

Nebo BESS Energy Storage System (Nebo BESS) and Nebo Substation Expansion

Application Number: 02668

Commencement Date:
05/11/2024

Status: Locked

1. About the project

1.1 Project details

1.1.1 Project title *

Nebo BESS Energy Storage System (Nebo BESS) and Nebo Substation Expansion

1.1.2 Project industry type *

Energy Generation and Supply (renewable)

1.1.3 Project industry sub-type

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1.1.4 Estimated start date *

01/01/2025

1.1.4 Estimated end date *

01/11/2025

1.2 Proposed Action details

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

Project Area - The proposed action encompasses a total project area of 97.69 hectares (ha). The project area includes the adjoining allotments:

- part of Lot 19 WHS 358
- part of Lot 20 WHS 358

Disturbance Footprint - the total proposed disturbance footprint is 17.05 ha which encompasses all project infrastructure.

Avoidance area – the total avoidance area is 80.66 ha and is the balance of the project area minus the disturbance area

Study area - The ecology study area used for database searches includes a 20 km buffer from the Project area.

Proposed action description – This proposed action relates to the construction and operation of a Battery Energy Storage System (BESS), with an installed capacity of 900 MW and an extension to the Nebo Substation. The BESS will be connected to the Nebo Substation via 2 x underground 275kV circuits which connect via dual substation bay extensions. The disturbance footprint is approximately 17.05 ha and mostly located in the central portion of the project area. (Att1, Section 4, Page 8) [Att1 – Ecology Assessment Report].

Supporting infrastructure, contained within the disturbance footprint will comprise:

- two switchyards, each containing 2 x 275kV transformers
- 33 kV underground cables connecting the BESS to the switchyards
- an internal access track and access point from the Suttor Developmental Road
- Extension to Powerlink's Nebo substation
- Underground 275kV cables connecting the project substation to Powerlink's Nebo substation.[SH1]

Further detail (Att1, Section 4 – Project Description, Page 7 -10) [Att1 – Ecology Assessment Report]

Purpose of the proposed action - The Project will import electricity from the grid, which is then stored in the battery and subsequently exported for use in the grid during periods of peak demand. This action of shifting energy from periods of low demand, to peak demand when it is most needed, has the effect of balancing energy flows in the network and therefore improving network resilience and energy security for consumers.

Proposed action activities – To enable the site to accommodate the BESS and ancillary infrastructure, the action will include site preparation activities (vegetation clearing, topsoil stripping and stockpiling, fencing), construction activities (bulk civil earthworks such as trenching, benching, foundations, water management structures, mechanical and electrical installation of all prefabricated operational equipment (including BESS containers, inverters, transformers, switch gear).

Nature of activities and resultant impact- The Project area is regularly used for agricultural activities like cattle grazing and the existing Nebo Substation. The disturbance area has been cleared and is non-remnant pastureland. Small patches of remnant vegetation and regrowth vegetation are interspersed throughout the project area and are mostly present along the tributary and creek lines. With the disturbance area designed to avoid areas identified as having MNES value where possible, the direct and indirect environmental impacts resulting from the proposed action activities are considered to be minimal.

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

No

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

The following Commonwealth approvals relevant to the project site that are being sought for the purpose of the proposed action include:

- *Environment Protection and Biodiversity Conservation Act 1999* Referral for determination of a not a controlled action as a result of no significant impact being identified to MNES via a self-assessment

The following EPBC Act related policies/guidelines that are applicable to the proposed action include:

- The self assessment process including detailed criteria has been used to assist in the decision of whether or not referral may be required and if the proposed action may have a 'significant' impact on MNES. *Significant Impact Guidelines 1.1: Matters of National Environmental Significance*

Targeted survey guidelines and methods were adopted specific to mapping results, the following applicable by State and Commonwealth survey guidelines specific to the proposed action include:

- *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland – Version 3.0 (Eyre et al. 2018).*
- *Survey guidelines for Australia's threatened reptiles.*
- *Survey guidelines for Australia's threatened mammals.*
- *Survey guidelines for Australia's threatened birds*
- *Survey guidelines for Australia's threatened bats*
- *Referral guidelines for the vulnerable Koala*
- *Draft referral guidelines for the nationally listed Brigalow Belt reptiles*
- *Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta) - EPBC Act policy statement 3.13.*

The following State approvals relevant to the project site that are being sought for the purpose of the proposed action are included below. These are required as the Isaac Regional Council (IRC) Planning scheme identifies the proposed land use (undefined - BESS) as impact assessable within the Rural Zone.

