened fauna identified as potentially occurring were undertaken using species-specific guidelines where available. Refer to Section 4.2.2 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

Bird utilisation surveys were undertaken for the Project in February-March 2020 (Autumn), November 2020 (Spring) and October 2021 (Spring) across thirteen vantage survey points on the ridgelines and peaks of the Study Area. Bat utilisation surveys were undertaken in July 2019 (Winter), February to March 2020 (Autumn), November 2020 (Spring), January 2021 (Summer) and October 2021 (Spring). Microchiropteran echolocation calls were sampled using Anabat Swift recording devices placed at each vantage point location. In addition, two Anabat Swift devices were deployed on the meteorological mast at approximately 50 m above ground level, for a combined total of three nights. Refer to Section 4.2.2.2 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

No Queensland Regional Ecosystems (REs) analogous with any Threatened Ecological Communities (TECs) were recorded within the Study Area and no TECs are considered likely to occur within the development corridor. One threatened flora species was recorded during the survey programme: Cycas megacarpa. Four threatened fauna species were recorded during surveys: northern quoll (Dasyurus hallucatus); squatter pigeon (southern) (Geophaps scripta scripta); white-throated needletail (Hirundapus caudacutus); and greater glider (Petauroides volans). Three migratory fauna species were recorded during surveys: white-throated needletail (Hirundapus caudacutus); rufous fantail (Rhipidura rufifrons); and spectacled monarch (Symposiarchus trivirgatus). Additionally, one migratory fauna species was assessed as having a high likelihood of occurring, while three threatened flora, two threatened fauna and three migratory fauna species were assessed as having a moderate likelihood of occurrence. Refer to Section 6.0 and Appendix E of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body and Att1-Pt3-Mt Hopeful MNES Assessment Report_Appendix B-F).

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

The Study Area is located within the Fitzroy River Basin. There are 153 stream order one, 88 stream order two, 33 stream order three and 8 stream order four watercourses mapped within the Study Area, the majority of which are unnamed highly ephemeral streams. Some of the named watercourses within the Study Area include:

- Centre Creek and its tributaries – runs in a south westerly direction draining the majority of the southern portion of the Study Area. Centre Creek is a tributary of the Don River, which then flows into Callide Creek.
- Manton Creek tributary – runs along the southern boundary of the Study Area and drains southwards to the Don River.
- Capella Creek and its tributaries – draining the majority of the northern portion of the Study Area in both a southerly and a northerly direction before heading west from the western boundary of the Study Area, joining Fletcher Creek downstream before flowing into the Dee River.
- Ginger Creek – A tributary of Centre Creek draining from the north west to the south east within the centre of the Study Area.

Review of vegetation management wetlands mapping indicates there are no wetlands in the Study Area. There are numerous dams scattered throughout the Study Area holding varying degrees of water. Refer to Section 6.4 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

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

There is no fine scale soil mapping available in the Study Area region. Digital Atlas of Australian soils 1:2,000,000 mapping indicates that, broadly, the southern half of the Study Area is characterised by steep hilly to mountainous country with some small plateau remnants; narrow valleys; chief soils are shallow loams (map unit Fz10). The northern half of the Study Area is characterised as mountainous to steep hilly land with steep scarps; very narrow valleys; rock outcrops common; chief soils are shallow stony loams (map unit LK20). The Australian Soil Classification (ASC) of soils in the Study Area are rudosols,

which have low fertility and low water-holding capacity, are poorly developed, and can be shallow and stony.

The surface geology of the Study Area mostly occurs on sedimentary geologies with intrusive volcanics including granitoids and rhyolites as well as a small area in the south east corner of the Study Area occurring on Quaternary alluvium.

