Goyder North Renewable Energy Facility Stage 1 Project

Application Number: **02493** Commencement Date: **05/07/2024** Status: **Reopened**

1. About the project

1.1 Project details

1.1.1 Project title *

Goyder North Renewable Energy Facility Stage 1 Project

1.1.2 Project industry type *

Energy Generation and Supply (renewable)

1.1.3 Project industry sub-type

Wind Farm

1.1.4 Estimated start date *

01/10/2025

1.1.4 Estimated end date *

01/12/2058

1.2 Proposed Action details

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

Neoen is developing the Goyder North Renewable Energy Facility (GNREF) as a part of its wider Goyder Renewables Zone (GRZ) concept, described further in the following sections and in detail in Att1_GN1_ProjectDescription, and displayed on Att2_GN1_MapBook, Map 1. The GNREF incorporates

infrastructure for wind generation, transmission and connection to the energy grid and a Battery Energy Storage System (BESS).

The GNREF Project Area comprises approximately 20,000 ha of land (private freehold and crown land), located north-east of Burra and east of the Mount Bryan township in the Goyder Regional Council area in South Australia (SA) (Att2_GN1_MapBook, Map 2). The area is characterized by world-class wind resources and complementary land uses comprising primarily of marginal grazing land for sheep and cattle, and some dryland cropping.

Given the scale of wind energy generation that would be achieved by the development of the GNREF, it is proposed to be developed in stages, with timing and eventual capacity dependent on power purchasing agreements dictated by customer electricity demand. Based on this, Neoen has focused on developing the southern portion for construction, defined as Goyder North Stage 1 Project (GN1) before any subsequent stages of GNREF are developed as potential longer-term projects.

The wind farm is proposed to be connected to the existing energy network at Bunday Substation via either the Primary Overhead Transmission Line (OTL) route or an alternate route to the east of OTL Primary, OTL Alternate. Only one OTL will be constructed however both are included in this submission for approval as external factors which influence which option will be selected have not yet been resolved by the Proponent.

The construction and operation of GN1 represents the Action described in this document and is the subject of this referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

GN1 comprises the following components and approximate Disturbance Footprint contributions with further detailed provided in Att1_GN1_Project Description, Section 2, Page 7-12) and visual indication of the project components provided in Att2_GN1_MapBook, Map 5:

- Up to 92 Wind Turbine Generators (WTGs) with a combined capacity of approximately 600MW, depending on the technology used with a decision yet to be finalized (**99 ha**)
- A 225MW/900MWh Battery Energy Storage System (BESS) within the wind farm (**10 ha**)
- A 275 or 330 kilovolt (kV) multi-circuit primary OTL connecting the wind farm substation to the existing Bundey Substation approximately 48 km (OTL Primary) or 47km (OTL Alternate), noting that only one of OTL will be constructed. The OTL includes transmission towers of up to 65 meters (m) high, with a permanent footprint of approximately 26 m x 26 m spaced approximately 200-400 m apart. Transmission lines would also connect the BESS to the wind farm (approximately 400 m). A permanent stringing corridor of 10m is assumed below the OTL. Vegetation maintenance zones extend outside of the central stringing corridor to adhere to requirements for vegetation management around transmission lines. Disturbance Footprint for the OTLs include brake and winch sites, stringing corridors and tower pads. (**97 ha** for OTL Primary or 93 ha for OTL Alternate).
- An electrical collector substation within the wind farm of approximately 200 x 200 m, including operations and maintenance facilities (**4 ha**).
- An extension of existing Bundey Substation of approximately 200 x 440 m, including substation and ancillary equipment (**10 ha**).
- Construction compounds and facilities (**36 ha** for the wind farm and either **6 ha** for OTL Primary or 7 ha for OTL Alternate).
- Access tracks to each infrastructure component including turnaround. Tracks will have a permanent footprint of approximately 11 m with temporary clearance to average around 21 m in width. Along the OTLs, a temporary 6 m wide access track will be constructed where required (**227 ha** for Wind Farm and Bundey Substation and **20 ha** for OTL Primary or 21 ha for OTL Alternate).
- Underground cabling for 33-66kV electrical transmission within the Wind Farm. Trench is approximately 1.2 m in depth and a 6 m wide disturbed area for cabling adjacent to access tracks or 10 m wide for cabling not aligned with tracks (**97 ha**).
- Three options for primary site access from Barrier highway along existing roads, of which only two will be selected. Disturbed area includes upgrade and road widening required at two intersections (**1 ha**).

The location of the proposed layout is based on the outcomes of various technical, visual, wind, environmental, social and cultural studies and assessments, including both Indigenous and European Heritage assessments. The total initial maximum Disturbance Footprint (on-ground clearance area) required for safe and efficient construction of the proposed GN1 Project is 607 ha, including OTL Primary. With both OTL Primary and OTL Alternate included as per the approval request, the total Approval Footprint is 728 ha, noting that only one of either OTL Primary (123 ha) or OTL Alternate (122 ha) will be built. Given OTL Primary is the primary proposed and likely OTL route, 607 ha is proposed as the Disturbance Footprint, however approval is requested for both OTLs (728 ha) to maintain optionality.

Of the total Disturbance Footprint, 568 ha is native vegetation (i.e. excluding existing cleared areas such as roads, crops, exotic pastures and amenity vegetation) assuming OTL Primary is adopted, or 564 ha for OTL Alternate.

In addition to the calculated Disturbance Footprint, vegetation will need to be maintained for the life of the asset in corridors adjacent to the OTL to maintain minimum clearance between vegetation and powerlines. Allowances for these maintenance zones that shoulder the stringing corridor along the OTLs are not included in the Disturbance Footprint (Att1_GN1_Project Description, Section 2.3, page 10) because they do not represent area that will be directly impacted by vegetation clearance and/or earthworks as per the definition. The area of impact has rather been quantified as vegetation associations which fall within the specified management height categories of these zones, and interactions with Matters of Environmental Significance (MNES) receptors throughout these zones due to vegetation trimming and management have been assessed and summarized in the Ecological Assessment (Att8_GN1_EcoAssessment) and SIA (Att3_GN1_SIA).

GN1 is proposed to be developed on many different freehold land parcels, four parcels of Crown Land (an additional two for OTL Alternate) and several local road reserves (Att2_GN1_MapBook, Map 3). Negotiations are ongoing with landowners and some design refinements and changes to the Project layout are considered likely as detailed design is developed to further minimize potential impacts to environmental or cultural values, or to accommodate landholder or constructability opportunities or constraints. Neoen is committed to ongoing application of the Mitigation Hierarchy to further avoid and minimize impacts where possible.

Minor adjustments to the final Project layout will be contained within the Development Envelope, a buffered version of the indicative GN1 Disturbance Footprint, which represents the maximum spatial extent in which the Disturbance Footprint will occur within (Att2_GN1_MapBook, Map 4). The Development Envelope allows for flexibility in the final positioning of the project infrastructure, enabling further refinements in design to reduce ecological impacts, and to allow for any unforeseen on ground construction related alterations which may be required once the contract for supply and construction has been awarded.

As outlined in Att1_GN1_Project Description (Section 3, page 16-17) construction is anticipated to commence late 2025 or early 2026 pending approval timelines and construction and procurement constraints for a duration of 24-36 months. Pre-construction activities include ongoing wind monitoring, geotechnical investigations and surveys. Pre-construction activities are excluded from the proposed Action provided there is no impact to MNES.

Planned construction activities include:

- Site establishment (temporary site facilities, laydown areas and equipment).
- Earthworks for access roads and the WTG hardstands.
- Excavations and construction of the WTG foundations.
- Installation of electrical and communications cabling and equipment.
- Installation of WTG transformers, in parallel with electrical reticulation works.
- Arrival of WTG Components to the Project Site and installation.
- Commissioning of WTGs.
- Reliability testing.

Operations are then expected to occur over the next 25 to 30 years, with activities including:

- Permanent on-site operations and ongoing maintenance of the wind farm, substation and BESS.
- Routine inspection and maintenance by operational personnel travelling from the Operations and Maintenance Compound / Site Office.
- Occasional replacement of equipment if required.
- Routine inspection and ongoing maintenance of the OTL.
- Prescribed maintenance activities along the OTL stringing corridor within a designated Inner Maintenance Zone (maintaining vegetation at less than 3 m height), and Outer Maintenance Zone (maintaining vegetation at less than 6 m height).

Following the conclusion of the operational life of the Wind Farm, a decision would made to either decommission or upgrade the technology. Decommissioning of the wind farm after the expected commercial life of up to 30 years would involve dismantling and removing the wind turbines, removing related infrastructure, and depending on the wishes of the landholders, covering and rehabilitating access road and foundations or retaining roads on their property if desired. If the Project were to be upgraded, a new development application and associated legislative approval documents would lodged at that time.

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

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

Yes

1.2.5 Provide information about the staged development (or relevant larger project).

Neoen is developing the GNREF as a part of its wider Goyder Renewables Zone (GRZ) concept, which Neoen has been developing since late 2017 (Att2_GN1_MapBook, Map 1). The GRZ represents one of the most ambitious renewable energy developments proposed in SA and is ideally located to complement Project EnergyConnect (PEC), a large transmission line interconnector between SA to New South Wales (NSW) currently under construction by ElectraNet (in SA) and TransGrid (in NSW).

For context, the GRZ comprises the Goyder South Hybrid Renewables Energy Project which was granted Development Approval in 2021 and EPBC Approval in July 2022 (Stage 1A EPBC/2021/8958; Stage 1B EPBC/2021/8957; OHL and Substation EPBC/2021/8959, Goyder South Hybrid Renewable Energy Facility - Battery EPBC/2021/8960), with construction of Stage 1 beginning in 2022. The Goyder South Project consists of 412 Megawatts (MW) of wind turbine power generation and 33 km of overhead transmission line. Construction of Goyder South Stage 1 commenced in 2022 and is scheduled to be completed in 2025.

As outlined in Att1_GN1_Project Description (Section 1, page 1-5), the broader GNREF comprises up to 1000 MW of wind generation and up to 900 MW /3600 MWh of BESS and is currently in the process of gaining Planning Approval under the Planning, Development and Infrastructure Act 2016 (SA).

The broader GNREF Project could comprise of:

- Wind generation including up to 135 WTGs with a capacity of up to 1000 MW.
- Up to three BESS with a combined capacity of 900 MW /3600 MWh.
- Electrical substations, underground cabling, and OTLs to connect the wind farm to the existing ElectraNet Transmission network at Bundey Substation that has been built as a part of PEC.

- Several temporary and permanent meteorological masts (Met masts).
- Permanent operations and maintenance (O & M) compounds and access tracks to WTGs and facilities.
- Temporary construction facilities including compounds and laydown areas, concrete batching plants and brake and winch sites.

Due to the size of capital investment associated with the building of the GNREF (>$4.7B) it is necessary for Neoen to deploy the Project in stages. The size and timing of stages will be defined by the size and timing of Power Purchase Agreements, which are generally agreements between generators and electricity consumers to sell electricity from generation projects at an agreed price. These agreements are vital to making investment decisions and securing debt financing on any large-scale generation project and inform the stages of the Project.

As such, the GNREF is further divided into two areas, which reflect two separate Project stages for Neoen (as shown on Att2_GN1_MapBook, Map 2):

- The southern portion of the GNREF which represents Goyder North Stage 1 (GN1) and contains all land within the GNREF boundary which occurs to the south of White Hill Road, including Overhead Transmission Line (OTL) and Bundey Substation extension.
- The northern portion of the land within the GNREF boundary which occurs to the north of White Hill Road and represents any subsequent stages that may occur (in earlier figures represented at Goyder North Stage 2 (GN2)). Any future potential stages are not yet defined to a point where impacts can be assessed and detailed surveys have not been undertaken in this area, however subsequent project stages will continue to be developed as a potential future project.

Goyder North Stage 1 (GN1) is therefore proposed as the first stage of the GNREF. The construction and operation of Stage 1 represents the Action described in this document and is the subject of this referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Construction of GN1 is expected to take 24-36 months. Dependent on the approvals process, it is proposed that construction of GN1 of the GNREF will commence late 2025. These timelines are subject to the Project gaining all necessary approvals, undertaking a comprehensive and competitive tender process, and acquiring the appropriate level of contracted revenue to enable the financial investment decision to occur.

The decision to submit GN1 as a Split Referral from any subsequent stages was based on the published guidance criteria for split referrals:

- Independence: GN1 is a standalone Project and can proceed entirely independently of any subsequent stages.
- Different construction timeframes: GN1 is significantly more progressed as a Project, projected to commence into construction in 2025. Future GNREF stages however are still early in the development phase and a customer for the energy generated for this portion of the GNREF is not yet close to being determined. Construction therefore is not forecasted to occur in the near term.
- Unique financing and ownership structure: Typically, Neoen has financed its projects under traditional non-recourse project financing with individual Special Purpose Vehicles (SPV). Discussions with potential lenders for GN1 have commenced with debt likely to be raised shortly after commencement of construction. Subsequent stages of the project would likely follow a similar process, but no discussions have commenced and therefore it is likely that financiers for the subsequent stages will be different. Therefore GN1 will have a unique financing and ownership structure, different from any subsequent Project Stages.

For the above reasons, only GN1 is being referred at this stage and is the focus of this Report. This approach was discussed with DCCEEW during a pre-Pre-Referral meeting held 29th February 2024 and supported as a strategy by DCCEEW representatives during the meeting.

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

Commonwealth legislation applicable to the Goyder North Wind Farm Project:

An *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Significant Impact Assessment against the Significant Impact Guidelines 1.1 (DotE, 2013), determined that the construction and / or operation of GN1 may have residual significant impacts on the following Matters of National Environmental Significance (MNES):

- Irongrass Natural Temperate Grassland of South Australia (INTG) Threatened Ecological Community (TEC).
- Pygmy Blue-tongue Lizard (*Tiliqua adelaidensis*).

Additionally, several MNES may be impacted, dependent on OTL alignment selected:

- Mallee Bird Community (MBC) of the Murray Darling Depression Bioregion (MDD) TEC.
- *Acacia glandulicarpa* (Hairy-pod Wattle).
- *Codonocarpus pyramidalis* (Slender Bell-fruit).
- *Dodonaea subglandulifera* (Peep Hill Hop-bush).
- *Olearia pannosa* ssp. *pannosa* (Silver Daisy-Bush).

A number of additional species are potentially impacted, however the impact is unlikely to be significant based on the significant impact criteria:

- Flinders Ranges Worm Lizard (*Aprasia pseudopulchella*).
- Southern Whiteface (*Aphelocephala leucopsis*).
- South-eastern Hooded Robin (*Melanodryas cucullata cucallata*).
- Blue-winged Parrot (*Neophema chrysostoma*).
- Diamond Firetail (*Stagonopleura guttata*).

Refer to Att3_GN1_ SIA, Section 5.5 and 5.6, pages 34-85 for further information.

State legislation applicable to the Goyder North Wind Farm Project:

Planning, Development and Infrastructure Act 2016 (PDI Act)

The PDI Act along with the Planning, Development and Infrastructure (General) Regulations 2017 and Planning and Design Code, provide the legislative framework for carrying out planning and development works within South Australia. The GNREF Project, which includes both GN1 and subsequent stages (Application ID: 23036148) was submitted for Planning Approval in December 2023 (05/12/2023) and is currently under review (PlanSA, 2024).