- *Planning Act 2016* - Development Permit for a Material Change of Use (MCU) pursuant to the IRC Planning Scheme
 - Planning Regulation 2017: Schedule 8, Table 2 Planning scheme identifies the proposed land use (undefined - BESS) as impact assessable within the Rural Zone.
- *Planning Act 2016* - MCU involving State transport infrastructure generally
 - Planning Regulation 2017: Schedule 10, Part 9
- *Planning Act 2016* - Development on premises that are the subject of a Ministerial designation
 - Planning Regulation 2017: Schedule 10, Part 9
- *Planning Act 2016* - Material Change of a use of a premises near a substation site or subject to an easement

Planning Regulation 2017: Schedule 10, Part 9

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. *

In addition to the legislatively required consultation, ACE Power is a signatory to the Clean Energy Council's Best Practice Charter for Renewable Energy Projects, which sets out 10 guiding principles for the development of renewable energy projects. As part of fulfilling those obligations, ACE Power commits to engaging with the local community, including Traditional Owners, to seek their views and input prior to submitting a development application. To this end, ACE met with the Traditional Owners (the Widi Group) in August 2024 and held a community consultation event in Nebo in October 2024. Outcomes from this community consultation event are provided in the attached 'Community Consultation Outcomes' document [Att2-Community Consultation Outcomes] ACE expects to undertake a cultural heritage site visit with the Widi Group in Q4 2024.

A Community Stakeholder Engagement Plan (CSEP) has been prepared for the development and will guide consultations going forward [Att3-Nebo CSEP_V2]. The CSEP is a live document that will be continuously updated throughout the project life.

1.3.1 Identity: Referring party

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details	
ABN/ACN	28141736558
Organisation name	EMM CONSULTING PTY LIMITED
Organisation address	2065 NSW
Referring party details	

Name	Sigrid Pembroke
Job title	Senior Environmental Planner
Phone	0431810950
Email	spembroke@emmconsulting.com.au
Address	Level 1, 87 Wickham Terrace, Spring Hill QLD 4000

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	93667208540
Organisation name	NEBO BESS PTY LTD
Organisation address	2095 NSW
Person proposing to take the action details	
Name	Colm Ahern
Job title	Development Director
Phone	0400925028
Email	cahern@acepower.com.au
Address	Suite 402, 39 East Esplanade, Manly NSW 2095

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. *

- Nebo BESS Pty Ltd has a satisfactory record of responsible environment management
- Nebo BESS Pty Ltd has no past or present proceedings under Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.
- Nebo BESS Pty Ltd does not have any actions previously referred under the EPBC Act, however ACE Power, through its subsidiaries has submitted a number of EPBC referrals. These are principally in relation to the Yabulu BESS located near Townsville (EPBC Ref: 2022/09384), the Yabulu BESS transmission line (EPBC 2023/09722), the Yabulu solar farm (EPBC Ref: 2022/09426) and the Burdekin solar farm (EPBC Ref: 2017/7998).
- Nebo BESS Pty Ltd does not have a corporate environmental policy or framework, however ACE Power has an Environment and Sustainability policy, and all works will be undertaken to the highest environmental standards. This is reflected in the proactive approach ACE Power takes with referring all of its projects under the EPBC act, as well as the "avoidance" design principles which are followed at every site including Nebo where the project has been designed in such a way as to avoid impacts on MNES as much as possible.

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

Nebo BESS Pty Ltd does not have an environmental policy and planning framework documentation available.

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	93667208540
Organisation name	NEBO BESS PTY LTD
Organisation address	2095 NSW
Proposed designated proponent details	
Name	Colm Ahern
Job title	Development Director
Phone	0400925028
Email	cahern@acepower.com.au
Address	Suite 402, 39 East Esplanade, Manly NSW 2095

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	28141736558
Organisation name	EMM CONSULTING PTY LIMITED
Organisation address	2065 NSW

Representative's name	Sigrid Pembroke
Representative's job title	Senior Environmental Planner
Phone	0431810950
Email	spembroke@emmconsulting.com.au
Address	Level 1, 87 Wickham Terrace, Spring Hill QLD 4000

✔ 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	93667208540
Organisation name	NEBO BESS PTY LTD
Organisation address	2095 NSW
Representative's name	Colm Ahern
Representative's job title	Development Director
Phone	0400925028
Email	cahern@acepower.com.au
Address	Suite 402, 39 East Esplanade, Manly NSW 2095