Large tracts of remnant vegetation exist within the Study Area, separated by partly cleared regrowth areas used primarily for livestock grazing. The dominant regrowth and remnant vegetation communities across the Study Area are eucalypt woodland and forest dominated by narrow-leaved ironbark (Eucalyptus crebra), lemon-scented gum (Corymbia citriodora) and white mahogany (E. acmenoides). On the lower colluvial slopes, gum-topped box (E. moluccana) and forest red gum (E. tereticornis) are present with the creek lines supporting weeping tea-tree (Melaleuca fluviatilis) and river sheoak (Casuarina cunninghamiana). Due to the steep topography of the Study Area, uncleared riverine vegetation communities are common, often with a dense mid-story of vine thicket or dense shrubs. Refer to Section 6.0 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

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

There are three state forests adjoining the Study Area: Gelobera State Forest to north-west; Ulam Range State Forest to the south-east; and the Don River State Forest to the south. The Boulder combe Gorge Resources Reserve is located adjacent to the Study Area to the north-east. There are forestry resources (i.e., state forest or timber reserve) located adjacent to the Study Area to the north, south and east. In addition, a forest consent area (profit à prendre) is located on a single lot in the south of the Study Area (Lot 30 RN72).

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

None of the 14 Queensland Regional Ecosystems (REs) identified by DoR Vegetation management regional ecosystem v12 mapping in the Study Area are analogous to a TEC.

The dominant regrowth and remnant vegetation communities across the Study Area are eucalypt woodland and forest dominated by narrow-leaved ironbark (Eucalyptus crebra), lemon-scented gum (Corymbia citriodora) and white mahogany (E. acmenoides). On the lower colluvial slopes, gum-topped box (E. moluccana) and forest red gum (E. tereticornis) are present with the creek lines supporting weeping tea-tree (Melaleuca fluviatilis) and river sheoak (Casuarina cunninghamiana). Vine thicket communities are also scattered throughout the Study Area, often centred around drainage lines. A list of the vegetation communities that have been ground-truthed during ecological assessments within the Study Area is provided in Appendix C of the Mt Hopeful MNES Assessment Report (Att1-Pt3-Mt Hopeful MNES Assessment Report_Appendix B-F).

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

The Project is located on the Ulam Range, between Mount Hopeful on the Dee Range and Mount Alma on the Mount Alma Range. The Study Area ranges in elevation from 190 m Australian Height Datum (AHD) at the lowest points in valleys, to 615 m AHD at the highest peak.

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

The dominant regrowth and remnant vegetation communities across the Study Area comprise eucalypt woodland and forest. The condition of these woodlands varies, with areas of lower condition negatively influenced by grazing impacts and the prevalence of weeds. Remnant woodlands were typically in moderate to good condition, particularly in larger patches with connectivity to areas beyond the Study Area. These locations have been impacted by weeds, light grazing and feral animals such as pigs and horses.

A total of 27 introduced flora were identified during the survey programme. Of these, five are identified as Weeds of National Significance (WoNS):

- Lantana (Lantana camara)
- Prickly pear (Opuntia stricta)
- Velvety pear (Opuntia tomentosa)
- Rubber vine (Cryptostegia grandiflora)
- Parthenium (Parthenium hysterophorus).

Further information relating to vegetation is provided in Section 6.0 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

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

There are no Commonwealth Heritage Places, National Heritage Places or World Heritage Properties located within or nearby the Study Area. There are also no heritage places listed on the Queensland Heritage Register within or nearby the Study Area. The closest Commonwealth, National or World heritage value to the Study Area is the Great Barrier Reef, which occurs approximately 20 km to the northeast at its closest point.

3.9 Describe any Indigenous heritage values relevant to the project area

A search of the Queensland Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP) Aboriginal and

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Torres Strait Islander Cultural Heritage Database and Register under the Aboriginal Cultural Heritage Act 2003 and Torres Strait Islander Cultural Heritage Act 2003 was received on 14 June 2021.

The search results show that:

- There are no recorded Aboriginal cultural heritage artefacts within the Study Area.
- There are two relevant cultural heritage parties associated with the Study Area: The Gaangalu Nation People and the Darumbal People.
- A portion of the Study Area is subject to a Native Title Claim by the Gaangalu Nation People (Tribunal No QC2012/009) extending over 25,506.206 km2.
- A portion of the Study Area (in the north) is subject to no native title claims.

A public notification process was undertaken by Neoen to identify any relevant parties associated with the portion of Study Area that is not subject to a native title claim, in accordance with the Aboriginal Cultural Heritage Act 2003. The Gaangalu Nation People were the sole responders and were subsequently endorsed by Neoen.

As described in Section 1.13 of this referral, Neoen plan to sign a CHMP with the Gaangalu Nation People and a Cultural Heritage Management Agreement with the Darumbal People.