The proposed development is within the Rural Zone of the Planning and Design Code (version 2023.15 dated 26 October 2023). The Conservation Zone applies to one Conservation Park (CP) (Mokota CP) which occurs within GN1 Wind Farm Project Area but is outside of the Disturbance Footprint, and Mimbara CP, which occurs directly adjacent the OTL Primary. Neoen has designed the Development Envelope to ensure no clearance will occur on these conservation parcels. The following Overlays apply to various allotments (sections) (but not all land parcels) within the Project Area:

- Water Resources Overlay
- Native Vegetation Overlay
- State Significant Native Vegetation
- Hazards (Flooding – Evidence Required) Overlay
- Hazards (Bushfire – Regional Risk) Overlay
- Hazards (Bushfire – General Risk) Overlay
- Environment and Food Production Area Overlay

- Heritage Adjacency Overlay
- Local Heritage Place Overlay
- State Heritage Place Overlay
- Dwelling Excision Overlay
- Limited Land Division Overlay
- Murray-Darling Basin Overlay
- Key Outback and Rural Routes Overlay

Within the Rural Zone, a Renewable Energy Facility is assessed as Code Assessed – Performance Assessed unless sited within an Overlay that triggers an assessment as Restricted Development (either the Significant Landscape Protection or Character Preservation District Overlay). As the Project Area is not located within either overlay, the correct assessment pathway is Code Assessed – Performance Assessed under the PDI Act Planning and Design Code, which is how the project is currently being assessed.

Hydrogen and Renewable Energy Act 2023 (HRE Act 2023)

On 11 July 2024, the South Australian Government introduced the *Hydrogen and Renewable Energy Act 2023* (*HRE Act 2023*). As a Development Application had already been made for the GNREF under the *Planning, Development and Infrastructure Act 2016*, the development is subject to the transitional provisions of the *HRE Act 2023*. This requires the operator to obtain a license to operate prior to the commencement of commercial operations of the generator.

The application for this license requires an Operating Management Plan (OMP) and a Safety, Reliability Maintenance and Technical Management Plan (SRMTMP) - which was already required to obtain the Essential Services Commission of South Australia (ESCOSA) generation license.

Native Vegetation Act 1991 (NV Act)

A draft Native Vegetation Clearance (NVC) Data Report was submitted to the South Australian Native Vegetation Council in response to an RFI request supporting the State Planning Approval process for the GN1 Project. The scope of this report incorporated OTL Primary only. A full and formal submission will be lodged with the NVC in due course as required under the Native Vegetation Regulations 2017. Neoen is undertaking ongoing engagement with the SA Native Vegetation Council regarding the NVC process.

The draft assessment determined the current Disturbance Footprint for the proposed Action (GN1) will require clearing of up to 568 ha of native vegetation (for OTL Primary), including 220 ha of permanent clearance and 348 ha of temporary clearance. A further 10 ha is within the OTL maintenance zone which requires trimming below 6 m (Outer Maintenance Zone) or 3 m (Inner Maintenance Zone) and has been included in the NVC draft calculation under a reduced clearance loss factor (0.8), as impacts only relate to the upper stratum of vegetation. Note that the vegetation disturbed in these maintenance zones is incorporated in the MNES assessment where relevant given the potential impacts on specific fauna species. An additional 38 ha of non-native vegetation is proposed to be impacted of which 15 ha is permanent and 23 ha is temporary. This aligns with the Total Disturbance Footprint (for the Wind Farm with OTL Primary) in Table 1 of Att1_DN1_Project Description of 607 ha where OTL Alt is excluded.

Neoen are committed to avoiding and further minimizing impact wherever possible through ongoing application of the mitigation hierarchy, as well as employing methods of rehabilitation. Where that is not possible, Neoen will offset all disturbance to native vegetation through a Significant Environmental Benefit (SEB) as required under the South Australian Native Vegetation Act 1991. Neoen has demonstrated their ability to exceed obligations under the Act with the highly successful on-ground offset strategy executed for the Goyder South Project with the World's End Gorge offset and is currently developing options for another on-ground SEB offset opportunity for Goyder North.

Also relevant to the PDI Act 2016 (in the case of the meteorological masts only) and the NV Act but excluded from the proposed action, are pre-construction investigations including ongoing wind measurement and geotechnical investigations as outlined in Section 3 of Att1_GN1_Project Description.

Details outlined as follows:

- Three meteorological masts have recently been permitted under the PDI Act 2016 and approved under the NV Act. Pre-clearance surveys were conducted by ecologists to determine that there would be no interaction with MNES.
- Geotechnical investigations are proposed late in 2024 and application for NVC associated with this are currently under assessment. A self-assessment will be undertaken, and appropriate management actions implemented to ensure no interaction with MNES. Geotechnical works will be conducted within the existing proposed disturbance footprint, and pre-investigation surveys will be conducted by ecologists to microsite any geotechnical works to avoid MNES.

National Parks and Wildlife Act 1972 (NPW Act)

Under the NPW Act it is an offence to take a native plant or protected animal without approval. Threatened plant and animal species are listed in Schedules 7 (Endangered species), 8 (Vulnerable species) and 9 (Rare species) of the Act. Conservation rated flora and fauna species listed on Schedules 7, 8, or 9 of the NPW Act are known to occur within the Project Area. Persons must comply with the conditions imposed upon permits and approvals. Flora and fauna surveys conducted within the GNREF have been conducted under the required flora collection permit (EBS Ecology Scientific Research Permit: K25613-23).

Landscape South Australia Act 2019 (LSA Act)

A water affecting activity permit is likely to be required for the Project for construction of access tracks across creek lines (i.e. Burra Creek). Neoen will implement standard sediment and erosion control procedures as part of a Construction and Operational Environmental Management Plan (COEMP) which will ensure that actions will not alter the natural flow of water within the Project Area and mitigate against sediment and erosion occurring, particularly around creek lines. Several Declared Weeds exist in the Project Area and the COEMP will outline hygiene practices. The requirement for these permits will be discussed with the Northern and Yorke Landscape Management Board and permits will be obtained where necessary.

Aboriginal Heritage Act 1988

GN1 predominantly falls within the traditional lands of the Ngadjuri Nation, with the southern end of the OTL and Bundey Substation Area within the traditional lands of the First People of the River Murray and Mallee Region. Preliminary studies have occurred and found a low risk for heritage impacts. Approval will be required if any sites, objects or remains are uncovered during the construction or operation. A ‘Stop Work’ procedure should be in place if any objects of significance are uncovered during the Project works.

Heritage Places Act 1993

This act makes provision for the Protection of all non-First Nations heritage places including those that might be unknown at this point in time. Neoen has avoided impacts on known places of heritage significance as identified in the Planning and Design Code. Any undocumented built heritage and archeological features of heritage significance which may be subsequently uncovered will implement a 200m micro-siting allowance, where practical, to avoid and mitigate potential heritage impacts.

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

Neoen is a long-term owner-operator within the Mid North Goyder Regional Council area and has formed long-term partnerships with communities through previous associated Projects in the region, namely Goyder South. Engagement will be targeted for different stakeholders as outlined below and will be conducted in accordance with Neoen’s Community Engagement Plan (Att4_GNREF_Community Engagement Plan) adopted for the Project.

Community and stakeholder engagement

- Employment of a Community Liaison Officer based locally and with a background in the area, as well as extensive experience with renewable energy. Their role is to assist in locating and engaging with all potential landholders and neighbours, staffing a community office and connecting community members with the Project Manager.
- Establishment of a Community Office in Burra (September 2019), to support community and stakeholder engagement for Goyder South and the wider Goyder Renewables Zone development. The space is open to the public during business hours 2-3 days per week and is a clear, easy way for community members with concerns or comments to get in touch with Neoen.
- Engagement of neighbouring landowners within a 6 km radius of the Project that are not hosting infrastructure, to inform and present information on the Neighbour Benefits Scheme. Engagement was either directly or through mail, with face-to-face meetings offered, and over 40 neighbours responded.
- A Community Information Day was held on October 18, 2023, at the Neoen Office in Burra. Prior to the event, Neoen ran weekly newspaper advertisements in the Plains Producer, and placed posters in both Burra and Mount Bryan, with additional outreach extended to stakeholders of the Goyder South Project via email. The Community Information Day was lightly attended, with the main interest being the visual impact on Burra town.
- A project website and 1800 number has been established and advertised to provide the community an ongoing source of contact with Neoen and convenient access to project updates.

Council and Agency Consultation

Neoen has maintained a positive and ongoing relationship with the Goyder Regional Council during the development of the Goyder South and Goyder North Projects. Specific engagement topics with the Council include:

- **Turbine setback from the Burra Town Centre –** the planning system policy indicates that a 2.9 km setback from the Burra Township boundary is appropriate, however, following discussions, Neoen has increased the setback from the town centre from an initial 4 km to almost 6 km to minimise any visual impact of the project on the township.
- **Burra World Heritage Bid –** Neoen is supportive of Council's interest in seeking World Heritage Listing and is committed to working with them to preserve the unique Heritage values of the areas. Neoen are continuing to undertake formal consultation with the Council via the planning assessment process so that Neoen can formally respond to any issues that may be raised by the Council. Preservation of National / World Heritage values in the area will be assessed in more detail through this EPBC process with consultation continuing throughout.

Neoen and the specialist team are also consulting with key State Agencies to understand their expectations in relation to the provision of information as part of approval processes including:

- Department of Environment and Water (DEW) (Native Vegetation Council).
- DEW (Heritage SA).
- Department of Mining and Energy (DEM) (including the Office of the Technical Regulator).

Neoen acknowledge that the State Heritage Agency does not have any formal role in the planning assessment process for this application because the project does not trigger a referral. Nevertheless, as a courtesy, Neoen have kept the Department informed of the project and the approach taken to relevant State Heritage places, which has been to avoid impacts as much as possible

Traditional Owner Consultation

The relevant Traditional Owners for the Goyder area are the Ngadjuri Nation and the First People of the River Murray & Mallee Region, whose traditional lands include the proposed project land and who also have a native title determination/application over parts of this land. A relationship between Neoen and the

Ngadjuri Nation already exists through the Hornsdale Wind Farm and Power Reserve, as well as the Goyder South Project. Dialogue between Neoen and the Traditional Owners has primarily focused on two themes:

1. Avoidance and preservation of Traditional Owner's cultural heritage; and
2. Broad benefit-sharing by committing to training and employment opportunities for Traditional Owners, with particular focus on benefiting members of the Traditional Owner's community.

Neoen have commenced discussions with the members of the Ngadjuri community to inform the design of Goyder North. An ethnographic site survey has been conducted to inform infrastructure layout and design. Neoen have also commenced engagement with the First People of the River Murray & Mallee region, whose native title claim area intersects with the proposed overhead transmission line route and Bundey Substation. Discussions are in their infancy however surveys are currently being scheduled, which will further inform design.

Regarding benefit-sharing, Neoen has committed to (and is in the process of delivering) ambitious benefit sharing programs with Ngadjuri Nation for Goyder South, though details are confidential and can only be disclosed with Ngadjuri Nation's consent. Discussions around benefit-sharing on Goyder North are at a much earlier stage but will be of proportionate scale. As with Goyder South, Neoen is also committed to introducing (and fulfilling) best-practice First Nations participation targets for employment and supply chain in accordance with Neoen's Indigenous Participation Plan (Att5_GNREF_Indigenous Participation Plan).

Freehold Title Consultation

Due to the size of the development, GNREF includes some 30 host landholders, some of which were also involved in the Goyder South project. They have all indicated their support for involvement in the project and the positive impact of the project on the community. The vast majority of the land required for GN1 has been secured through option to lease or option to grant easement contracts with the landholders.

Formal Public Consultation

A formal public consultation period has been completed as part of the Development Application process in which ninety responses were made, with seventy-eight of those being unique. Eighteen responders were in support of the Project with the remaining sixty in opposition. Through this process, Neoen encouraged community members via email, a post on the GRZ website, and a notice in the Goyder Regional Council newsletter, to respond to provide their response to the application. Neoen is currently in the process of responding to the formal public consultation responses which will be uploaded to the Development Assessment Portal in due course.

1.3.1 Identity: Referring party

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Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000

Referring party details

Name	Mikaela Georgiadis
Job title	Project Manager
Phone	0484 902 401
Email	mikaela.georgiadis@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide, SA 5000

1.3.2 Identity: Person proposing to take the action

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

No

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

Yes

Person proposing to take the action organisation details

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000

Person proposing to take the action details

Name	Hilary Pocock
Job title	Project Manager
Phone	0431 802 524
Email	hilary.pocock@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide SA 5000

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

No

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

No

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

Environmental management history

Neoen is an independent power producer specialising in renewable energy projects, with over 8 GW of generation in operation or under construction worldwide. Founded in 2008, Neoen is headquartered in Paris and operates across a range of renewable energy technologies, including solar, wind and battery storage. Neoen has over 400 experienced employees across 16 countries on multiple continents. Outside of Paris the largest Neoen branch is in Australia (opened in August 2012), which represents over 50% of the global Neoen portfolio and approximately 100 personnel across 7 offices across Australia.

Since 2012, Neoen Australia has brought over 4.09 GW of solar, wind and storage into construction and operation through local partnerships and strategic acquisitions in Australia. Neoen is now Australia's largest renewable energy generator in terms of committed capacity. Neoen's South Australian projects include the award-winning 315 MW Hornsdale Wind Farm and the 150 MW /194 MWh Hornsdale Power Reserve, the world's first lithium-ion battery of that scale. Hornsdale Power Reserve, better known as the 'Tesla big battery' after its technology manufacturer, has been an immense success for both Neoen and South Australia. Not only has it intervened numerous times to help prevent blackouts, but it also saved consumers around $40 million in 2018 and $116 million in 2019 by suppressing the prices of various grid stability services previously provided exclusively by gas generators.

A key differentiator of Neoen's business model is that it is a developer-owner-operator. It develops, builds, owns and operates its projects for their entire lifespan and therefore is focused on building meaningful, long-term partnerships with local communities.

Elements of the broader GRZ Project, specifically for the Goyder South Hybrid Renewable Energy Facility, was referred in four discrete packages as listed below.

Past or present proceedings under law (related to GRZ)

- Goyder South Hybrid Renewable Energy Facility - Wind Farm 1B, 5km south Burra (Goyder Wind Farm 1B Pty Ltd) (2021/8957). Approved with conditions 13 July 2022.
- Goyder South Hybrid Renewable Energy Facility - Wind Farm 1A, 10km south Burra (Goyder Wind Farm 1 Pty Ltd) (2021/8958). Approved with conditions 5 July 2022.
- Goyder South Hybrid Renewable Energy Facility - OTL and Substation, Worlds End (Goyder Wind Farm Common Asset Pty Ltd) (2021/8959). Approved with conditions 28 July 2022. Variation approved 19 December 2022.
- Goyder South Hybrid Renewable Energy Facility - Battery, 5km north Robertstown (2021/8960). Referral decision: Not a controlled action, 1 October 2021.