✔ 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

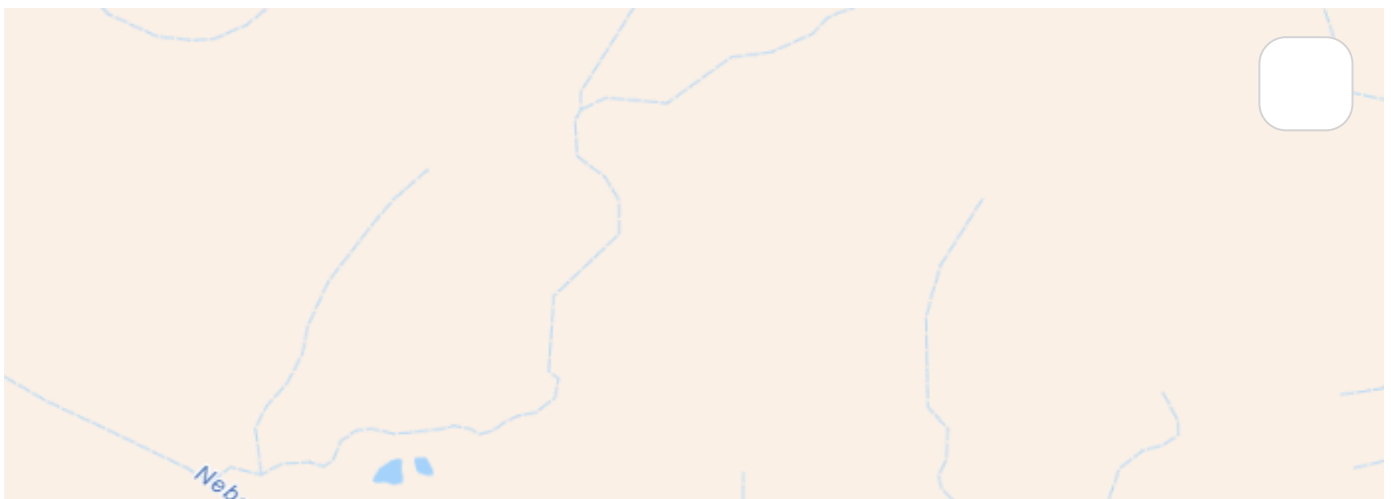
1.4 Payment details: Payment allocation

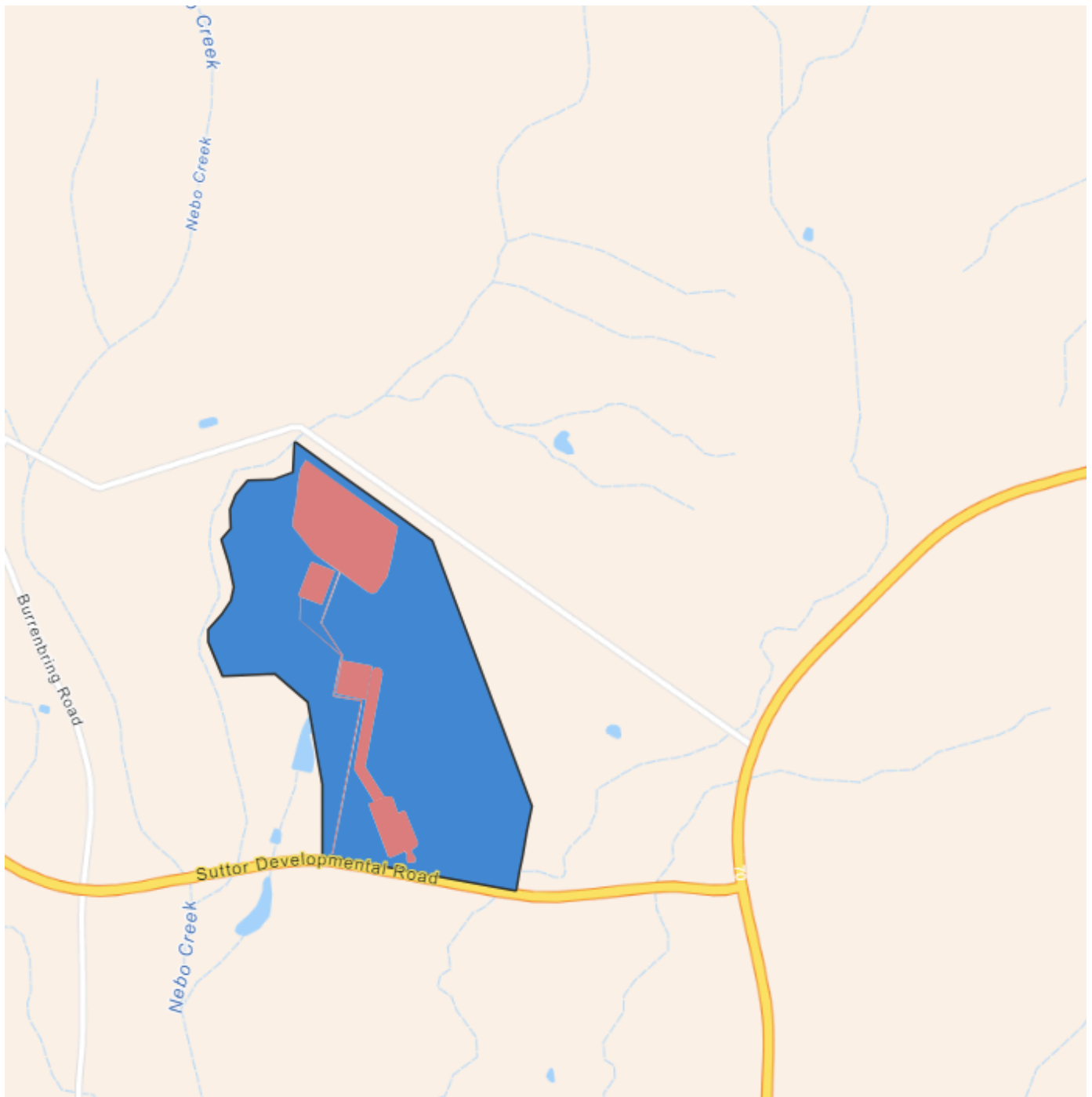
1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint