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

The Study Area comprises 17 freehold properties and local road reserves. The list of lot/plans that make up the Study Area are included in Section 1.2, Table 1.1 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

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

Light grazing and livestock production are the predominant uses across the Study Area. These uses can continue alongside the Project.

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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

The hierarchy of avoid, minimise, and mitigate has been applied to the design process for the Project, with the field survey findings incorporated into the development corridor design. The development corridor has been subject to an ecological constraint analysis to facilitate the avoidance of significant terrestrial habitat types during the preliminary design stage of the Project, as well as directing infrastructure towards pre-disturbed land areas which hold limited or low ecological values.

The presented design prioritises the avoidance and preservation of areas of high-density Cycas megacarpa as a key MNES flora value. Through this process, most (96%) of the high-density C. megacarpa areas have been avoided and it is expected that this impact can be further reduced through the micro siting process (during the detailed design phase of the Project).

The presented design prioritises the avoidance and preservation of threatened species habitat as a priority MNES fauna value. This includes habitat features which may be a limiting habitat resource in the environment (e.g., denning habitat for northern quoll). The applied constraint process incorporated a traffic light system with values ranging from a very high constraint value to a limited constraint value.

The Project will be governed by a comprehensive CEMP which will include a management approach and actions to limit and reduce the potential impacts on vegetation communities, flora and fauna including threatened species.

While the clearance of vegetation is unavoidable within the development corridor, a range of measures are proposed to minimise the level of impact from clearing. Vegetation clearance will be minimised within the development corridor around the final infrastructure layout and will be guided by a Vegetation Management Plan (VMP). Key mitigation elements of this plan include:

- Site preparation such as the demarcation of areas to be cleared including ‘no-go’ zones to avoid inadvertent clearing.
- Vegetation clearing methods including stockpiling of felled vegetation within clearing limits, retention of vegetation for use in on-site rehabilitation and specific requirements for clearing vegetation surrounding creek lines and watercourses.
- Provision of a vegetated buffer around the vine thicket communities of up to 5 m to prevent edge effects where the vine thicket communities occur on the edge of the final clearance footprint. In cases where the final clearance footprint intersects the vine thicket communities, a 5 m buffer will not be practical.
- Where practical, reduction of the clearing widths for access tracks and cabling to 25 m or less within remnant vegetation surrounding watercourses.
- Rehabilitation requirement for disturbed areas no longer required for active use or construction, including rehabilitation works in creek lines.

Mitigation measures specific to threatened flora have been put in place, including:

- Undertaking of pre-clearance surveys for the threatened flora species with a ‘high’ to ‘moderate’ likelihood of occurrence within the vine thicket communities. If threatened species are located during the targeted surveys, efforts will be made to avoid or minimise impacts through the micro-siting process. If these threatened species cannot be avoided, then a Species Management Plan (SMP) will be prepared, which, where possible, will include the translocation and/or propagation of individuals and establishment into suitable nearby habitat.
- Preparation of a species management plan for Cycas megacarpa, that will include the following requirements:
  - Pre-clearance surveys to confirm the location, extent, numbers, and age class of the population within the Development Corridor, with all efforts made to avoid impacts to high-density areas and large reproductive-age individuals.
  - Vegetation clearing requirements and methods to reduce impacts to surrounding individuals and their habitat.
  - Specific weed management measures to reduce impacts on the long-term integrity of the remaining C. megacarpa habitat and population including high-biomass weeds.
  - Erosion, sedimentation, and dust management requirements specific to the species.
  - Translocation and propagation requirements for individuals that would otherwise be removed through clearing for the Project. The plan must specify pre and post monitoring requirements, translocation and propagation methods and protocols and reporting requirements and performance criteria.
  - Reporting requirements and performance measures.

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

[continued from section 4.1]

The CEMP will include provisions to limit and reduce potential impacts on fauna. Primary objectives of the plan will be to:

- ensure the clearing of habitat does not exceed the approved disturbance limit
- prevent injury or mortality to fauna during all Project phases
- maintain fauna corridors/movement through the Project
- ensure the Project does not exacerbate threats to fauna habitat, including the occurrence of invasive weeds, pest animals and bushfire.

Specific mitigation measures for threatened fauna will also be implemented. These measures are outlined in Section 8.2.3 of the Mt Hopeful MNES Assessment Report (Att1-Pt1-Mt Hopeful MNES Assessment Report_Body).