As part of Neoen's native vegetation offset strategy for the Goyder South Project, Neoen has proudly transferred ownership of 1,000 ha at Worlds End Gorge to the Government of South Australia, paving the way for a new national park in the region. This innovative approach is testament to long-term collaboration between Neoen, host landowners, Traditional Owners the Ngadjuri Nation, the Regional Council of Goyder and South Australia's Department of Environment and Water and is a true first for the renewable energy industry in Australia. Neoen intend to adopt a similar approach to offset requirements for the Goyder North Stage 1 Project.

Neoen can confirm the EPBC approval conditions of the EPBC Referral for the above elements of the Goyder South Project have and will continue to be met to the satisfaction of DCCEEW, specifically:

- Management Plans have been developed and implemented over the Project life to date as evidenced by environmental audits and compliance reporting undertaken during construction phase.
- Offset Management Plans were developed as part of the approval conditions of the Project. Implementation of the plans have commenced and will be reported annually as part of the compliance reporting.
- Regular environmental audits have occurred throughout construction phase to ensure compliance to approval conditions.
- Neoen has worked closely with the Contractors to ensure they are aware of their obligations to meet the Project's approval conditions relevant to the construction phase. This has included ensuring

appropriate procedures were developed and implemented, and raising issues or non-conformances in a timely way if any of the procedures were not followed.
- Neoen has worked closely with DCCEEW when issues have been identified and in instances where potential non-conformances with approval conditions could have eventuated, Neoen has worked with DCCEEW in a timely and efficient manner to provide them with all relevant details including management measures enacted to prevent any reoccurrence of the issue.
- Completion of all annual compliance reports on time demonstrating compliance with all approval conditions.

Past or present proceedings under law in Australia (other)

- Western Downs Green Power Hub, Hopeland, Queensland (Neoen Australia Pty Ltd) (2018/8301). Not a controlled action, 11 December 2018.
- Kentbruck Green Power Hub (Neoen Australia Pty Ltd) (2019/8510). Controlled Action 7 November 2019. Variation currently Under Assessment.
- Victorian Big Battery (Neoen Australia Pty Ltd) (2020/8614). Controlled Action 26 May 2020, pending final decision.
- Territory Battery Energy Storage System (Neoen Australia Pty Ltd) (2021/8884). Approved with conditions 31 May 2024.
- Mount Hopeful Wind Farm (Neoen Australia Pty Ltd) (2021/9137). Approved with conditions 19 April 2024.
- The Collie Battery Energy Storage System (Neoen Australia Pty Ltd) (2023/09462). Not a controlled action 13 April 2023.
- Navarre Green Power Hub (Neoen Australia Pty Ltd) (2023/09624). Controlled Action, 29 November 2023, pending final decision.
- Tchelery Wind Farm (Neoen Australia Pty Ltd) (2023/09617). Controlled Action, 20 December 2023, pending final decision to be assessed under the assessment bilateral agreement with NSW.

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

Refer to Att6_Neoen Sustainability Framework.

1.3.3 Identity: Proposed designated proponent

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

Yes

Proposed designated proponent organisation details

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000

Proposed designated proponent details

Name	Hilary Pocock
Job title	Project Manager
Phone	0431 802 524
Email	hilary.pocock@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide SA 5000

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

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

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000
Representative's name	Mikaela Georgiadis
Representative's job title	Project Manager
Phone	0484 902 401

Email	mikaela.georgiadis@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide, SA 5000

Confirmed Person proposing to take the action's identity

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

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000
Representative's name	Hilary Pocock
Representative's job title	Project Manager
Phone	0431 802 524
Email	hilary.pocock@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide SA 5000

Confirmed Proposed designated proponent's identity

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

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

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

No

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

No

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

No

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

No

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

No

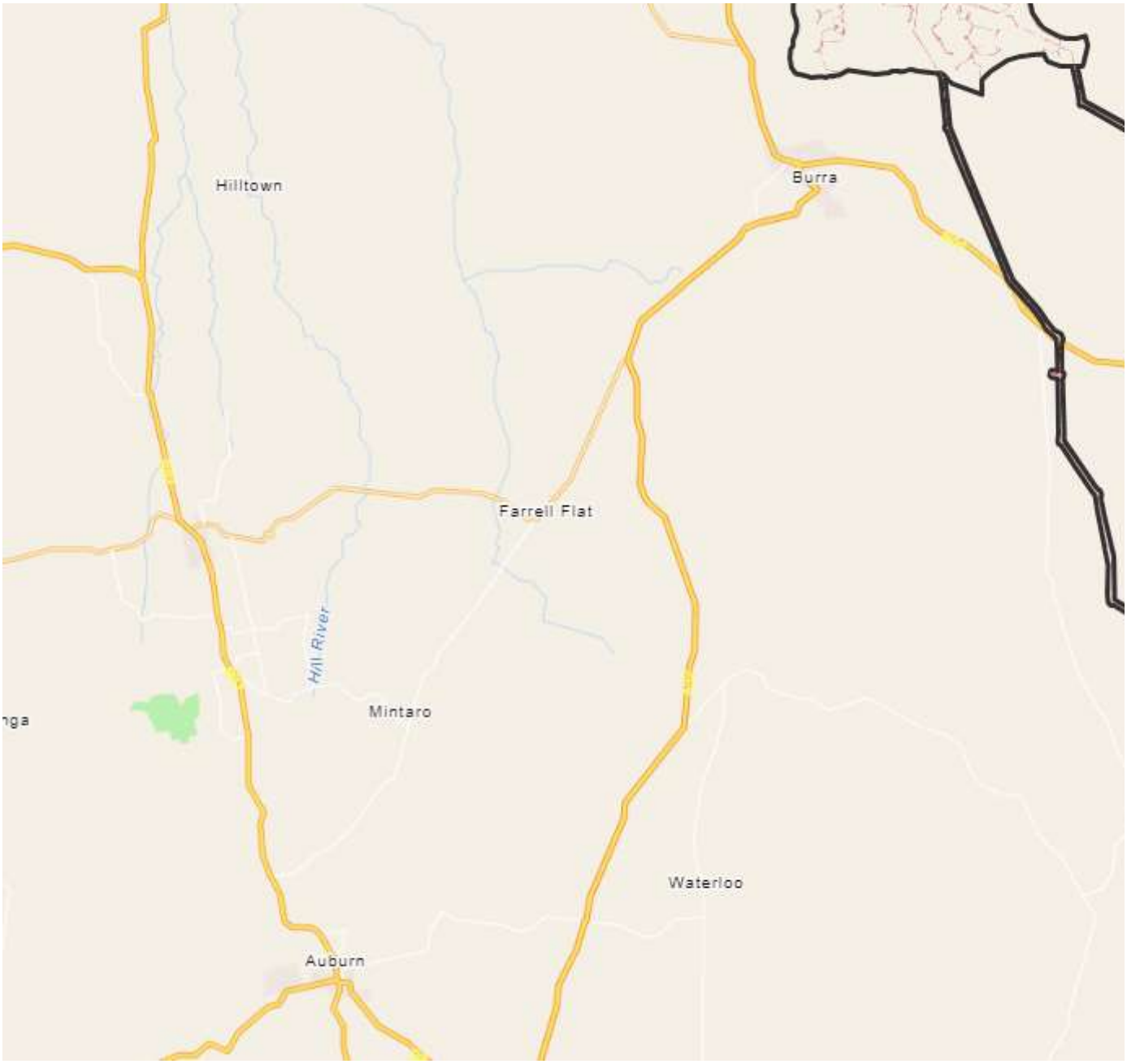
1.4 Payment details: Payment allocation

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

Referring party

2. Location

2.1 Project footprint



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2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Title Ref: CT 5410/475; Wandillah Rd, Burra, South Australia, 5417

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

South Australia

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

No

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

Land tenure across the Project Area is freehold and Crown Land, including:

- 6 Crown records (2 WF, 2 OTL Primary, 2 OTL Alt)
- 7 Crown leases (2 OTL Primary, 5 OTL Alt)
- 245 freehold (197 OTL Primary + WF, 37 OTL Alt, 11 are ancillary access estimated impact areas).

A detailed list of land parcels affected by the proposed project is provided in Att7_LandTenure, and displayed on Att2_GN1 Map Book, Map 2.

3. Existing environment

3.1 Physical description

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

Location

The Project Area is located in the Mid North of South Australia, within the Goyder Regional Council area. The southern boundary of the Wind Farm Component commences approximately 5.5 km to the north of Burra, extending approximately 9 km to the northern boundary of GN1 at White Hill Road. The Project Area is situated parallel and east of the Barrier Highway, with the western boundary approximately 4.5 km east of Mount Bryan township. The eastern boundary is approximately 1 km west of Mongolata Road. The OTL Primary extends southward (from within the wind farm at the proposed substation) approximately 48 km to Bundey Substation. The OTL Alternate extends east from the proposed substation, extending southward for approximately 47 km, also connecting into Bundey. Only one OTL will be constructed but both are assessed as part of this referral application.

Zoning

The Project Area is almost entirely within an area zoned under the South Australian *State Planning, Development and Infrastructure Act 2016* (PDI Act), as Rural, except for the very southern extent where the OTL connects to the existing Bundey Substation, zoned as Rural Intensive Enterprise. There will be no change to zoning for this activity. Land tenure is predominantly freehold agricultural land, with several Crown Land parcels as well as unmade road reserves included.

The Project Area also encompasses / adjoins two areas zoned Conservation, Mokota Conservation Park (CP) within the northwestern boundary of the Wind Farm, and Mimbara CP, directly east of the OTL Primary. The Development Envelope excludes parcels zoned as Conservation.

Goyder's Line runs through the Project Area, meaning the land is considered marginal for agriculture, with the primary land use marginal grazing for sheep and cattle and dryland cropping of grains.

Landscapes

The Project Area is dominated by ridges with occasional rocky outcrops, which fall away to low foot slopes and undulating hills, dissected by eroded drainage gullies.

The Interim Biogeographical Regionalisation of Australia (IBRA) identifies geographically distinct bioregions based on common climate, geology, landform, native vegetation and species information. The bioregions are further refined into subregions and environmental associations. The GN1 Project Area is primarily located within the Flinders Lofty Block (FLB) Bioregion, with the southern portion of the OTL Primary in the Murray Darling Depression (MDD) bioregion (Att2_GN1_MapBook, Map 7). The OTL-Alt commences in the FLB, before tracking east where it predominantly occurs within the MDD. Within the FLB, the Project Area crosses two subregions Broughton and Olary Spur within which four environmental associations occur: Terowie, Burra Hill, Hansen and Mongolata. Within the MDD, the Project Area crosses South Olary Plain and Murray Mallee subregions, and two environmental associations: Florieton and Sutherlands.

Native vegetation and condition (Att8_GN1_EcoAssessment, Section 5.1 pp 61 to 94).

A total of 23 broad native vegetation associations have been mapped across the Project Area, in which up to 241 species of native plants have been identified (including some identified to only to Genus). Native vegetation throughout the Project Area is comprised predominantly of grasslands, with large tracts of Iron-grass (*Lomandra* spp.) in the central and eastern sections of GN1. Remnant mallee woodland associations occur along the eastern side of the site, where they grade into chenopod dominated plains within the eastern rain shadow. The OTL Primary traverses a variety of landscapes, and includes native vegetation including *Austrostipa* grassland, *Lomandra* grassland, Chenopod shrubland, and Mallee woodland. Vegetation was assessed according to the South Australian Bushland Assessment Method (BAM) (NVC 2020).

Grasslands within the Project Area have a long history of grazing, and are predominantly in poor to fair condition, mapped as native grassland if more than (>) 5 % of the vegetation was considered to comprise native grasses, otherwise mapped as exotic grassland or cropped. Some clearance of woodland vegetation (Mallee and E*ucalyptus leucoxylon* +/- *E. odorata* woodland) is likely to have preceded, with the remaining areas considered derived grasslands.

Condition of habitat for threatened species and ecological communities

Despite their generally degraded condition, grasslands in the region, particularly those occurring on low to medium hills and slopes are known to provide important habitat for EPBC listed species, Pygmy Blue-tongue Lizard (*Tiliqua adelaidensis*) (PBTL). As the location of the site is on the edge of Goyder's Line, it is considered marginal for cropping. As cropping is a major threatening process for PBTL, which are unable to occupy disturbed ploughed soil due to the lack of spider burrows, the Goyder North Project Area provides large areas of suitable uncropped grasslands, which provide favourable habitat despite their often high exotic pasture content.

Remnant Mallee woodlands in the Project Area are generally intact in the upper storey, but with varying degrees of degradation from grazing in the understorey. Most areas of mallee contained old trees, which provide important hollow resources. Where intensive agricultural pressure has occurred, especially on the plains along the central portions of the OTL Primary, understorey may be limited to a few hardy chenopod species, with large bare patches and limited regeneration caused by repeated grazing and use of small patches as shelter. Other areas of Mallee woodland which occurs on steeper slopes, or less intensively grazed areas, contain higher species and structural diversity suitable for a range of threatened and more

common bird species. Where mallee vegetation occurred in the Murray Darling Depression Bioregion, it was found to meet the criteria for Mallee Bird Community of the MDD. Based on this assessment, the OTL Primary has been aligned specifically to avoid this vegetation type.

Chenopod Shrublands are common in the eastern area of the Wind Farm, and along the OTL. Although important in the vegetation matrix, these areas provide minimal suitable habitat for MNES associated with the Project, with the exception of Vegetation Association (VA) 9 (*Maireana rohrlachii* shrubland over grass), which had a high density of PBTL. This VA was limited in extent within the Project Area.

Lomandra Grasslands were broadly mapped by their condition in an EBS field survey in spring 2022, which identified areas of C Class, likely B Class and a small area of possible A Class INTG TEC. When detailed vegetation surveys were undertaken in spring 2023, field conditions were poor, and it was deemed unsuitable for qualifying Lomandra Grassland according to the Condition Classes outlined in the Conservation Advice (Att8_GN1_EcoAssessment, Section 5.1.5, pp 93-94). The preliminary design was altered based on the broad mapping undertaken in 2022, with the number of WTGs impacting Lomandra Grassland reduced from 41 to 16, and all infrastructure removed from areas mapped as likely B or A Class. The current design has only three WTGs encroaching on the edge of Lomandra Grassland and where Lomandra Grassland adjoins existing tracks which need to be widened to allow construction and access.

For further detail regarding current condition of the Project Area environment refer to Att8_GN1_EcoAssessment, Section 5.1 pp 61 to 94.

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

The Project Area is privately owned and primarily used for grazing of sheep and cattle, with some areas land utilised periodically for dryland cropping. The zoning of the land is not proposed to change due the GNREF Project, and it is expected that the current land uses will co-exist with the Project.

The OTL is proposed to connect into the Bundey substation which is being built for the SA-NSW interconnector (Project EnergyConnect).

Two long-distance walking / shared use trails intersect with the Project Area – the Heysen Trail and the Mawson Trail. The Heysen Trail is a 1200-kilometre (km) trail which traverses from Cape Jervis in the south to Parachilna Gorge in the north, passing through National Parks and Conservation Reserves, public and unmade roads, private land and state forests. Section 27 (Burra to Wandallah) and Section 28 (Wandallah to Newikie Creek) intersect the Project Area.