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Powered By Esri - Sources: Esri, TomTom, Garmin, F...

Project area: 97.69 Ha
Disturbance footprint: 17.05 Ha
Avoidance area: 80.66 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

178 Suttor Developmental Road, NEBO, QLD, 4742

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

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

No

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

The project area is Freehold land. This proposed action relates to activities to be undertaken on:

- 178 Suttor Developmental Road, NEBO, QLD, 4742 (Lot 20 WHS 462)
- Suttor Developmental Road, NEBO, QLD 742 (Lot 19 WHS 358)

Powerlink is the landowner of the Nebo Substation allotment (Lot 19 WHS 358) and Royce Patrick Hanrahan is the sole owner of the BESS allotment.

A series of transmission lines run through Lot 20, adjacent to the southern boundary, within a designated easement and connecting into the Nebo Substation.

- 275 kV – Nebo to Strathmore transmission line – east/west
- 132 kV – Coppabella Tee to Nebo transmission line – east/west
- 132 kV – Nebo to Mindi transmission line – north/south

3. Existing environment

3.1 Physical description

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

The project area is comprised of two large rural allotment is improved by residential dwelling, horse paddocks, including a round yard, a dam, fencing and a network of vehicle access tracks and the existing Nebo substation. The project area has largely been cleared and converted to/managed as pastureland though there are small patches of vegetation which are predominately remnant and regrowth narrow-leaved ironbark (*Eucalyptus crebra*) woodland to open woodland with accompanying red bloodwood (*Corymbia erythrophloia*) and a bluegrass (*Dichanthium sericum* and *Bothriochloa decipiens*) understory.

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

Prior land use - The Project area has historically been used for agricultural purposes such as cattle grazing. The Nebo Substation was developed on the land in the late 1970s and is situated near the shared cadastral boundary. Three easements, each approximately 100 metres (m) wide, intersect the project area from the Substation.

Current land use – The BESS project allotment and the Nebo Substation allotment are currently used for grazing land and the substation allotment respectively. The Nebo Substation allotment is also agisted for grazing land

Proposed land use – BESS and substation. The Project will result in the additional use of Lot 20 for the purpose of the BESS. The agricultural grazing currently undertaken on both allotments will continue and co-exist with the new land use.

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

Vegetation - Vegetation within the project area has largely been cleared and converted to managed pastureland. Remaining native vegetation is predominantly remnant and regrowth narrow-leaved ironbark (*Eucalyptus crebra*) woodland to open woodland with accompanying red bloodwood (*Corymbia erythrophloia*) and a bluegrass (*Dichanthium sericum* and *Bothriochloa decipiens*) understory.

Watercourses and wetlands - An unnamed tributary (Stream Order 3) of Nebo Creek parallels the project area to the west (approximately 50 m away at its nearest point). Nebo Creek (Stream Order 5) proper is located approximately 800–900 m west of the Project's disturbance footprint.

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

The project area is generally flat, with elevation increasing gradually in an easterly direction from approximately 214 m Australian Height Datum (AHD) in the west to 226 m AHD in the east.

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.