Operational impacts to birds and bats will be managed through a BBAMP. The strategy of the BBAMP is to monitor and

mitigate the potential impacts of turbine strike on birds and bats via trigger based, adaptive management. Pre- and post-commissioning monitoring of bird and bat activity (including flight behaviours) is a key requirement of the plan. The monitoring will inform a risk profile for each turbine. This strategy leads to direct and tailored management actions, applied at the appropriate locations and times. Further detail of the BBAMP is provided in Appendix A of the Mt Hopeful MNES Assessment Report (Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A).

[Section 4.2]

The hierarchy of avoid, minimise, and mitigate has been applied to the design process for the Project, with the field survey findings incorporated into the development corridor design. The development corridor has been subject to an ecological constraint analysis to facilitate the avoidance of significant terrestrial habitat types during the preliminary design stage of the Project, as well as directing infrastructure towards pre-disturbed land areas which hold limited or low ecological values. Detailed design will continue to consider and incorporate ecological constraints where possible.

Individual outcomes for MNES relevant to the Project, including detailed justification surrounding significant impact assessment results, are provided in the Mt Hopeful MNES Assessment Report and associated appendices:

- Att1-Pt1-Mt Hopeful MNES Assessment Report_Body
- Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A
- Att1-Pt3-Mt Hopeful MNES Assessment Report_Appendix B-F
- Att1-Pt4-Mt Hopeful MNES Assessment Report_Appendix G
- Att1-Pt5-Mt Hopeful MNES Assessment Report_Appendix H
- Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I.

Where significant impacts are identified, offsets under the EPBC Act are proposed. The requirement for an offset, the associated offset area (size) and offset pathway will be determined following the detailed design phase of the Project and as part of further pre-clearance surveys for the Project.

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

Not applicable

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

Neoen has a satisfactory record of responsible environmental management. Neoen is the largest owner and operator of renewable energy projects in Australia. Across all of these projects, Neoen has always complied with all environmental protocols and has never been found to be in breach of any permit, law, or regulation that is related to the environment.

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

Neoen has never had such proceedings taken against it.

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

Neoen is committed to providing a healthy and safe working environment for its employees while guaranteeing the integrity of the company's assets and protecting the environment.

At Neoen, we believe:

- All accidents and damages to the employees, contractors, customers, off-takers, visitors, property, the environment and surrounding communities can be avoided, and we will undertake all appropriate measures with the goal of eliminating all of them.
- HSE management is a daily individual and team responsibility.
- Each company member must be dedicated to conduct all required activities to develop the proper attitudes and practices, with the greatest concern for employees' health & safety, the environment and local communities.
- All of us should actively contribute to HSE programs during the development, construction and operation of Neoen's assets, and seek to achieve an accident-free work environment for Neoen employees, its customers and its contractors.

Accordingly, Neoen is committed to:

- Meeting or exceeding all applicable HSE laws or regulations.
- Pursuing the objective of no harm to people, the company's assets and no damage to the environment or the local communities.
- Minimising adverse impacts of our activities to the environment and the ecosystem, optimize the social impact to the communities in the areas surrounding Neoen's facilities, and preserving the local cultural heritage.
- Taking actions to prevent pollution and promoting the sustainability of the natural resources that we use.
- Managing the HS&E matters as any other critical business activity in the company, with a continuous performance improvement mindset.
- Providing guidance, support and training to our personnel and contractors to create and maintain a best in class HSE culture.

To achieve these objectives above, Neoen has published an over-arching environmental policy document titled HSE Management System (HSEMS). The HSEMS covers the following components:

- Leadership and Governance
- Risk Management
- Operations
- Training
- Legal requirements
- Incident reporting and investigation
- Emergency preparedness
- Environment management.

All HSEMS components are based on the guidelines of OHSAS 18001 and ISO 14001 standard frameworks. The HSEMS provides background and reference to the provisions of these standards that are being used as guidelines to the HSEMS. The HSEMS is organized according to a usual Plan/Do/Check/Review approach to allow for the definition of the company's strategy and objectives (Plan), the tools to execute the strategy (Do), the controls required (Check), and the continuous review of the process to allow for improvement (Review).