The Mawson Trail is a 900km long trail, traversing minor and unmade roads from Gorge Road north of Adelaide, north to Blinman in the Flinders Ranges. Section 4 (Burra to Spalding) traverses the Project Area along the northern boundary (White Hill Road).

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

The Proposed Project Area is recognised as being within the traditional lands of the Ngadjuri Nation and the First People of the River Murray and Mallee Region. Neoen will continue to work closely with Traditional Owners and heritage consultants to minimise any risk of impact to features that hold value and significance, throughout development and construction. Natural Features relevant to the Project Area including Protected Areas and watercourses are presented in Att2_GN1_MapBook, Map 8.

The Project Area encompasses the Mimbara Conservation Park and the Mokota Conservation Park, two State Protected Areas. One privately managed conservation reserve also occurs within the Project Area, Tiliqua Nature Reserve. One large privately owned Heritage Agreement Area also adjoins the Project Area

in the northeast (HA1264). No impacts are proposed within these protected areas which are excluded from the Project Envelope. Further details are presented in Att8_GN1_EcoAssessment Section 4.1.4 pp 40-43.

Two Nationally Threatened Ecological Communities (TEC) are found to occur within the Project Area:

- Iron-grass Natural Temperate Grassland of South Australia; and
- Mallee Bird Community of the Murray Darling Depression Bioregion.

Impacts to these TECs are discussed in Att8_GN1_EcoAssessment Section 5.1.5 (pp. 93-94) and Section 6.1 pp. 111 – 113 as well as Section 4.5 of Att3_GN1_SIA.

The OTL (and OTL-Alt) is proposed to cross over one significant watercourse which intersects the Project Area, Burra Creek, however no impacts are anticipated. This creek rises near Hallett in the Northern Mount Lofty Ranges and flows southward through the township of Burra to the Burra Gorge, near Worlds End, before changing course in an easterly direction, extending to the River Murray near Morgan (Att8_GN1_EcoAssessment Section 4.1.5, pp 43-45).

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

The GN1 Project occurs across several Land Systems, detailed below:

WF

- Wandalla Land System occurs north of Burra and comprises most of GN1. Rainfall averages 300-425 mm annually. The landscape includes strongly dissected, moderately steep to steep hills north of Burra, grading to lower hills, slopes and low rises in the north. Drainage from the range is mostly to the west and east. Elevation in this Land System is from 460 metres (m) above sea level in the southeast, to 789 m at Mount Cone (centre).

OTL

- Stone Chimney Creek Land System occurs south of GN1 along the route of the OTL to just west of Mimbara Conservation Park. Rainfall averages 275 – 400 mm annually. It comprises gently inclined outwash fan abutting the eastern edge of the Burra Hills and basement rock rises, mainly in the north, with slopes of approximately 10% to 2%, interrupted by low rises of basement rock. Water originates in the hills and flows across the fans in an easterly direction. Elevation ranges from 550 m on the upper fan to 290 m where Baldina and Stone Chimney Creek leave the system.
- Hallelujah Hills Land System incorporates Mimbara CP and land to the south and west, with an average rainfall of 275 mm to 410 mm. It consists of steep low hills and undulating rises with very shallow rocky soils and rock outcrops. Elevation averages around 350 m, up to 430 m in the south, with a low point around 240 m occurring along the Burra Creek.
- Thistlebeds Land System comprises gently sloping, low elevation (290 m to 210 m) pediments adjacent to the ranges, weakly to moderately dissected by creeks, with some gently undulating hard rock rises. Average rainfall is 200-375 mm.
- Mount Mary Land System incorporates the very south of the OTL (and OTL-Alt) including Bundey. It includes flat to very gently undulating plains with predominantly shallow and rubbly calcareous soils. Rainfall averages 225 – 310 mm annually. Rangeland grazing has been the predominant land use, however substantial areas of the stony rises have not been cleared or have regenerated.

OTL-Alt (from north to south)

- Wandalla Land System (as above).
- Thistlebeds Land System (as above).
- Baldina Creek comprises a deeply eroded plain east of the ranges where Baldina and Stone Chimney Creeks debouch. Rainfall averages 230 to 300 mm annually. Soils comprise deep

calcareous uniform and gradational types with significant areas of red pedaric texture contrast soils.
- Eurovale Land System predominantly located north of Goyder Highway along the mid-section of the OTL-Alt. It includes gently sloping calcareous plains with broad drainage channels transgressing low angle, calcareous pediment and fan deposits. Average rainfall is215 - 295 mm. Soils are generally deep over outwash sediments, gradational loamy to clay loamy calcareous soils with significant clay loamy texture soils also significant.
- Frying Pan Hut Land System incorporates the land immediately surrounding the Burra Creek. It is an unstable, gullied, dissected, and erodible landscape where the Burra Creek cuts across pediments abutting the ranges with alluvium deposited by the Burra Creek and other minor creeks. Soil is mostly calcareous with red pedaric sodic duplex soils, and shallower soils over rock where erosion has deeply cut the landscape.
- Mount Mary Land System (as above).

3.2 Flora and fauna

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

Many ecological field surveys have been undertaken by EBS across the GNREF between November 2022 and March 2024, noting that survey efforts became concentrated on the Goyder North Stage 1 Project Area from late 2023 onwards. Surveys are summarised in Att8_GN1_EcoAssessment Section 1.3 pp 11, including:

- On-ground broad flora assessment in the GNREF (excluding OTL) (12 to 16 November 2022).
- On-ground flora assessment (BAM) in GN1 (including accessible portions of OTL) (20 to 24 November 2023).
- Spring Bird and Bat Utilisation Surveys (BBUS) in WF (20 to 24 November 2023).
- Targeted Mallee Bird Community (MBC) surveys along OTL intersecting with MDD Bioregion (20 to 24 November 2023).
- Summer BBUS surveys (WF) (12 to 16 February 2024).
- Targeted Pygmy Blue-tongue Lizard (PBTL) surveys GN1 Disturbance Footprint (Excluding OTL-Alt) (12 February – 7 March 2024).
- Targeted EPBC listed threatened plant surveys in GN1 Disturbance Footprint (Excluding OTL-Alt) (4 to 7 March and 18 to 22 March 2024).
- On-ground flora assessment in GN1 (remainder of unsurveyed areas) (12 February to 22 March 2024 (discontinuous)).
- Autumn BBUS surveys (WF) (14-16 May 2024) (report in prep, not detailed in Att8).

A PMST report was generated on 6 February 2024 to identify MNES under the EPBC Act relevant to the Project Area, including a 5 km Buffer applied (Search Area) (DCCEEW, 2024) for WF and OTL Primary. A second PMST was generated on 26 March 2024, relevant to the OTL-Alt Search Area. The PMST was used to identify flora and fauna species and ecological communities of national significance that may occur or have suitable habitat within the GN1. The PMST indicated that four matters of national ecological significance may occur within the Project Search Area including (Att8_GN1_EcoAssessment Section 4.3 pp 48 to 61):

- Wetlands of International Importance – 150 to 200 km upstream from the Coorong and Lakes Alexandra and Albert Wetland (Ramsar site number 25).
- Four Listed Threatened Ecological Communities.
- Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia.

- Iron-grass Natural Temperate Grassland of South Australia.
- Mallee Bird Community of the Murray Darling Depression Bioregion.
- Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions.
- 35 Listed threatened species including 14 flora and 21 fauna species.
- Nine Listed Migratory species protected under international agreements (including four which are also listed as threatened).

Field surveys – Flora (Att8_GN1_EcoAssessment, Section 5.1, pp 61 – 94).

Native vegetation throughout the GNREF is comprised predominantly of grasslands, with large tracts of *Lomandra* spp. in the central and eastern sections. Remnant mallee woodland associations occur along the eastern side of the site, where they grade into chenopod dominated plains. The primary OTL traverses a variety of landscapes, and includes *Austrostipa* grassland, *Lomandra* grassland, Chenopod shrubland, and Mallee woodland. On ground surveys have not yet been undertaken for the OTL-Alt, but publicly available vegetation mapping (DEW, 2024), indicates that in the north, the OTL-Alt is dominated by Chenopod Shrubland, before entering Mallee Woodland in the southern extent (Att8_GN1_EcoAssessment, Section 4.2 pp 45 to 48).

A total of 23 native vegetation associations have been mapped across the GNREF, of which 17 are being impacted in the current Disturbance Footprint (Att2_GN1_MapBook Maps 9 – 12). Across all vegetation surveys, up to 241 species of native plants have been identified (including some specimens not identified to species level). Eleven threatened flora species have been recorded within the GNREF during field surveys, including two EPBC listed species:

- **Acacia spilleriana* (Spillers Wattle) (EPBC Act: Endangered; NPW Act: Endangered).
- *Austrostipa gibbosa* (Swollen Spear-grass) (NPW Act: Rare) – detected in good condition grassland in GN2 in spring 2022.
- *Cryptandra campanulata* (Long-flower Cryptandra) (NPW Act: Rare) – scattered in VA6 and VA13, plus dominant species in VA17.
- **Cullen parvum* (Small Scurf-pea) (NPW Act: Vulnerable) – detected sparsely in VA6 and VA11 within WF during spring 2023 and summer 2024 field surveys.
- *Dianella longifolia* var. *grandis* (NPW Act: Rare) – sparsely present at BAM site B1a in spring 2022 in WF.
- *Dodonaea procumbens* (Trailing Hop-bush) (EPBC Act: Vulnerable; NPW Act: Vulnerable).
- **Eryngium ovinum* (Blue Devil) (NPW Act: Vulnerable) – scattered individuals in VA6 and VA11, especially on western slopes of WF.
- **Maireana rohrlachii* (Rohrlach's Bluebush) (NPW Act: Rare) – common understorey species in multiple VAs, forming dominant layer in VA9.
- *Ptilotus erubescens* (Hairy-tails) (NPW Act Rare) – sparsely detected in VA6 and VA11 in WF.
- **Rumex dumosus* (Wiry Dock) (NPW Act: Rare) – common across VA6 and VA11 in WF.
- *Swainsona behriana* (Behr's Swainson Pea) (NPW Act: Vulnerable) – scattered in good quality VA6 and VA11 in WF in spring 2022.

Of these, five species occur within the GN1 Project Disturbance Footprint (indicated by *), with the remainder being recorded in the Development Envelope or broader GNREF. *Austrostipa gibbosa* was only detected in the northern area of the broader GNREF, however, is likely to occur elsewhere in GN1 (Att8_GN1_EcoAssessment Section 7.1 pp 136-140)).

Based on desktop assessment results, combined with knowledge of site conditions and habitat present, a further five EPBC listed threatened species were considered to potentially occur in unsurveyed areas. A Biological Database of South Australia (BDBSA) search identified an additional 36 State listed threatened flora species which have known records within the Search Area, of which 28 were considered to possibly occur in the WF / OTL and / or OTL-Alt.

Two threatened ecological communities were determined as occurring within the Project Area, including the Disturbance Footprint:

- Iron-grass Natural Temperate Grassland of South Australia, of which 3,122.23 ha was mapped in the GN1 Project Area, and 29.64 ha is currently proposed to be impacted.
- Mallee Bird Community of the Murray Darling Depression Bioregion, of which up to 2.13 ha may be impact for the OTL Primary option, and up to 30.66 ha may be impacted for the OTL-Alt Option (Att8_GN1_Eco Assessment Section 5.2.3 pp 101-104).

Fauna (Att8_GN1_EcoAssessment, Section 5.2, pp 95- 108).

In total, 112 species of fauna have been recorded within GNREF by EBS during field surveys (targeted and opportunistic) between September 2022 and March 2024. This includes 94 species of bird (four introduced), 10 mammals (six introduced), three native frogs, four reptiles and one crustacean. Eight fauna species listed as threatened or migratory were recorded during field surveys, including four EPBC listed species and one migratory species, listed below along with a brief description of their observation (Att8_GN1_Eco Assessment Section 7.2 pp 140-142):

- Southern Whiteface (*Aphelocephala leucopsis leucopsis)* (EPBC Act: Vulnerable) – 23 observations of up to 139 individuals recorded across GN1, predominantly detected in mallee woodland fringing chenopod shrublands.
- Fork-tailed Swift (*Apus pacificus*) (EPBC Act: Migratory) – one individual observed in summer 2024 BBUS surveys flying above BUS Site 12.
- White-winged Chough (*Corcorax melanorhamphos*) (NPW Act: Rare) – up to 75 individuals observed across 17 observations, in mallee vegetation primarily along the OTL Primary.
- Black Falcon (*Falco subniger*) (NPW Act: Rare) – one individual observed in the south of the WF during spring 2022 field survey.
- Hooded Robin (*Melanodryas cucullata cucullata*) (EPBC Act: Endangered, NPW Act: Rare) – eight individuals recorded across three observations, detected in the far south of OTL Primary during MBC targeted surveys and along Black Peake Road.
- Elegant Parrot (*Neophema elegans elegans*) (NPW Act: Rare) – 13 individuals detected across five occasions throughout field survey in spring 2022.
- Diamond Firetail (*Stagonopleura guttata*) (EPBC Act: Vulnerable; NPW Act: Vulnerable) – one observation along Black Peake Road, outside of GN1 Project Area, in spring 2023.
- Pygmy Blue-tongue Lizard (*Tiliqua adelaidensis*) (EPBC Act: Endangered, NPW Act: Endangered) – 154 individuals detected during targeted field surveys in summer 2024, found to be widespread within grassland and low grassy shrubland habitats within the WF boundary.

A PMST search indicated that 21 threatened fauna and nine migratory species may occur in the Project Area. Four of these were detected during field surveys. A further three species were determined as likely to occur based on occurrence of historical records and / or suitability of habitat. A BDBSA search found records of an additional 14 fauna State listed threatened fauna species within the Search Area. In addition to those observed on site during the field survey, a further 10 species were assessed as possible or likely to occur in the Search Area.

Threatened fauna with potential to occur within the Project Area occupy a wide range of habitat niches, many of which are supported by vegetation occurring within the Project Area. Important habitat features in the Project Area include:

- Grassland habitat which has not previously been disturbed by cropping / ploughing mechanisms.
- Remnant mallee woodland containing a varied age range of trees which includes standing dead trees, hollows and woody debris.
- Large contiguous patchwork of native vegetation comprising a variety of associations which add diversity to the habitat matrix and provide channels for fauna movement through the landscape.
- Riparian vegetation and associated resources along the Burra Creek.

- Presence of steep, largely inaccessible hills and ridges which contain rocky substrates and often high species diversity due to more intact (less grazed) vegetation.
- Network of eroded drainage gullies which hold ephemeral water resources following rain.

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

EBS Ecology was engaged by Neoen to prepare a Native Vegetation Clearance data report for the GN1 Project. A draft application has been submitted to the South Australian Native Vegetation Clearance Branch to enable progression of the Development Approval process at a State Level. Based on outcomes of final landholder negotiations and further application of the mitigation hierarchy to minimise impacts to native vegetation, a final Clearance Data Report will be submitted at a later date.