Surveys – Field surveys of the project area were undertaken In January 2024. Survey effort, timing and the climactic conditions at the time of field surveys are described in (Att1, Section 7.1, Page 19) [Att1 – Ecology Assessment Report].

No survey limitations were identified during the survey period.

Survey results – vegetation communities - The survey identified three REs within the project area, Remnant (RE 11.12.1), regrowth (RE 11.12.1), and non-remnant. The Project disturbance footprint occurs entirely within non-remnant pastureland with the exception of 0.01 ha of remnant (RE 11.12.1) vegetation which is disturbed to establish the new access. A brief description of the GTRE is provided in (Att1, Section 7.2.2, Page 19, Table 7.1) [Att1 – Ecology Assessment Report]

Survey results Flora – Flora surveys across the Project area did not identify any threatened flora species.

Survey results Pest Flora - Pest flora was present at low densities throughout the eastern Lot 19 on WHS358. In contrast, large, dense patches of parthenium were present within the paddocks north of the residence in the western Lot 20 on WHS Plan WHS462. Improved pasture grass species are present throughout the Study Area, most notably sabi grass (*Urochloa mosambicensis*).

Fauna survey results –Targeted fauna surveys across the Project area identified the following species:

- Squatter Pigeon - Two squatter pigeons (*Geophaps scripta scripta*) were observed outside the Project area adjacent to a dam located near the northeast corner of Lot 19 WHS358. The dam is approximately 640 m and 700 m from the proposed transmission easement footprint and the BESS layout, respectively.
- Koala- Scats and scratches were recorded within the project area but outside the Project disturbance footprint

Additionally, two other species were not recorded but are considered likely to occur based on the suitability of habitat and the species' wide-ranging migratory and nomadic nature.

- White-throated Needletail.
- Fork tailed Swift

Further detail (Att1, Section 7.3, Page 22 - 27) [Att1 – Ecology Assessment Report]

Survey results Pest Fauna - An emerging threat to koala habitat within the Clarke-Connors Ranges is the population growth of three species of exotic deer: red deer (*Cervus elaphus*) rusa deer (*Cervus timorensis*) and Chital (*Axis axis*) (Department of Agriculture and Fisheries, 2018). Chital deer and evidence of deer ringbarking were observed within the Project area but outside the disturbance footprint during the field survey.

Groundwater dependent ecosystems - A review of Wetland Maps did not identify mapping of any groundwater dependent ecosystems (GDEs) within the project area. The project is not expected to impact on GDEs. No groundwater is proposed to be extracted and appropriate spills response will be in place to ensure any seepage does not occur. As a result, there is no impact to groundwater expected.

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

The native vegetation within this western portion of the project area has largely been cleared and converted to/managed as pastureland. The remaining native vegetation within this eastern portion of the Project area is predominately remnant and regrowth narrow-leaved ironbark (*Eucalyptus crebra*) woodland to open woodland with accompanying red bloodwood (*Corymbia erythrophloia*) and a bluegrass (*Dichanthium sericum* and *Bothriochloa decipiens*) understory however the disturbance footprint has been sited to avoid GTRE remnant and re-growth.

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.

Commonwealth heritage places or other places recognised to have heritage values are not applicable to the Project area.

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

The Widi Group are the traditional custodians of the land on which the Proposed action is located.

No native title determination or cultural heritage sites are known within the Project Area. A Cultural Heritage Assessment will be prepared for the project along with an Indigenous cultural clearance survey will be undertaken in association with the Widi Group prior to any onsite disturbance.

3.4 Hydrology

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

The Project area is within the Fitzroy catchment basin and generally drains to the south via overland flow and unnamed drainage features into Nebo Creek.

The western portion of the Project area drains via overland flow into Nebo Creek which is located outside of the project boundary. Natural drainage and conveyance of overland flow for the balance of site is via an unnamed drainage channel which flows into Nebo Creek. Nebo Creek traverses (via a bridge structure) Suttor Development Road and flows in a southerly direction into Denison Creek approximately 30 km, before converging into Connors River approximately 95 km downstream. Denison Creek flows into the Fennel Creek which is a major tributary to Connors River. Connors River converges with Isaac River approximately 150 km downstream of the Project area.

4. Impacts and mitigation

4.1 Impact details

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

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes

EPBC Act section	Controlling provision	Impacted	Reviewed
S18	Threatened Species and Ecological Communities	Yes	Yes
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.

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

No

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

The action is unlikely to have any direct and/or indirect impact on World Heritage protected matters as none are located within the project area area.

Desktop search results identified that there are no World Heritage areas within 50km of the Project area.

4.1.2 National Heritage

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

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

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

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

No

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

The project will not have a significant impact to National Heritage protected matters as there are no identified matters within 50km of the Project are.