For each of the components listed above, the HSEMS describes:

- The objectives: what is it that the system aims at achieving
- The deliverables: what is the output expected
- The controls: how should the organization control that objectives are met

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

- The procedures and tool box: documents, templates to be used to implement the HSEMS.

The framework HSEMS is used to develop Neoen's specific HSE Management Plan for each asset (refer to the Mt Hopeful HSE Management Plan (Att3-Mt Hopeful_Health Safety Environment Management Plan). All Contractors (either construction or maintenance) are required to develop their detailed management plans in compliance with such the HSEMS and to have a unified tracking of Key Performance Indicators (KPIs) to the satisfaction of Neoen.

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

- Kaban Green Power Hub: 2018/8289
- Kentbruck Green Power Hub: 2019/8510
- Western Downs Green Power Hub: 2018/8301
- Bulgana Wind Farm: 2015/7460
- Hornsdale Wind Farm: 2012/6573
- Victorian Big Battery: 2020/8614
- Territory Battery Energy System: 2021/8884
- Goyder South Hybrid Renewable Energy Facility: 2021/8960
- Thunderbolt Energy Hub Stage 1: 2021/9048

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

Neoen 2021, 'Mount Hopeful Wind Farm - Clean Energy for Queensland', accessed from https://mounthopefulwindfarm.com.au/.

Reliability

High – the website is kept up to date with publicly available general information about the Project and wind power/battery storage including documentation from Neoen, external consultants/ not for profit organisations and the Commonwealth government.

Uncertainties

Low – information regarding the Project including news and timelines has been compiled by Neoen and is therefore considered accurate for the purposes of the website. Other general information provided on the website is based on reputable sources (e.g., the Clean Energy Council) or outcomes of other Neoen renewables projects in Australia (e.g., Bulgana Clean Power Hub).

Reference source

Department of State Development, Manufacturing, Infrastructure and Planning 2020, State code 23: Wind farm development v2.6, Queensland Government, Brisbane QLD.

Reliability

Commonwealth, State or Local government documents do not need to be rated for reliability or uncertainty.

Uncertainties

N/A

Reference source

Department of State Development, Manufacturing, Infrastructure and Planning 2020, State code 16: Native vegetation clearing v2.6, Queensland Government, Brisbane QLD.

Reliability

Commonwealth, State or Local government documents do not need to be rated for reliability or uncertainty

Uncertainties

N/A

Reference source

Department of Agriculture, Water and the Environment 2021, 'Protected Matters Search Tool', accessed from https://www.environment.gov.au/epbc/protected-matters-search-tool.

Reliability

High - the PMST is a Commonwealth government resource.

Uncertainties

Maps on the PMST have been collated from a range of sources at various resolutions and therefore there are some limitations and uncertainties associated with its use. As per the caveat provided on PMST report outputs, PMST reports are not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act.

Reference source

Department of the Environment 2014, EPBC Act referral guidelines for the vulnerable koala (combined populations of Queensland, New South Wales and the Australian Capital Territory), Commonwealth of Australia, Canberra ACT.

Reliability

Commonwealth, State or Local government documents do not need to be rated for reliability or uncertainty.

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

Uncertainties

N/A

Reference source

Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships 2021, 'Aboriginal and Torres Strait Islander Cultural Heritage Database and Register', accessed from https://culturalheritage.datsip.qld.gov.au/achris/public/home.

Reliability

Commonwealth, State or Local government documents do not need to be rated for reliability or uncertainty.

Uncertainties

N/A

Reference source

Department of Resources 2021, 'Vegetation management regional ecosystem map - version 12.0', accessed from http://qldspatial.information.qld.gov.au/catalogue/.

Reliability

Commonwealth, State or Local government documents do not need to be rated for reliability or uncertainty.

Uncertainties

N/A

Reference source

National Resource Information Centre 1991, 'Digital Atlas of Australian Soils', Australian Soil Resource Information System, accessed from <https://www.asris.csiro.au/themes/Atlas.html>.

Reliability

High - the mapping is a Commonwealth government resource. The Atlas of Australian Soils was compiled by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in the 1960's and later digitised in 1991. There is a reliability map with a descriptive legend available with the Digital Atlas.

Uncertainties

N/A

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Section 8

Proposed alternatives

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

Yes ☑ No

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.