As on ground surveys have not been undertaken in the OTL-Alt, the NV Data report relates only to the WF and OTL-Primary. A total clearance area of up to 595.78 ha of native vegetation is proposed to be impacted for the Project, noting that this is an upper limit intended to be reduced through further design refinements and construction methods and this value also includes allowance for area subject to upper canopy trimming in the OTL outer maintenance zone. Clearance is predominantly within Grassland vegetation, which has a long history of agricultural grazing. Quality and condition of the grassland varies considerably across the Project Area, however, where native species were estimated to cover more than 5% of any given area, it was considered to constitute native vegetation. Areas with less than 5% native species cover have been designated as exotic grassland or otherwise cropping land.

Vegetation was surveyed according to methodology accepted under State legislation *Native Vegetation Act 1991* (NV Act) and NV Regulations. A total of 75 sites were surveyed according to Bushland Assessment Methodology (BAM) across the GNREF in order to gain a thorough coverage of the site, and to determine variations in vegetation condition and composition. The following vegetation association (VA) descriptions and their associated clearance area are listed below, and described in detail in Att8_GN1_EcoAssessment, Section 5.1.1 and 5.1.2, pp 61 – 91 (Att2_GN1_Map Book, Maps 9 - 12):

- VA1: *Eucalyptus porosa* plus/- *E. gracilis* / *E. brachycalyx* Woodland over Chenopods (Impact: 26.94 ha WF, 1.49 ha OTL Primary).
- VA2: Smooth-barked Mixed Mallee *(E. gracilis* plus/- *E. brachycalyx* plus/- *E. dumosa* plus/- *E. leptophylla* plus/- *E. socialis*) over Chenopods (Impact: 7.93 ha WF).
- VA3: *E. porosa* Woodland over *Senna artemisioides* sp. *coriacea* and *Sclerophyllous* Shrubs (Impact: 2.13 ha in WF).
- VA4: *Acacia pycnantha* Tall Shrubland plus/- *Austrostipa* spp. plus/- *Cymbopogon ambiguus* in rocky creek (0.04 ha WF).
- VA5: *Maireana aphylla* Shrubland over native and exotic grasses (No impact).
- VA6: *Maireana aphylla* Shrubland over native and exotic grasses.
- VA7: *Acacia spilleriana* Shrubland (No impact).
- VA8: *E. leucoxylon* ssp. *pruinosa* plus/- *E. odorata* (Peppermint Box) Very Open Woodland over exotic grasses (No impact).
- VA12: Mixed Chenopod Shrubland of *Maireana pyramidata* and *Atriplex stipitata* over native and exotic grasses plus/- *Lomandra* spp. (Impact: 5.11 ha WF, 40.20 ha OTL, 16.65 ha OTL-Alt).
- VA13: *Hakea leucoptera* ssp. *leucoptera* Shrubland (No impact).
- VA14: *Eucalyptus camaldulensis* Riparian Woodland over reeds and sedges (0.11 ha WF, 0.63 ha OTL).
- VA15: *Juncus* spp. Sedgeland plus/- *Typha domingensis* plus/- *Phragmites australis* associated with minor drainage lines and creeks (0.05 ha WF).
- VA16: *Acacia nyssophylla* shrubland (0.96 ha OTL).
- VA17: *Cryptandra* spp. Shrubland plus/- *Lomandra* spp. (No impact).
- VA18: Mixed Mallee (*E. oleosa* dominant) over Chenopods and native grass (31.92 ha OTL).

- VA19: *Dodonaea lobulata* Shrubland plus/- Scattered Mallee *Eucalyptus* spp. (9.21 ha OTL).
- VA20: *Alectryon oleifolius* Low Woodland over Chenopods (1.62 ha OTL).
- VA21: *Senna* spp. Shrubland (0.11 ha OTL).
- VA22: *Scaevola spinescens* Shrubland over Grass (0.77 ha OTL).
- VA23: *Nitraria billardiera* Shrubland (14.74 ha OTL).

Vegetation within the Project Area comprises a large contiguous patchwork of native vegetation bounding Goyder's Line, which demarcates the portion of the state where rainfall is unpredictable, and land therefore deemed unsuitable for cropping. As such, there are very few gaps in native vegetation coverage across the Project Area, and remnant woodland remains. It is likely that some areas of grassland and shrubland historically contained mallee vegetation, which has been cleared, however grazing has been the primary impact in this location, including of sheep and cattle as well as unmanaged populations of feral goats and native herbivores such as kangaroos. Grazing impacts vary across the site, and include species form and composition changes, limited regeneration of woody shrubs and trees and bare patches from resting animals.

3.3 Heritage

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

No Commonwealth Heritage places owned or controlled by the Australian Government are present in or nearby the Project Area.

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

Neoen has been engaging with the Ngadjuri Nation for many years spanning back to its Hornsdale Wind Farms and most recently with the Goyder South Renewable Energy Facility (currently in construction). Neoen also engaged Independent Heritage Consultants (IHC) to undertake Aboriginal and historic heritage desktop assessments during the planning process to develop a desktop assessment. An ethnographic survey and report was completed in May 2024 which discussed the heritage values that apply to the project area. A redacted version (out of an abundance of caution) of this report is attached (Att9_GNREF_Cultural Heritage_Redacted).

GN1 predominantly falls within the traditional lands of the Ngadjuri Nation, with the southern end of the OTL and Bundey substation area within the traditional lands of the First People of the River Murray and Mallee Region. There are limited publications available relating to specific ethno-history of these Traditional Owner groups which may be due in part to European interaction and subsequent cultural losses. However, the Ngadjuri Nation are known to have lived a rich ceremonial life and to have been bound by complex social and marriage laws. The First People of the River Murray & Mallee Region are known to have a strong connection to the River Murray, or Murrundi, which is fundamental to their culture and beliefs.

Preliminary studies found two recorded Aboriginal heritage sites nearby the Project Area which have been enclosed within exclusion areas. Five other sites were identified during the ethnographic survey, however none of these fall within the proposed disturbance footprint. The OTL does not intersect any known Aboriginal heritage sites. Considering the Aboriginal heritage context for the area, the environmental landforms and the level of previous development, it was assessed as a low risk of works encountering unknown Aboriginal sites and objects in previously developed soils, and a moderate risk in undeveloped soils.

The OTL crosses through two native title claim areas, the Ngadjuri Nation #2 (SAD84/2022) Claim (determined) in the north and the First Peoples of the River Murray and Mallee Region #2 (SAD184/2019).

There are no current Indigenous Land Use Agreements (ILUA) for the Project Area.

In South Australia, Aboriginal heritage is protected by the *Aboriginal Heritage Act 1988.* Approval will be required if any sites, objects or remains are uncovered prior to, or during the construction or operation of GN1 under South Australian legislation.

To manage the projects potential risk to Aboriginal Heritage, Neoen commits to:

- Engage an archaeologist to carry out a site avoidance survey in any remaining unsurveyed Development Footprint to identify and record any unknown archaeological sites that may be present.
- Prepare and implement a Cultural Heritage Management Plan in collaboration with the Traditional Owners.
- Avoid any known archaeological sites through detailed design and micro-siting.
- Ongoing consultation with Traditional Owners to mitigate against inadvertently impacting an ethnographic site.
- Stipulate requirements for all contractors and workers in the Construction and Operation Environmental Management Plan (COEMP) to ensure all personnel are aware of areas of heritage value and how to manage them.
- Implement a site discovery procedure through the COEMP.
- Engage an archaeologist to be on call and assist in identifying any heritage items found during construction works.

3.4 Hydrology

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

The south-western extent of the GNREF is within the Upper Burra Creek surface water catchment area. No large natural water bodies occur in the GNREF however numerous constructed farm dams occur alongside an intersecting network of small named and unnamed ephemeral watercourses, fed by runoff from surrounding hills and ranges. Watercourses and wetlands intersecting each Project Area element are listed below and described in more detail in Att8_GN1_EcoAssessment Section 4.1.5 pp. 43-45:

- Wind Farm – Newikie Creek, North Wiry Creek, South Wiry Creek, Wandalla Creek, Baldina Creek.
- OTL Primary – Wandalla Creek, Baldina Creek, Stone Chimney Creek, Burra Creek.
- OTL-Alt – Baldina Creek, Burra Creek, Gordon Lagoon.

Most watercourses within the GN1, except for Burra Creek, are relatively small, eroded creeks or drainage lines which do not hold permanent water and are likely to have degraded vegetation, impacted by erosion and long-term agricultural practices. Several named creeks have Environment Protection Authority (EPA) water monitoring sites, with characteristics described further below.

Burra Creek is a large stream which rises north of Burra and flows in a south easterly direction, connecting to the Murray River, east of Morgan. Flows disappear underground in the lower reaches, except during flooding. Monitoring in 2010 showed it to be in fair condition, with evidence of human disturbance such as nutrient enrichment and fine sediment deposition, however, some areas of intact riparian vegetation still occur (EPA, 2024).

Baldina Creek is a small stream which rises north of Burra and drains in an easterly direction through Red Banks CP, where it includes several permanent springs, and then disappears underground into surrounding mallee vegetation. It is generally in poor condition, typically dry except following rainfall, with evidence of human disturbance, lack of remnant vegetation and impacts from livestock and erosion (EPA, 2024).

Stone Chimney Creek is a small stream which rises east of Burra and drains in an easterly direction through Red Banks CP, before disappearing underground in the mallee. The creek is in fair condition, typically dry, retaining some riparian vegetation, but showing signs of erosion, stock damage and weed encroachment (EPA, 2024).

No wetlands occur within the Search Area. Waterbodies are limited to small farm dams, and one large (~160 ha) waterbody named Gordon Lagoon, which occurs approximately 1.4 kilometres west of the OTL-Alt route. NatureMaps lists this waterbody as a ‘mainly dry lake’.

A flood model has also been completed for the site (Att10_GNREF_Flood Modelling), which has and will continue to be used to inform civil design as it progresses.

4. Impacts and mitigation

4.1 Impact details

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

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	Yes	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes

EPBC Act section	Controlling provision	Impacted	Reviewed
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

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

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

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

—

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

No

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

No World Heritage Properties were identified within the PMST report generated on 30 April 2024. A review of the World Heritage Properties was undertaken using Australia's World Heritage List (DCCEEW, 2024). It found the nearest World Heritage Site to the Project is the Willandra Lakes Region in NSW, located approximately 325 km to the east of the GN1 Project Area. Due to the distance between the proposed Project and the nearest World Heritage Place, it is considered that there is no potential impact to this MNES (Att3_GN1_SIA Section 5.3 pp 86).

Neoen acknowledges that Burra aspires to receive a World Heritage listing for their Australian Cornish Mining Site (currently registered as a National Heritage Place), which has been taken into consideration through discussions with Goyder Regional Council and expert consultants, including implementation of setbacks to reduce the potential visual impact.

4.1.2 National Heritage

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

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

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

Direct impact	Indirect impact	National heritage
No	Yes	Australian Cornish Mining Sites: Burra

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

Yes

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

The proposed Goyder North Renewable Energy Facility (GNREF) is located approximately 5.5 kilometers north-east from the center of Burra and approximately 2.7 kilometers from the most northern point of the National Heritage Listing (NHL) for the Australian Cornish Mining Sites (Burra). The proposed project is not located within the NHL town of Burra. Therefore, there is no direct physical impact to the NHL values for the Australian Cornish Mining Sites (Burra).

The Australian Cornish Mining Sites (Burra) is listed for criteria A (events, processes) and F (creative or technical achievement). The views from Burra are not explicitly cited in the NHL criteria.

The action will have an indirect impact on the NHL values. Biosis (2024) undertook a Heritage Impact Assessment (Att11_GNREF_Heritage Impact Assessment, Section 6.2, page 24-25 which draws on Att12_GNREF_Visual Impact Assessment) as has assessed the proposed GNREF project to have a moderate indirect visual impact. The distant rural setting would be altered to the north-east by the proposed works as they are a new element in the currently empty horizon. However, the altering of the distant views to the north-east from the mine site would not impact on the understanding of the revolutionary mining technology.

Note that Att11_GN1_Heritage Impact Assessment and Att12_GNREF_Visual Impact Assessment incorporate assessments from the broader Goyder North Renewable Energy Facility (GNREF) rather than just focusing on GN1 only. These assessments are therefore more comprehensive than what is required for this GN1 Project but remain valid.

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

No

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

As the views from Burra are not specifically cited in the NHL criteria, the proposed Goyder North project would not have a significant impact as defined by the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The proposed project will not have a substantive impact on the National Heritage values of the Australian Cornish Mining Sites (Burra).

Further detail is provided in Att11_GNREF_Heritage Impact Assessment, Section 6.2, page 25-29 and Section 8, page 45-46.

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

No

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

The proposed Goyder North Project would not have a significant impact as defined by the EPBC Act 1999 given the views from Burra are not specifically cited in the NHL criteria. The proposed project will not have a substantive impact on the National Heritage values of the Australian Cornish Minnig Sites (Burra).

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

As outlined below and in further detail in the HIA (Att11_GNREF_Heritage Impact Assessment, Section 7, page 33-44), a reduction of the number of turbines has already aided in decreasing the potential for adverse impacts on the heritage values of Burra.

Five WTGs identified as some of the highest performing (in terms of wind resource) locations on the site were removed from the initial layouts in late 2022 based on early advice from Biosis and GBD Landscape Architects, even though they were compliant with proposed setbacks. Set upon the ridge closest to the

Barrier Highway and Burra Township it was deemed that they provided an unacceptable visual impact to the area, in regard to Burra National Heritage Site and an unofficial state heritage site which draws some tourism (Midnight Oil House).

In early 2024, an additional three WTGs were subsequently removed from the layout to reduce visual impact from crowding of WTGs visible from the Burra Mine site. This came as a result of further consultation between Neoen, the Goyder Regional Council and their World Heritage consultant, Biosis, GBD Landscape Architects, and Swanbury-Penglase (author of the Australian Cornish Mining Sites: Burra Conservation Management Plan (2021)). Refer Att11_GNREF_Heritage Impact Assessment and Att12_GNREF_Visual Impact Assessment.

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

No offsets have been proposed given that the views from Burra are not specifically cited in the NHL criteria and the proposed Goyder North Project would not have a significant impact as defined by the EPBC Act 1999.

4.1.3 Ramsar Wetland

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

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

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

Direct impact	Indirect impact	Ramsar wetland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

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

No

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

The Coorong, and Lakes Alexandrina and Albert Wetland was identified within the PMST results as being a Wetland of National Importance, although its proximity to the Search Area was described as 150 – 200 km away, and therefore no direct impacts are likely (Att3_GN1_SIA Section 5.1 pp. 85).

The Coorong and Lakes Alexandrina and Albert Ramsar site is located at the downstream end of the Murray River, in south-east South Australia. The Murray River flows into Lake Alexandrina and out to the Southern Ocean through the Murray Mouth Estuary. Lake Albert is a terminal lake connected to Lake Alexandrina by a narrow channel. Its primary source of water is from Lake Alexandrina, supplemented by groundwater discharge and surface water runoff.