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.

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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 project will not have any impact to Ramsar Wetlands protected matters as there are no identified matters within 50km of the Project area.

4.1.4 Threatened Species and Ecological Communities

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

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

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

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Dasyurus hallucatus</i>	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	<i>Denisonia maculata</i>	Ornamental Snake
No	No	<i>Dichanthium setosum</i>	bluegrass
No	No	<i>Egernia rugosa</i>	Yakka Skink
No	No	<i>Elseya albagula</i>	Southern Snapping Turtle, White-throated Snapping Turtle
No	No	<i>Erythrorhynchus radiatus</i>	Red Goshawk
No	No	<i>Eucalyptus raveretiana</i>	Black Ironbox
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
Yes	No	<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)

Direct impact	Indirect impact	Species	Common name
No	No	Hemiaspis damelii	Grey Snake
No	Yes	Hirundapus caudacutus	White-throated Needletail
No	No	Macroderma gigas	Ghost Bat
No	No	Neochmia ruficauda ruficauda	Star Finch (eastern), Star Finch (southern)
No	No	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	No	Petauroides volans	Greater Glider (southern and central)
No	No	Phalaenopsis rosenstromii	Native Moth Orchid
Yes	No	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	No	Poephila cincta cincta	Southern Black-throated Finch
No	No	Polianthion minutiflorum	
No	No	Rheodytes leukops	Fitzroy River Turtle, Fitzroy Tortoise, Fitzroy Turtle, White-eyed River Diver
No	No	Rostratula australis	Australian Painted Snipe
No	No	Solanum graniticum	Granite Nightshade

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Natural Grasslands of the Queensland Central Highlands and northern Fitzroy Basin
No	No	Poplar Box Grassy Woodland on Alluvial Plains

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. *

Based on the results of the desktop assessment, ground-truthing of fauna habitat and targeted fauna surveys, the Project area is considered to provide potential habitat for the following species:

- Koala
- Squatter pigeon

As the Koala and Squatter Pigeon are considered likely and known to occur they will be directly impacted by the project. Habitat clearing area calcs are below:

- the removal of 1.07 ha of Koala dispersal habitat
- the removal of 0.15 ha of Squatter Pigeon dispersal habitat.

Calculations of fauna habitat impacted by the proposed action are presented in (Att1, Section 8.1, Page 28, Table 8.2) [Att1 – Ecology Assessment Report]

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

No

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

Koala - The Project is not expected to have a significant residual impact on Koala's as the habitat resources within the Project footprint are sparse. Based on documented koala sightings on a landscape scale and the location of scats and scratches recorded within the project area, it is probable that koalas are foraging intermittently within the smaller, mature stands of eucalypts near the homestead and the dam on Lot 20, which lie outside of the Project disturbance footprint; as well as foraging within the large, contiguous stand of remnant eucalypt woodland to the east of Lot 19, also outside the Project disturbance footprint. Koalas may be accessing these two woodland areas via the regenerating treed areas within the pastureland north of the existing Nebo Substation. As such, approximately 1.07 ha of regrowth woodland has been mapped as dispersal habitat. The impact on koala and koala habitat as a result of this Project is expected to be minor and unlikely to lead to a long-term decrease in the size of the koala population.

The koala significant residual impact assessment is detailed in (Att1, Section 10.1.1, Page 34-37, Table 10.1) [Att1 – Ecology Assessment Report]

Squatter Pigeon - The species occurs in grassy woodlands which remain abundant across much of its range including the project area. Squatter pigeon also occur in disturbed areas cleared for cattle grazing and along access tracks.

Preferred habitats are located within wooded portions of the Project area which support more suitable foraging conditions. The central part of the Project area in which the majority of Project infrastructure is located is dominated by dense pasture grass cover and is unsuitable habitat for the species. As such, Squatter Pigeon are unlikely to use the resources within the Project area for breeding over the more suitable habitat/better quality breeding habitat located in the surrounding woodlands (e.g. retained habitats along Nebo Creek). Whilst generally sited to avoid any potential habitat, the project disturbance footprint will require the removal of approximately 0.15 ha of mapped as dispersal habitat. Given significant areas of habitat will be retained within the project area, it is unlikely that the Project will modify the species habitat dramatically.

The squatter pigeon significant residual impact assessment is detailed in (Att1, Section 10.2.1, Page 38-40, Table 10.2) [Att1 – Ecology Assessment Report]

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

No

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

Given the limited impact to habitat within the Project disturbance footprint, the Project should not be classified as a controlled action. While Koalas and Squatter Pigeons are known to occur adjacent to the disturbance footprint, the Project has minimised residual impacts to only 1.07 ha of koala dispersal habitat and 0.15 ha of squatter pigeon dispersal habitat.