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)	NEOEN AUSTRALIA PTY. LTD.
Business name	
ABN	57160905706
ACN	
Business address	Suite 1 / Level 10, 227 Elizabeth Street, Sydney, 2000, NSW, Australia
Postal address	
Main Phone number	0400 487 119
Fax	
Primary email address	elyse.wise@neoen.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	Elyse
Last name	Wise
Job title	Project Manager - Queensland
Phone	0400 487 119
Mobile	
Fax	
Email	elyse.wise@neoen.com
Primary address	Suite 1 / Level 10, 227 Elizabeth Street, Sydney, 2000, NSW, Australia
Address	

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

I, Elyse Wise **, 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: ..... Date: 7/02/2022

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)	NEOEN AUSTRALIA PTY. LTD.
Business name	
ABN	57160905706
ACN	
Business address	Suite 1 / Level 10, 227 Elizabeth Street, Sydney, 2000, NSW, Australia
Postal address	
Main Phone number	0400 487 119
Fax	
Primary email address	elyse.wise@neoen.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	Elyse
Last name	Wise
Job title	Project Manager - Queensland
Phone	0400 487 119
Mobile	
Fax	
Email	elyse.wise@neoen.com
Primary address	Suite 1 / Level 10, 227 Elizabeth Street, Sydney, 2000, NSW, Australia
Address	

Declaration: Proposed Designated Proponent

I, Elyse Wise (on behalf of Neoen Australia Pty Ltd) **,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: ..... **Date:** 07/02/2022

Australian Government
Department of Agriculture, Water and the Environment

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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)	UMWELT (AUSTRALIA) PTY. LTD.
Business name	UMWELT
ABN	18059519041
ACN	
Business address	75 York Street, Teralba, 2284, NSW, Australia
Postal address	
Main Phone number	0421 150 238
Fax	
Primary email address	dgatfield@umwelt.com.au
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	David
Last name	Gatfield
Job title	Principal Ecologist
Phone	0421 150 238
Mobile	
Fax	
Email	dgatfield@umwelt.com.au
Primary address	Level 7, 500 Queen Street, Brisbane City, 4000, QLD, Australia
Address	

Declaration: Referring party (person preparing the information)

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

Signature: ..... **Date:** 8 February 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	Development_Corridor.shp
action_area_images	*Att3-fig2_1_7053_093_ProjectLayout.pdf
action_area_images	*Att8-Study Area Coordinates.pdf
public_consultation_reports	*Att1-MountHopeful_CommunityEngagementPlan_v1.pdf
supporting_tech_reports	Att1-Pt1-Mt Hopeful MNES Assessment Report_Body.pdf
supporting_tech_reports	Att1-Pt2-Mt Hopeful MNES Assessment Report_Appendix A.pdf
supporting_tech_reports	Att1-Pt3-Mt Hopeful MNES Assessment Report_Appendix B-F.pdf
supporting_tech_reports	Att1-Pt4-Mt Hopeful MNES Assessment Report_Appendix G.pdf
supporting_tech_reports	Att1-Pt5-Mt Hopeful MNES Assessment Report_Appendix H.pdf
supporting_tech_reports	Att1-Pt6-Mt Hopeful MNES Assessment Report_Appendix I.pdf
supporting_tech_reports	Att2-Mt Hopeful_Preliminary Construction Management Plan.pdf
flora_fauna_investigation	*Att2-Pt1-7053_R13_Mt Hopeful MNES Assessment Report_Body.pdf
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flora_fauna_investigation	*Att2-Pt3-7053_R13_Mt Hopeful MNES Assessment Report_ApdxB-F.pdf
flora_fauna_investigation	*Att2-Pt4-7053_R07_Neo_Cycad Bioregional Assessment_Apdx G.pdf
flora_fauna_investigation	*Att2-Pt5-7053_R12_Fauna Bioregional Assessment_Apdx H.pdf
flora_fauna_investigation	*Att2-Pt6-7053_R13_Mt Hopeful MNES Assessment Report_Apdx I.pdf
corp_env_policy_docs	*Att6-Mount Hopeful Neoen_Health Safety Envm Management Plan.pdf
corp_env_policy_docs	Att3-Mt Hopeful_Health Safety Environment Management Plan.pdf

* NOT PUBLISHED - SUPERSEDED

Appendix B

Coordinates

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