Burra Creek is a waterway that connects to the Murray River near Morgan, however although the OTL and OTL-Alt intersect the waterway, the Project is not expected to indirectly impact water flows or quality. A COEMP will address measures to ensure that pollutants (i.e. building / construction waste, soil or sediment, rubbish / hard waste) from construction and operation of the OTL do not move offsite, a CEOMP will address erosion, sediment and drainage control management practices. Therefore, the Coorong, and Lakes Alexandrina and Albert Wetland will not be impacted upon by any proposed development for GN1.

4.1.4 Threatened Species and Ecological Communities

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

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

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

Threatened species

Direct impact	Indirect impact	Species	Common name
Yes	Yes	Acacia glandulicarpa	Hairy-pod Wattle
Yes	Yes	Acacia spilleriana	Spiller's Wattle
Yes	Yes	Aphelocephala leucopsis	Southern Whiteface
Yes	Yes	Aprasia pseudopulchella	Flinders Ranges Worm-lizard
No	No	Caladenia tensa	Greencomb Spider-orchid, Rigid Spider-orchid
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
Yes	Yes	Codonocarpus pyramidalis	Slender Bell-fruit, Camel Poison
Yes	Yes	Dodonaea procumbens	Trailing Hop-bush
Yes	Yes	Dodonaea subglandulifera	Peep Hill Hop-bush

Direct impact	Indirect impact	Species	Common name
No	No	Falco hypoleucos	Grey Falcon
No	No	Galaxias rostratus	Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Leipoa ocellata	Malleefowl
No	No	Litoria raniformis	Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog
No	No	Lophochroa leadbeateri leadbeateri	Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo
Yes	Yes	Melanodryas cucullata cucullata	South-eastern Hooded Robin, Hooded Robin (south-eastern)
Yes	Yes	Neophema chrysostoma	Blue-winged Parrot
No	No	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
Yes	Yes	Olearia pannosa subsp. pannosa	Silver Daisy-bush, Silver-leaved Daisy, Velvet Daisy-bush
No	No	Pedionomus torquatus	Plains-wanderer
No	No	Pterostylis xerophila	Desert Greenhood
No	No	Rostratula australis	Australian Painted Snipe
Yes	Yes	Senecio megaglossus	Superb Groundsel
Yes	Yes	Stagonopleura guttata	Diamond Firetail
No	No	Swainsona pyrophila	Yellow Swainson-pea
Yes	Yes	Tiliqua adelaidensis	Pygmy Blue-tongue Lizard, Adelaide Blue-tongue Lizard

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions
Yes	Yes	Iron-grass Natural Temperate Grassland of South Australia

Direct impact	Indirect impact	Ecological community
Yes	Yes	Mallee Bird Community of the Murray Darling Depression Bioregion
No	No	Natural Damp Grassland of the Victorian Coastal Plains
No	No	Peppermint Box (Eucalyptus odorata) Grassy Woodland of South Australia
No	No	Subtropical and Temperate Coastal Saltmarsh

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

Yes

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

Potential for direct and indirect impacts for affected MNES are presented below. Att8_GN1_EcoAssessment provides detailed information on potential for impacts to MNES and Att3_GN1_SIA Section 4 pp. 27 – 83 provides a significant impact assessment including further justification on MNES which are considered not to be impacted by the Project. Att3_GN1_SIA provides a summary of this assessment in Section 6 and Table 6.

Iron-grass Natural Temperate Grassland (INTG) Threatened Ecological Community

All Lomandra Grassland in the Project Area has conservatively been mapped as INTG, though it is noted some areas may not qualify as the TEC. The Disturbance Footprint (i.e. direct impact) associated with the Project is approximately 29.64 ha (11.93 ha of permanent disturbance and 17.71 ha of temporary disturbance) of Lomandra Grassland representing approximately 1.83% of the total area of INTG mapped in the broader GN1 Project Area (1,616.06 ha). Approximately 251.67 ha occurs within the Development Envelope, for which other indirect impacts may include increased likelihood of weed introduction / spread due to increased traffic during construction and presence of disturbed soil, altered hydrology and / or erosion caused by changes to landform for infrastructure, and increased dust deposition on adjacent INTG.

Mallee Bird Community (MBC) of the Murray Darling Depression (MDD) Bioregion Threatened Ecological Community

EBS targeted surveys and desktop assessment found that all mallee vegetation intersecting with the OTL and OTL-Alt within the MDD Bioregion is considered MBC TEC. Up to 2.13 ha along the OTL is proposed to be directly impacted in the Disturbance Footprint, or up to 30.66 ha of the OTL-Alt. Indirect impacts may include disturbance to bird activity during construction, potential increased access for invasive predators in areas where few existing tracks occur, and potential degradation of surrounding mallee vegetation due to weed incursion or dust deposition.

For:

- *Acacia glandulicarpa* (Hairy-pod Wattle)
- *Codonocarpus pyramidalis* (Slender Bell-fruit, Camel Poison)
- *Dodonaea subglandulifera* (Peep Hill Hop-bush)
- *Olearia pannosa* subsp. *pannosa* (Silver Daisy-bush, Silver-leaved Daisy, Velvet Daisy-bush)
- *Senecio megaglossus* (Superb Groundsel)

Despite comprehensive vegetation surveys undertaken within the WF and OTL, the species have not been recorded. Potentially suitable habitat occurs in unsurveyed portions of the Development Envelope, and along the OTL-Alt. Direct impacts may occur to currently undetected individuals or populations if the Disturbance Footprint changes from its current position and / or the OTL-Alt is selected as the preferred OTL option. Indirect impacts may include reduction in habitat quality as a result of weed incursion, erosion, sediment deposition or altered hydrology.

***Acacia spilleriana* (Spiller's Wattle)**

A targeted threatened species survey was undertaken by EBS to specifically locate any *Acacia spilleriana* within suitable habitat within the Disturbance Footprint. Within the GN1 Project Area (excluding OTL-Alt), six individual planted specimens were recorded on Gum Hill Road within the Development Envelope, and one in Burra Creek outside of the Development Envelope east of Sutherland Road. Direct impacts may occur to up to six known individuals and currently undetected individuals or populations if the Disturbance Footprint changes from its current position and / or the OTL-Alt is selected as the preferred OTL option. Indirect impacts may include reduction in habitat quality as a result of weed incursion, erosion, sediment deposition or altered hydrology.

***Dodonaea procumbens* (Trailing Hop-bush)**

A targeted threatened species survey was undertaken by EBS to locate any *Dodonaea procumbens* within the Disturbance Footprint. To date, the species has been recorded solely within the Project Area in Mokota Conservation Park (including two historical records), where it is protected from herbivore grazing by fencing. The species has not been recorded within the Disturbance Footprint of the GN1 Project Area. Neoen have applied an avoidance buffer around all conservation areas, and therefore, although Mokota CP adjoins the Disturbance Footprint it has been designated as an exclusion area. Potentially suitable habitat occurs in unsurveyed areas of the Development Envelope (i.e. in Grassland or Lomandra Grassland) including the OTL-Alt. As the species is known to occur within the GN1 Project Area, and given its small size, susceptibility to grazing and low visibility, it is considered possible that the species occurs. Direct impacts may occur to unidentified individuals which have not been detected in the Disturbance Footprint, while indirect impacts may occur to existing known populations through weed incursion, erosion, sediment deposition or altered hydrology.

***Aphelocephala leucopsis* (Southern Whiteface)**

Within the GN1 Project Area, the species has been previously recorded in Mallee Woodlands associated with fringing Chenopod Shrublands in the eastern extent of the GN1 Project Area and along the OTL. Direct impacts to suitable habitat include an estimated potential impact area of 45.90 ha in the WF, 48.92 ha along the OTL, and 33.20 ha along the OTL-Alt, (with a maximum combined total of either 94.82 ha for WF plus OTL, or 79.10 ha for WF plus OTL-Alt).

***Melanodryas cucullata cucullata* (South-eastern Hooded Robin)**

The species has been previously recorded opportunistically by EBS in the far south of the OTL Primary. The Disturbance Footprint associated with the Project intersects with suitable habitat for the South-eastern Hooded Robin across the GN1 Project Area, resulting in an estimated potential direct impact area of 39.34 ha in the WF, 45.97 ha along the OTL alignment, and 33.17 ha along the OTL-Alt alignment respectively.

***Neophema chrysostoma* (Blue-winged Parrot)**

The Disturbance Footprint associated with the Project intersects with potentially suitable foraging habitat for the Blue-winged Parrot across the GN1 Project Area, resulting in an estimated potential direct impact area (to foraging habitat only) of 43.27 ha in the WF, 74.26 ha along the OTL alignment, and 115.67 ha along the OTL-ALT alignment respectively.

***Stagonopleura guttata* (Diamond Firetail)**

The species has been recorded opportunistically by EBS outside of the Project Area, near the southern end of the OTL Primary and sparse historical records also occur. The Disturbance Footprint associated with the Project may impact upon potentially suitable habitat for the Diamond Firetail across the GN1 Project Area, resulting in an estimated maximum potential direct impact area of 31.52 ha in the WF, 35.76 ha along the OTL, and 31.48 ha along the OTL-Alt alignment respectively (i.e. maximum estimated area of 67.28 ha for WF plus OTL, or 63 ha for WF plus OTL-Alt).

Indirect impacts to Southern Whiteface, Hooded Robin, Blue-winged Parrot and Diamond Firetail may potentially result from long term modification to existing occupied areas through weed incursion, altered hydrology and sediment deposition, as well as through an increase in regular human disturbance during operation of the wind farm. Some areas of OTL and OTL-Alt are currently isolated with a lack of existing road and track networks. Increased movement of introduced predators may also constitute an indirect impact of the OTL construction in these undeveloped areas, where suitable habitat occurs. Additionally, maintenance works (i.e. trimming of tall vegetation) along the OTL may impact breeding activities and success of relevant species (i.e. excluding Blue-winged Parrot which does not breed in this location).

***Aprasia pseudopulchella* (Flinders Ranges Worm-lizard)**

The Disturbance Footprint results in an estimated maximum direct impact area of 416.80 ha in the WF Area, 46.90 ha along the OTL alignment, and 31.71 ha along the OTL-ALT alignment respectively, with impacts predominantly associated with VA11. The number of individuals impacted in this area is unknown, however, given their small size it is assumed the ability to mobilise away from any construction activities is limited. The distribution of this species is likely to be significantly more limited than the above estimates suggest due to the requirement for a rocky surface layer, which is not present across all areas of each of the suitable vegetation associations. Indirect impacts may include noise and vibration disturbance, degradation of habitat from weed incursion.

***Tiliqua adelaidensis* (Pygmy Blue-tongue Lizard, Adelaide Blue-tongue Lizard) (PBTL)**

Targeted surveys identified 136 individuals in the Disturbance Footprint and an additional 16 in small areas of the Development Envelope. A maximum of 459.14 ha (based on the GN1 plus OTL) is inside the GN1 Disturbance Footprint and potentially impacted by the Project. Within this area, an estimated maximum of 298 individual PBTL may be directly impacted. Indirect impacts include noise, vibration and light disturbance to foraging and breeding activities during construction and operation, degradation of habitat from incursion of weeds, and potential sediment deposition, erosion and hydrology changes from built landscapes.

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

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

For further detail, refer to Att3_GN1_SIA Sections ES2, 4.5, 4.6 and 6 and Att8_GN1_EcoAssessment, Sections 4.3, 5 and 6.

Iron-grass Natural Temperate Grassland

Residual direct impacts for INTG includes clearance of up to 29.64 ha (11.93 ha permanent, 17.71 ha temporary). This represents up to 0.59% of the current estimated Area of Occupancy (5,000 to 50,000 ha) for the TEC, although it should be noted that not all Lomandra Grassland proposed to be cleared may constitute the TEC and therefore the actual impact is likely to be less significant. Three impact criteria are triggered for this MNES principally as a result of native vegetation clearance: a reduction in the extent of the

TEC, fragmentation of the TEC, and adverse impacts to habitat critical to the survival of the TEC. Therefore, **significant impacts are considered possible** to this TEC. Residual indirect impacts to undisturbed INTG are mitigated (section 4.1.4.10). As such, these impacts would not be expected to trigger other significant impact criteria for TECs, such as modify or destroy abiotic factors necessary for a TECs survival, cause a substantial change in species composition of an occurrence of the TEC, nor cause a substantial reduction in the quality or integrity of an occurrence of the TEC, nor interfere with the recovery of the TEC.

Mallee Bird Community of the Murray Darling Depression Bioregion

Residual direct impacts for MBC include clearance of a maximum of 2.13 ha along the OTL-Primary and up to 30.66 ha along the OTL-Alt. Along the OTL-Primary, no significant impact is expected, due to the small, linear and degraded nature of the patches proposed to be impacted to enable the OTL to cross rods for access to the existing Bundey Substation. Along the OTL-Alt, MBC covers a larger contiguous section of the alignment and therefore avoidance was less feasible in design. Clearance of up to 30.66 ha of MBC triggers three significant impact criteria: a reduction in the extent of the TEC, fragmentation of the TEC, and adverse impacts to habitat critical to the survival of the TEC. A **significant impact is considered possible** for this TEC, if OTL-Alt is selected.

Threatened Flora

A **significant direct impact is considered possible** for the Threatened Flora species listed below, despite no individuals or populations (including identified important populations or critical habitat) currently known to occur within the Development Envelope or Project Area. The OTL-Alt has not been surveyed in detail, and unsurveyed areas of potentially suitable habitat for each species occur in the Development Envelope. As such, any changes to design, or selection of the OTL-Alt option, has an unknown potential to impact individuals or populations of these species:

- *Acacia glandulicarpa* (Hairy-pod Wattle);
- *Codonocarpus pyramidalis* (Slender Bell-fruit, Camel Poison);
- *Dodonaea subglandulifera* (Peep Hill Hop-bush);
- *Olearia pannosa* subsp. *pannosa* (Silver Daisy-bush, Silver-leaved Daisy, Velvet Daisy-bush);
- *Senecio megaglossus* (Superb Groundsel).

A significant indirect impact is considered possible for the Threatened Flora species listed below which have known populations within the Development Envelope, close to the Disturbance Footprint:

- *Acacia spilleriana* (Spiller's Wattle); and
- *Dodonaea procumbens* (Trailing Hop-bush).

Additionally, a significant direct impact may occur if any new individuals or populations of these species are subsequently detected in the Disturbance Footprint.

Southern Whiteface (*Aphelocephala leucopsis*)

Potential direct impacts to suitable habitat for Southern Whiteface result from clearance of vegetation, including 45.90 ha in the WF, 48.92 ha along the OTL, and 33.20 ha along the OTL-Alt. No important populations of Southern Whiteface are identified in the Conservation Advice. Given the widespread and continuous distribution of the records across the Search Area (Att8_GN1_Eco Assessment, Figure 36) it is unlikely records within the Project Area represent important populations of the species. The action triggers one significant impact criteria through adversely affecting habitat deemed critical to the survival of the species. However, habitat deemed critical to the survival of the species includes a broad range of vegetation community types which are widespread regionally around the Project Area. Removal of up to 94.82 ha of habitat within small linear strips is not considered to represent a loss of habitat which is critical to the survival of the species. The widespread occurrence of the Southern Whiteface in the Project Area, along with its extensive distribution across southern Australia, along with clearance which is patchily distributed in small and / or narrow linear patches across a larger area of contiguous intact critical habitat,

results in **significant impacts being considered possible,** although unlikely**.** The clearance of up to 94.82 ha of habitat considered critical to the survival of the species represents a marginal reduction (0.0013%) in the Area of Occupancy (70-80,000 km2) of the species.