The environment within the disturbance footprint is already modified and sits within a broader landscape, suggesting sporadic use of the affected habitat by these species. Importantly, through avoidance and mitigation measures, the Project has effectively reduced its potential impact, meeting and aligning with the significant residual impact criteria. Therefore, the Project's limited, non-significant effect on Koala and Squatter Pigeon populations and habitat supports the case for it not to be considered a controlled action.

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

Following the field verification of vegetation communities within the project area, the location of the BESS and substation were revised to avoid areas of regrowth eucalypt woodland that supported koala dispersal habitat. By micro-siting the BESS and substation, project impacts associated with vegetation clearance and habitat removal were avoided.

Further to this avoidance by design, the following general measures will be implemented to avoid and mitigate environmental impacts:

- Vegetation clearing will be limited to those areas required for earthworks and construction of the Project.
- Nebo Creek and the associated riparian corridor are outside of the Project disturbance footprint.
- Vegetation clearing boundaries will be clearly demarcated.
- Sequential clearing of woody vegetation will occur to minimise impacts on native fauna.
- Vehicles on site will be limited to approved access roads and tracks.

Further impact management, mitigation and monitoring measures are detailed within (Att1, Section 9, Page 31-33) [Att1 – Ecology Assessment Report]

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

Due to the current modified state of the environment within the Project disturbance footprint, coupled with its placement within the broader landscape and the probable sporadic utilisation of the habitat present, the project is not expected to yield a significant impact to MNES.

As a result of the negligible impact to MNES, it is anticipated a 'not a controlled action' and thus does not trigger the requirement for designated offset provision

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	Cuculus optatus	Oriental Cuckoo, Horsfield's Cuckoo
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	No	Hirundapus caudacutus	White-throated Needletail
No	No	Motacilla flava	Yellow Wagtail

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. *

Based on the results of the desktop assessment, ground-truthing of fauna habitat and targeted fauna surveys, the Project area is considered to provide potential habitat for the following species:

- White-throated Needletail
- Fork-tailed Swift

The White-throated Needletail and Fork-tailed Swift were not recorded within the action area during the field survey but are considered likely to occur based on the suitability of habitat and the species' wide-ranging migratory and nomadic nature.

Habitat clearing area calcs as they relate to each of the species above are detailed below:

- White-throated Needletail foraging habitat clearance of 17.05 ha (Could occur anywhere above the whole site where there are airborne insects, although the habitat is generally suboptimal).
- Fork-tailed Swift foraging habitat clearance of 17.05 ha (Could occur anywhere above the whole site where there are airborne insects).

Calculations of fauna habitat impacted by the proposed action are presented in (Att1, Section 8.1, Page 28, Table 8.2) [Att1 – Ecology Assessment Report]

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. *

White-throated Needletail - The Project is not expected to have a significant residual impact on White-throated Needletail habitat as they are almost exclusively aerial. Direct impacts to their habitat are not expected to occur as a result of vegetation clearance for the Project. There is limited potential the species could roost in an area of woodland across the action area, although this use will be sporadic, temporary and across a broad area (i.e. not involving regular or repeated roost sites).

Further detail (Att1, Section 10.2.2, Page 40 - 42, Table 10.3) [Att1 – Ecology Assessment Report]

Fork-tailed Swift - The Project will not have a significant residual impact on Fork-tailed Swift habitat and the risk of an impact on an ecologically significant proportion of the population (defined by DoE 2015 as being 100 birds or 0.1% of the population) is considered to be low. The species is likely to occur on a sporadic basis over the summer months within the Project area. Within the core range of the species, numbers can vary from 0 on one day to over 1,000 the next day with seemingly little pattern, presumably driven by weather and foraging conditions. As Fork-tailed Swift arrive and disperse over a broad front across the whole of Australia, but mainly over inland plains, it is impossible to predict on a long-term basis any patterns of utilisation of a given site, although focal features such as wetlands which may attract a large number of insect prey, could result in an increase in numbers of the species. There are no such wetlands within proximity to the action area.

Further detail (Att1, Section 10.3, Page 43, Table 10.4) [Att1 – Ecology Assessment Report]

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. *

The migratory species that are relevant to the action all identified not to have a significant impact as there is unlikely direct impact expected as a result of habitat clearing. There is no evidence to indicate a population of any of the aforementioned species in the project area, this is likely due to the project area not being suitable for breeding, dispersal or maintaining genetic diversity in the species. As such the species' occurrence on the Project area is unlikely to constitute an ecologically significant proportion of the population. It is for this reason Migratory species should not be considered a controlled action.