Melanodryas cucullata cucullata **(South-eastern Hooded Robin)**

An estimated potential direct impact to suitable habitat (which meets criteria for habitat critical to the survival of the species) for the Hooded Robin resulting from clearance of vegetation includes 9.34 ha in the WF (predominantly associated with VA1), 45.97 ha along the OTL alignment (predominantly associated with VA18), and 33.17 ha along the OTL-Alt alignment (predominantly associated with Mallee Forest and Woodland). No important populations are defined in the Conservation Advice. The action triggers two criteria including reducing the area of occupancy for the species and impacting habitat critical for the survival of the species. However, as the proposed clearance is patchily distributed in small and / or narrow linear patches across a larger area of contiguous intact critical habitat, **significant impacts are considered possible,** although unlikely. The clearance of up to 85.31 ha of habitat considered critical to the survival of the species represents a marginal reduction (maximum) (0.0053%) in the listed Area of Occupancy (16,000-50,000 km2) of the species.

Neophema chrysostoma **(Blue-winged Parrot)**

The species has not been recorded in the Project Area, and only one historical (2001) record occurs within Red Banks Conservation Park, adjacent the OTL-Alt. Habitat listed as critical to the survival of the species is broad, and as such, this criteria is triggered for the species. However, no breeding habitat, nor preferred wetland fringe or coastal foraging habitats occur in the Project Area. A maximum of 158.94 ha of potentially suitable foraging habitat is proposed to be impacted, representing a marginal (0.0010%) in the listed Area of Occupancy (155,000– 190,000 km2). Additionally, as the proposed clearance is patchily distributed in small and / or narrow linear patches across a larger area of contiguous intact critical habitat, **significant impacts are considered unlikely**.

Stagonopleura guttata **(Diamond Firetail)**

Direct impact as a result of vegetation clearance for the proposed Project includes an maximum potential impact area of 31.52 ha in the WF, 35.76 ha along the OTL alignment, and 31.48 ha along the OTL-Alt, though it is noted that these estimates are conservative, as the majority of this area does not match the structural description for critical habitat, and the species has not been reported across this entire distribution. A maximum of 67.28 ha of potentially suitable habitat is proposed to be impacted, representing a marginal (0.0054%) reduction in the listed Area of Occupancy (12,500-50000 km2). As the proposed clearance is patchily distributed in small and / or narrow linear patches across a larger area of contiguous intact critical habitat, **significant impacts are considered unlikely**.

Aprasia pseudopulchella **(FIinders Ranges Worm-lizard (FRWL))**

As the FRWL is small, cryptic and not well surveyed, little information is published on the species abundance or distribution. The Conservation Advice does not list any area of critical habitat, nor any important populations. Historical records are predominantly associated with targeted survey effort for sympatric species Pygmy Blue-tongue Lizard, however, it is likely they are more abundant and widespread that records suggest, and the species is not listed as threatened under South Australian legislation (*National Parks and Wildlife Act 1974*). Rocky surfaces have not been mapped in the Project Area, so habitat disturbance areas are based on associated vegetation, resulting in an estimated potential maximum impact area of 416.80 ha in the GN1 Project Area, 46.28 ha along the OTL, and 31.71 ha along the OTL-Alt. Given the patchy and narrow / linear nature of the proposed Project, FRWL which may occur in the disturbance footprint are likely to represent small portions of much larger and / or continuous populations and therefore**, significant impacts are considered unlikely** to this species.

Tiliqua adelaidensis **(Pygmy Blue-tongue Lizard)**

Based on the density of PBTL recorded in each vegetation association, and the approximate search area, an estimated maximum number of approximately 298 individuals may be impacted within the Disturbance Footprint. Further, up to 459.14 ha constitutes suitable habitat, critical to the survival of the species. This represents 0.91% of estimated Area of Occupancy (500km2). Criteria triggered include: leading to leading to a long-term decrease in the size of a population, reducing the area of occupancy of a population, fragmenting a population into two or more populations, adversely affecting habitat critical to the survival of a species, disrupting the breeding cycle of a population, modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, and interfere with the recovery of a species. **Significant impacts are considered likely** for this species.

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

Yes

4.1.4.8 Please elaborate why you think your proposed action is a controlled action. *

The proposed action is considered likely to have a significant residual direct and / or indirect impacts on up to three MNES (Att3_GN1_SIA, Section 6 and Table 6.1):

- Iron-grass Natural Temperate Grassland by causing a reduction in the extent of the TEC (~29ha), fragmentation of the TEC, and adverse impacts to habitat critical to the survival of the TEC.
- Mallee Bird Community of the Murray Darling Depression Bioregion (present along the OTL-Alt only) by causing a reduction in the extent of the TEC (up to 30.66 ha for OTL-Alt), fragmentation of the TEC, and adverse impacts to habitat listed as critical to the survival of the TEC.
- *Tiliqua adelaidensis* (Pygmy Blue-tongue Lizard) by potentially leading to leading to a long-term decrease in the size of a population (estimated as maximum 298 individuals, however likely to be less based on non-uniform distribution), reducing the area of occupancy of a population (by impacting up to 459 ha of suitable habitat), fragmenting a population into two or more populations, adversely affecting habitat (up to 459 ha) critical to the survival of a species, disrupting the breeding cycle of a population, modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, and interfere with the recovery of a species. Noting that some of these potential impacts are under-researched.

The proposed action may potentially also result in a significant residual direct or indirect impact to Southern Whiteface (*Aphelocephala leucopis*) and South-eastern Hooded Robin (*Melanodryas cucullata cucullata*) as result of clearance of habitat deemed as critical to the survival for the species, noting that the Conservation Advice for the Southern Whiteface suggests broad range of widespread habitat types are deemed to represent critical habitat.

Additionally, a controlled action outcome is warranted for up to seven flora species where significant impacts are possible if populations are identified during vegetation survey works along the OTL-Alt. The controlled action acknowledges that further assessment of these species may be required if the Project persists with the OTL-Alt transmission line. The species in question are:

- *Acacia spilleriana* (Spiller's Wattle);
- *Acacia glandulicarpa* (Hairy-pod Wattle);
- *Codonocarpus pyramidalis* (Slender Bell-fruit, Camel Poison);
- *Dodonaea subglandulifera* (Peep Hill Hop-bush);
- *Olearia pannosa* subsp. *pannosa* (Silver Daisy-bush);
- *Senecio megaglossus* (Superb Groundsel); and
- *Dodonaea procumbens* (Trailing Hop-bush).

It is noted that Neoen commit to detailed on-ground survey of the Disturbance Footprint and aim to microsite any infrastructure around subsequently identified individuals or populations of EPBC listed flora where practicable.

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

Ecological surveys were initially used to inform project layout through avoiding identified ecological constraints. Neoen have since conducted more extensive surveying and assessment of the Project Area and have continued to apply the Mitigation Hierarchy throughout design refinement, to avoid impacts to areas of MNES and ecological value. Neoen is committed to ongoing application of the Mitigation Hierarchy in the coming months, through detailed design and construction planning phases to further reduce the current upper limit estimate of disturbance and impacts as summarised in this EPBC Referral submission. Refer to Section 5 of Att1_Goyder North Stage 1 Project Description (page 23-24) for more information.

Iron-grass Natural Temperate Grassland TEC

Assessment of Lomandra Grassland is conservative in the first instance, as all vegetation comprising Lomandra Grassland (VA6) is being considered as the TEC, though it's likely that some areas are unlikely to meet condition criteria. At the time of the survey, EBS determined the site to be of poor condition (lack of rainfall and heavy grazing) and not likely to adequately represent the true condition of sites.

Avoidance has been incorporated into the design phase of the Project as follows:

- WTG locations have been sited to avoid Lomandra Grassland. Reducing the number of WTGs impacting INTG areas from 41 to only three encroaching on the edge of INTG areas over several design iterations.
- Where possible, access tracks are aligned to follow existing farm tracks and to cross large patches of Lomandra Grassland at the narrowest practical point (i.e. least impact).

Minimisation / mitigation will also include:

- Designating avoidance areas for any Lomandra Grassland within the Development Envelope.
- Installation of physical no-go zone barriers to ensure no off-target clearance during construction.
- Implementation of a COEMP and associated construction management measures and targeted management plans (Att13_GN1_INTG Management Plan_Draft) to ensure that infrastructure design, construction and operation does not lead to adverse impacts outside of the direct clearance area, such as weed incursion, erosion, sedimentation, altered hydrology and dust deposition.
- Implementation of a Vegetation Management Plan to address rehabilitation in areas of temporary disturbance in INTG, with an aim to return the condition to like for like or better to the original condition where practicable.

Mallee Bird Community (MBC) TEC

The OTL, Bundey Substation Expansion and Access roads have been re-routed to avoid higher quality mallee vegetation, and MNES including MBC TEC. The only remaining impact to MBC TEC is from crossing several strips of vegetation across narrow road corridors, required to access Bundey Substation. Further, transmission towers are located approximately every 200-400m, which means there is further flexibility to enable siting of towers in such a way that avoids particular areas. Neoen is committed to locating towers to further avoid ecological features as much as reasonably practical during the detailed design phase and the Development Envelope is intended to provide flexibility for this purpose. The OTL-Alt route passes through a large contiguous patch of mallee vegetation which is unavoidable on its current alignment, however it has been sited where possible to go through areas of sparser (likely more degraded) areas of mallee vegetation.

Threatened Flora

Neoen commit to undertaking on-ground surveys in any suitable areas proposed to be disturbed, and to avoid any subsequently identified populations of EPBC listed threatened flora species. Neoen will implement a COEMP to address any potential indirect impacts to these species which will include implementation of no-go zones around sensitive areas, requirement for dust suppression activities along heavily trafficked roads and implementation of a sediment and erosion management plan. As a result of the above, avoidance and mitigation measures mean that any potential direct or indirect impacts are considered unlikely to occur, and a significant impact is not likely for the following species:

- *Acacia glandulicarpa* (Hairy-pod Wattle);
- *Acacia spilleriana* (Spiller's Wattle);
- *Codonocarpus pyramidalis* (Slender Bell-fruit);
- *Dodonaea procumbens* (Trailing Hop-bush);
- *Dodonaea subglandulifera* (Peep Hill Hop-bush);
- *Olearia pannosa* subsp. *pannosa* (Silver Daisy-bush); and
- *Seneciomegaglossus* (Superb Groundsel).

Threatened Fauna

Southern White-face, Southeastern Hooded Robin, Diamond Firetail:

- Continue to apply the mitigation hierarchy, avoiding and minimising impacts to habitat considered potentially suitable (i.e. various Mallee Woodland and tall shrubland associations) for the above species. This includes micro-siting of OTL tower pads, access roads and stringing corridors where practicable.
- Undertake any required maintenance works in the IMZ and OMZ during operation phase, outside of breeding season (spring) to minimise potential for disturbance to species which may be utilising the corridor.
- Use a conservative approach to any management in the IMZ and OMZ, only trimming selected vegetation where required for compliance (i.e. avoid broad-brush approach).
- COEMP to address environmental management issues to ensure that no additional indirect impacts to surrounding habitat occurs, including requirement for weed hygiene procedures, dust monitoring and suppression, erosion and sediment control and increased feral predator control in areas which have not previously been open to a network of access tracks.
- Continue to undertake Bird Utilisation Surveys across the Project Area with additional targeted focus on any identified locations of the above species, to determine potentially important locations or populations, and subsequent micro-siting to avoid during construction.

Flinders Ranges Worm Lizard (FRWL)

Historically known locations of FRWL were utilised in the early design phase and avoided where possible in the design phase. No targeted search effort has been undertaken in the Project Area and rocky surface substrate has not been mapped, therefore, no avoidance of current known populations or higher likelihood habitat has been specifically undertaken.

Neoen has committed to mitigation measures to reduce potential impacts, including:

- Undertake targeted survey to determine the distribution of FRWL across the disturbance footprint, to guide the CEOMP and any specific species management plans if required.
- Undertake pre-clearance surveys to find and relocate individuals prior to construction, in areas deemed suitable habitat for FRWL during targeted surveys.
- Implementation of a COEMP to address any potential indirect impacts including erection of physical no-go zones around known populations or sensitive areas, requirement for dust suppression activities along heavily trafficked roads and implementation of a sediment and erosion management plan, and waste management during construction. A COEMP will ensure that chemicals or other mechanisms used to eradicate weeds in known population areas do not have a significant adverse effect on the species.

Pygmy Blue-tongue Lizard

Historically known locations of PBTL (BDBSA records) were utilized in the early design phase and were avoided during the design process. At this time, the full extent of PBTL occurrence was not known. Following targeted PBTL surveys in early 2024, infrastructure was again relocated to avoid higher density populations, however, it is noted that the density of PBTL is unknown in areas which have not had targeted survey effort.

Neoen has committed to mitigation measures to further reduce residual impacts including:

- Undertake surveys in all areas of suitable habitat proposed to be impacted by the Project.
- Assess potential for pre-clearance surveys to find and relocate and PBTL which may be residing in the Disturbance Footprint at the time of construction.
- Implementation of a COEMP, associated construction management measures and targeted threatened species management plan (Att14_GN1_PBTL Management Plan_Draft) which includes specific protocols for relocation of residually impacted individuals, to address any potential direct or indirect impacts. Measures may include erection of physical no-go zones around known populations or sensitive areas where practicable, requirement for dust suppression activities along heavily trafficked roads and implementation of a sediment and erosion management plan, and waste management during construction. A COEMP will ensure that chemicals or other mechanisms used to eradicate weeds in known population areas do not have a significant adverse effect on the species.
- Designate avoidance areas where known populations of PBTL occur or are known to have a relatively high abundance of PBTL compared to other locations of suitable habitat.

General

Several Project components are required to support the construction phase of the Project but will be decommissioned at the conclusion of the relevant construction stage, and the affected land rehabilitated where practicable. This includes construction compounds, laydown areas and batching plants, brake and winch sites, MV cable routes, as well as some access tracks. Rehabilitation measures may include re-spreading of topsoil and weed management, with other methodology to be advised.

In total, Neoen proposes up to 348 ha of 'temporary disturbance' to facilitate construction of the Project. The temporary clearance is assessed under Loss Factor 1.0; however, rehabilitation works are anticipated to occur in these areas where practicable. Priority for rehabilitation will be given to areas of higher ecological value, such as impacted Lomandra Grassland (VA6) (17.71 ha of temporary clearance proposed).

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

Neoen has demonstrated their ability to achieve high quality, high impact, meaningful offsets through the Goyder South Project with the World's End Gorge offset and is committed to developing a similar offset strategy for the Goyder North Stage 1 Project. Discussions with landholders, the Department of Environment and Water and conservation organisations have commenced to identify potential suitable properties in the region which support the relevant impacted MNES species and habitat. All disturbance to native vegetation will also be offset through a Significant Environmental Benefit, as required under South Australian *Native Vegetation Act 1991.*

It is intended that a more detailed Offset Strategy or Offset Proposal (depending on the level of progress with formalising the offset arrangements at the time) will be issued to DCCEEW as part of our response to the assessment requirements (e.g. with our Preliminary Documentation response, or alternate assessment pathway). An Offset Proposal and Management Plan will be updated once final conditions of approval are received.

4.1.5 Migratory Species

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

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

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

Direct impact	Indirect impact	Species	Common name
No	No	Actitis hypoleucos	Common Sandpiper
Yes	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Motacilla cinerea	Grey Wagtail
No	No	Motacilla flava	Yellow Wagtail
No	No	Myiagra cyanoleuca	Satin Flycatcher

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

Yes

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

***Apus pacificus* (Fork-tailed Swift)**

There are four BDBSA records of the species occurring within the GN1 Project Search Area (i.e. 5 km buffer) (BDBSA, 2024). The species has been recorded on a single occasion (Site 12) as a fly-over species during the Summer 2024 BBUS, flying at heights between 1 m and 300 m above the ground, and consequently considered a possible at-risk flight height (50 m relative to the wind turbines), as a direct impact resulting from operation of the wind farm. Vegetation clearance is unlikely to impact this species, with direct impacts only associated with potential bird strike during operation of the wind farm. No direct impacts are expected for the OTL or OTL-Alt. No indirect impacts are predicted.

For other EPBC migratory species identified in the PMST, none have been recorded within, or flying over the Project Area during ecological surveys to date, and no historical records of migratory species occur within the Project Area. No identified important habitat for migratory species is present within the Project Area or is close to the Project Area and no downstream impacts are expected to occur, therefore no direct or indirect impact is likely to occur.

Further details are provided in Att3_GN1_SIA (Section 6, Section 4.5 page 79) and Att8_GN1_EcoAssessment (Section 4.3.4, page 52, Section 6, Section 8).

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

No

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

***Apus pacificus* (Fork-tailed Swift)**

Whilst it is possible the species occurs as a fly-over species in the aerial space above all habitats in the GN1 and Disturbance Footprint, given the sparse historical records, it is considered unlikely that the aerial habitats over GN1 represent an important foraging area for this species, nor that the area contains an ecologically significant proportion of the population. Significant Impact Criteria are not likely to be triggered as this species is exclusively aerial, does not breed in Australia, and impacts as a result of the Project are unlikely to disrupt the lifecycle of an ecologically significant proportion of the species population.

Further details are provided in Att3_GN1_SIA (Section 6 and Section 4.5 page 79).

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

No

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

No significant impact to migratory species is expected as a result of the Project, and therefore this protected matter does not require assessment and approval under the EPBC Act.

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

Neoen have committed to undertaking 24 months of Bird (and Bat) Utilisation Surveys (BBUS), with four surveys already completed (Spring 2023, Summer 2024, Autumn 2024 and Winter 2024). The BBUS surveys will inform a bird and bat risk assessment to determine the likely risk of impact to listed threatened bird species, and other at-risk species. The results of a risk assessment will inform a Bird Adaptive Management Plan (BAMP), if required, for the wind farm. The BAMP, if required, will continue to monitor for any impacts to listed bird species during the operation of the wind farm from WTG strikes, and if any impacts are detected, to implement mitigation measures necessary to ensure impacts are measured, reported and remain insignificant.

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

No offsets have been proposed as direct / indirect impacts on the Fork-tailed Swift are considered unlikely.

4.1.6 Nuclear

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

No

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

There are no known radiological characteristics associated with the Project that trigger EPBC criteria.

4.1.7 Commonwealth Marine Area

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

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

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

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

No

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

No Commonwealth Marine Areas were identified within the PMST report generated on 30 April 2024. The nearest Commonwealth Marine Area to the Project is the Murray Marine Park (South-east Network), located approximately 195 km to the southwest of the GN1 Project Area, adjacent the Coorong and Lower Lakes. The Project does not interact with the marine environment in any way and there no potential for impacts to this MNES.

4.1.8 Great Barrier Reef

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

No

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

The closest point of the Great Barrier Reef Marine Park is located over 1,600 km north-east of the GN1 Project Area. As a result of the distance between the works and the Great Barrier Reef Marine Park, there is no potential direct or indirect impact to this MNES.

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

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

No

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

The Project is not directly or indirectly associated with a coal seam gas development or large coal mining development. Therefore, it is considered the works do not trigger the MNES and thus do not require an assessment of the potential for significant impacts to the whole of the environment.

4.1.10 Commonwealth Land

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

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

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

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

No

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

The Protected Matters Search Tool report identified that the GN1 Project Area does not directly intersect with any identified Commonwealth Lands and therefore, no direct or indirect impacts will occur.

4.1.11 Commonwealth Heritage Places Overseas

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

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

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

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

No

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

The Protected Matters Search Tool report identified that the GN1 Project Area does not directly intersect with any identified Commonwealth Heritage Places Overseas and therefore, no direct or indirect impacts will occur.

4.1.12 Commonwealth or Commonwealth Agency

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

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

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

- Threatened Species and Ecological Communities (S18)

Conclusion on the likelihood of unlikely significant impacts

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

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

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

No

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

Location and Activity

The viability of wind farms is dictated by several factors including wind speed, constructability, proximity to transmission and proximity to loads, existing land use, landholder buy-in and ecological landscape. The proposed Project site is located in the Mid North region in South Australia, home to some of the best wind resources in the country. The Goyder North Renewable Energy Facility will take advantage of the measured high value wind resources in the Goyder region north of Burra and south-east of Hallett in the Goyder Regional Council area where landholders are amenable to having wind turbines on their property. In addition to the highly competitive wind resource, the Project is ideally located to complement Project EnergyConnect, a large interconnector to New South Wales nearing construction completion which will make a major contribution to servicing the substantial increase in South Australian energy demand forecast by ElectraNet. In addition to providing low-cost renewable energy, the addition of a battery to the facility will increase stability in the grid as well as reducing volatility and reliance on gas generation within the energy market.

While alternative locations have been assessed through Neoen's development process, based on the factors discussed, this location was deemed to be the best suited at this point in time.

During the planning phase, alternative areas were considered, including several alternate OTL options (assessed via desktop) which were found to have no significant difference in the potential constraints between each option and the current proposed options. Additional constraints regarding landholder agreements and the requirement for the OTL to ultimately connect to the existing Bundey Substation location resulted in the OLT Primary and OTL Alternate options presented in the referral. The worse-case scenario for each OTL option is assessed for all relevant MNES and presented in our supporting documents.

The current Disturbance Footprint incorporates avoidance of MNES as much as practicable as well as minimum setbacks from dwellings, property boundaries, residential zones, tourist accommodation, uninvolved dwellings, National Heritage Areas, state heritage areas and EMI no go zones. Design iterations have evolved to reduce impacts on MNES (for example reducing potential impacts to TEC INTG through reducing the number of WTGs from 41 turbines down to only three WTGs that encroach only on the edge on INTG areas) and further opportunities for impacts to be avoided to MNES through the detailed design phase.

Based on the range of constraints and alternatives already considered over such a large Project Area, the Development Envelope (micro-siting corridor) is considered the optimal location for the GN1 Project, and an alternative or further updates to the design, outside of this Development Envelope is not anticipated to provide any significant benefit or reduction in impacts to MNES or other matters of state significance.

No alternative activity was considered for the Goyder North Stage 1 Project because the location is part of the broader Goyder renewable energy zone which is a renewable energy development, situated where the wind resource and connection to grid has previously been determined to be. Land topography in the Goyder

North area is not suited to solar developments, which also require broad scale ground disturbance, hence consideration of an alternate activity would not have been feasible.

Timeline

The Goyder North Stage 1 Project will help reduce Australia's carbon footprint by generating approximately 600MW of clean energy when constructed which is enough to power up to 520,000 South Australian homes. The project will also bring investment and benefits focused on the surrounding Goyder Regional Council community. The current timeline is proposed to commence as soon as possible to contribute to Australia and South Australia's renewable energy targets.

The Goyder North Stage 1 Project has already been in the planning phase for 3 years, with substantial design refinements resulting from ecological and heritage considerations and a number of other constraints, incorporated. Prior to that the Project was in pre-feasibility phase since 2012 when the prospective Wind Farm was acquired by Neoen. Further delays are not considered to be of benefit to the Project. Additionally, as the Action (including construction and operation) will occur continuously over an extended timeframe (25 to 30 years), timing of commencement of the action would not alter the significance of potential impacts on MNES.

On a small scale, alternative timeframes will be implemented for individual components of the action, such as planning the timing and frequency of maintenance trimming activities in the IMZ and OMZ to avoid unnecessary impacts during bird breeding season.

OTL Alternate option

The GN1 Project proposes two options for overhead transmission line routes for approval to maintain project optionality until some external factors are resolved. Once they are resolved, one route will be selected and constructed. This referral assesses potential interactions with MNES for the Overhead Transmission Line (OTL) Primary and OTL Alternate options separately in Att3_GN1_SIA and Att8_GN1_EcoAssessment. Both OTLs are included in the proposed action for assessment and therefore not considered an alternative. Once external factors are resolved, only one OTL will be built and Neoen would endeavor to reconcile the offset required during development of the Offset Proposal, or earlier during the EPBC approval process.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1_GN1_Project Description.pdf A description of the Goyder North Project	04/10/2024	No	High
#2.	Document	Att2_GN1_Map Book.pdf Mapbook	20/09/2024	No	High

1.2.5 Information about the staged development

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Att1_GN1_Project Description.pdf A description of the Goyder North Project	03/10/2024	No	High
#2.	Document	Att2_GN1_Map Book.pdf Mapbook	19/09/2024	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1_GN1_Project Description.pdf A description of the Goyder North Project	03/10/2024		High
#2.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024	No	High
#3.	Link	(DotE, 2013) Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/sites/default/files/do..	01/01/2013		High
#4.	Link	(PlanSA, 2024) Planning Application ID 2303648 https://plan.sa.gov.au/development_application_r..			High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att4_GNREF _Community Engagement Plan.pdf Community Engagement Plan for GNREF	04/10/2024	No	High
#2.	Document	Att5_GNREF_Indigenous Participation Plan.pdf Indigenous Participation Plan		No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att6_Neoen Sustainability Framework.pdf Neoen Sustainability Framework		No	High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att2_GN1_Map Book.pdf Mapbook	19/09/2024	No	High
#2.	Document	Att7_GN1_Land Tenure.pdf Land Tenure		No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence

#1.	Documen	Att2_GN1_Map Book.pdf Mapbook	19/09/2024	No	High
#2.	Documen	Att8_GN1_EcoAssessment.pdf Ecological Assessment not redacted	08/10/2024	Yes	High
#3.	Documen	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	10/10/2024	No	High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Documen	Att2_GN1_Map Book.pdf Mapbook	19/09/2024	No	High
#2.	Documen	Att3_GN1_SIA.pdf Significant Impact Assessment	04/07/2024	No	High
#3.	Documen	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Documen	Att2_GN1_Map Book.pdf Mapbook	19/09/2024	No	High
#2.	Documen	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High
#3.	Link	(DCCEEW, 2024) Protected Matters Search Tool https://pmst.awe.gov.au/#/map? lng=138.9806213043..			High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Documen	Att2_GN1_Map Book.pdf Mapbook	19/09/2024	No	High
#2.	Documen	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Documen	Att9_GNREF_Cultural Heritage.pdf Cultural Heritage Report (not redacted, sensitive)	31/01/2024	Yes	High
#2.	Documen	Att9_GNREF_Cultural Heritage_Redacted.pdf Cultural Heritage Report Redacted	04/10/2024	No	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att10_GNREF_Flood Modelling.pdf Flood Modelling		No	High
#2.	Document	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High
#3.	Link	(EPA, 2024) 2010 Aquatic Ecosystem Report https://www.epa.sa.gov.au/			High

4.1.1.3 (World Heritage) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024	No	High
#2.	Link	(DCCEEW, 2024) Australias World Heritage List https://www.dcceew.gov.au/parks-heritage/heritag..			High

4.1.2.2 (National Heritage) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att11_GNREF_Heritage Impact Assessment.pdf Heritage Impact Assessment for the GNREF Project	04/10/2024	No	High
#2.	Document	Att12_GNREF_Visual Impact Assessment.pdf Visual Impact Assessment		No	High

4.1.2.6 (National Heritage) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att11_GNREF_Heritage Impact Assessment.pdf Heritage Impact Assessment for the GNREF Project	03/10/2024		High
#2.	Document	Att12_GNREF_Visual Impact Assessment.pdf Visual Impact Assessment		No	High

4.1.2.10 (National Heritage) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att11_GNREF_Heritage Impact Assessment.pdf Heritage Impact Assessment for the GNREF Project	03/10/2024	No	High
#2.	Document	Att12_GNREF_Visual Impact Assessment.pdf Visual Impact Assessment		No	High

4.1.3.3 (Ramsar Wetland) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024	No	High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024	No	High
#2.	Document	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	10/10/2024	No	High
#2.	Document	Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High

4.1.4.8 (Threatened Species and Ecological Communities) Why you think your proposed action is a controlled action

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att1_GN1_Project Description.pdf A description of the Goyder North Project	03/10/2024	No	High
#2.	Document	Att13_GN1_INTG Management Plan_Draft.pdf INTG Management Plan Draft		No	High
#3.	Document	Att14_GN1_PBTL Management Plan_Draft.pdf PBTL Management Plan Draft		No	High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024		High
#2.	Document				

		Att8_GN1_EcoAssessment_Redacted.pdf Ecological Assessment Redacted	09/10/2024	No	High
#3.	Link	(BDBSA, 2024) Biological Databases of South Australia https://www.environment.sa.gov.au/topics/science..			High

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att3_GN1_SIA.pdf Significant Impact Assessment	09/10/2024	No	High

4.3.5 Why an alternative location for your proposed action was not possible

	Type	Name	Date	Sensitive	Confidence
#1.	Document	Att1_GN1_Project Description.pdf Project Description	07/07/2024	No	High

5.2 Declarations

● Awaiting Referring party's declaration

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

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000
Representative's name	Mikaela Georgiadis
Representative's job title	Project Manager
Phone	0484 902 401
Email	mikaela.georgiadis@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide, SA 5000

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

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

☐ By checking this box, I, **Mikaela Georgiadis of NEOEN AUSTRALIA PTY. LTD.**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

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

● Awaiting Person proposing to take the action's declaration

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

ABN/ACN	57160905706
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Organisation address	L21/570 George St, Sydney, NSW 2000
Representative's name	Hilary Pocock
Representative's job title	Project Manager
Phone	0431 802 524
Email	hilary.pocock@neoen.com
Address	Lot Fourteen, Frome Rd, Adelaide SA 5000

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

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

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

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

● Awaiting Proposed designated proponent's declaration

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

Same as Person proposing to take the action information.

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

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

☐ I, **Hilary Pocock of NEOEN AUSTRALIA PTY. LTD.**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

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