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. *

The micro-siting of the BESS and substation has avoided project impacts associated with vegetation clearance and habitat removal were avoided.

Further to this avoidance by design, the following general measures will be implemented to avoid and mitigate environmental impacts:

- Vegetation clearing will be limited to those areas required for earthworks and construction of the Project.
- Nebo Creek and the associated riparian corridor are outside of the Project disturbance footprint.
- Vegetation clearing boundaries will be clearly demarcated.
- Sequential clearing of woody vegetation will occur to minimise impacts on native fauna.
- Vehicles on site will be limited to approved access roads and tracks. Please ensure you have read the general guidance at the beginning of section 4 of this document.

Further impact management, mitigation and monitoring measures are detailed within (Att1, Section 9, Page 31-33) [Att1 – Ecology Assessment Report]

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

As the migratory species are almost exclusively aerial, direct impacts to their habitat are not expected to occur as a result of vegetation clearance associated with the Project. There is very limited potential the species could roost in woodland across the Project area as the trees are generally not mature enough, and these species favours larger trees often on ridgelines. Roost site use is sporadic, temporary and across a broad area (i.e. not involving regular or repeated roost sites) and if it occurs in the area is likely to be on the Nebo Range, outside the project area. The majority of suitable roost trees (larger more mature trees) are located within Nebo Creek riparian zone which is avoided by the Project.

As a result of the negligible impact to MNES, it is anticipated a 'not a controlled action' and thus does not trigger the requirement for designated offset provisions.

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. *

Nuclear is not relevant or applicable to this action.

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. *

The action is unlikely to have a direct and/or indirect impact on Commonwealth Marine Areas as none are located within or proximal to the project area.

4.1.8 Great Barrier Reef

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

No

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

The action is unlikely to have a direct and/or indirect impact the Great Barrier Reef as it is not located within the project area or in close proximity to the project.

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. *

Not applicable – use or influence to water resource (in relation to large coal mining development or coal seam gas) is not anticipated, therefore direct and/or indirect impacts are not applicable to this action.

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 action is unlikely to have any direct and/or indirect impact on Commonwealth land as none are located within the project area.

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 action will not have a direct and/or indirect impact on Commonwealth Heritage Places Overseas protected matters as it is not relevant the site, or the proposed action.

4.1.12 Commonwealth or Commonwealth Agency

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

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

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

None

Conclusion on the likelihood of unlikely significant impacts

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

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)

- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

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

No

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

The Project site was selected following a process of feasibility and other assessments. It presents favourable grid connectivity, does not impact good quality agricultural land, has no nearby sensitive receivers and impacts to ecological values can be readily avoided and minimised. The proponent has an option to purchase in place over the land, and does not currently have any other land under control in the area.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	21/11/2024	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document				

	Att2-Community Consultation Outcomes.pdf Community Consultation Outcomes Report	10/10/2024	No	High
#2.	Document Att3 – Nebo CSEP_V2.pdf Community Stakeholder Engagement Plan	20/12/2024	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	20/11/2024		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	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	20/11/2024		High

4.1.4.6 (Threatened Species and Ecological Communities) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	20/11/2024		High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	20/11/2024		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	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	20/11/2024		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	Sensitivity	Confidence
#1.	Document	Att1-Ecology Assessment Report.pdf MNES Summary Report	20/11/2024		High

4.1.5.10 (Migratory Species) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document				

5.2 Declarations

☒ Completed Referring party's declaration

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

ABN/ACN	28141736558
Organisation name	EMM CONSULTING PTY LIMITED
Organisation address	2065 NSW
Representative's name	Sigrid Pembroke
Representative's job title	Senior Environmental Planner
Phone	0431810950
Email	spembroke@emmconsulting.com.au
Address	Level 1, 87 Wickham Terrace, Spring Hill QLD 4000

☒ 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, **Sigrid Pembroke of EMM CONSULTING PTY LIMITED**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

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

☒ Completed Person proposing to take the action's declaration

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

ABN/ACN	93667208540
Organisation name	NEBO BESS PTY LTD
Organisation address	2095 NSW
Representative's name	Colm Ahern
Representative's job title	Development Director
Phone	0400925028
Email	cahern@acepower.com.au
Address	Suite 402, 39 East Esplanade, Manly NSW 2095

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

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

☒ Completed Proposed designated proponent's declaration

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

Same as Person proposing to take the action information.

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

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

☒ I, **Colm Ahern of NEBO BESS 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. *