EPBC Act referral

Australian Government

Department of the Environment and Energy

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Title of proposal	2020/8614 - Victorian Big Battery, Moorabool Victoria

Section 1

Summary of your proposed action

1.1 Project industry type Energy Generation and Supply (non-renewable)

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

Neoen is the largest renewable energy owner and operator in Australia with 11 projects totaling more than 1GW either operating or under construction across 4 states. In 2017 Neoen delivered, and is now currently expanding, the Hornsdale Power Reserve in South Australia which is the largest battery in the world (150MW). In Victoria Neoen has established the Bulgana Green Power Hub which consists of 56 wind turbine and a 20MW battery storage facility as well as the Numurkah Solar Farm (100MW).

The action being proposed by Neoen for which this referral is being prepared is the development of the Victorian Big Battery (VBB). The VBB is an up to 600MW battery energy storage system (BESS) that will contribute significantly to the energy storage capacity in Victoria.

The Victorian electricity sector is at risk of under-supply during extreme demand periods. This demand could be met by constructing additional generators, increasing the level of interconnectors between neighbouring states or installing battery energy storage systems. Conventional generation and transmission are long term projects, taking years or decades to deliver, and so are not reasonable alternatives for the short term electricity shortfall. For this reason Neoen is committed to quickly deploy large-scale battery projects in order to add security, and reduce prices for Australian electricity customers.

The project will provide Fast Frequency Response services to the National Electricity Market, be a reserve to augment power supplies in Victoria and will provide improved grid reliability. Such energy storage facilities can reduce spot price volatility and protect the grid from network disturbances thus improving reliability and reducing power costs.

The VBB will be provided by an experienced BESS contractor with strong industry experience either in Australia or overseas. This fits with Neoen's ethos as a long-term owner and operator, that only contracts with experienced partners to construct and maintain its projects.

The construction of the battery project on this site will entail the following proposed ativities:

- Installation of up to 600MW of batteries in either cabinets or shipping containers;
- Installation of switchrooms and a small operations and maintenance facility within the BESS footprint;
- Installation of ancillary equipment including electrical inverters, transformers, underground cabling, benching and earthing,
- Installation of new power transformers and the extension of an existing busbar at the existing Moorabool Terminal Station (MTS);
- Installation of appropriate firebreaks as required by the Country Fire Authority (CFA);
- Installation of security fencing and lighting;
- Landscaping works;
- Earthworks and drainage;
- Provision of up to two car parking spaces and internal access roads;
- Potential installation of a sound wall if required to meet EPA requirements; and
- Installation of a temporary secondary entrance for construction.

The VBB will be installed adjacent to the MTS, which is owned and operated by AusNet. Neoen have actively engaged with AusNet (as the network and site owner) and AEMO (as the network planner) from the early stages of the project to ensure the siting of the proposed facility does not interfere with existing operations of the MTS or future planned expansion scenarios.

There are a handful of locations within Victoria for which a BESS could be installed however the MTS is considered the best possible site. The MTS has been selected by Neoen for the VBB as the optimum location as it achieves co-location on an existing terminal station site (like-infrastructure) and best achieves the strategic objective of the VBB . There is no other Terminal Station owned by AusNet with the same characteristics as MTS.

This strategic co-location with MTS allows for:

- Power to flow from the BESS into the 500kV network which forms a ring around the west, north and east of Melbourne. For large power flows from the BESS to effectively reach the Melbourne load centre where needed, a connection to this 500kV network is critical. Connection at 500kV is also the most effective way to provide grid stabilizing services,
- Power stored in the facility to be readily connected back to the grid without the need for extensive new transmission or cabling routes through the wider region,
- The BESS to be constructed on a land title already hosting electrical infrastructure without burdening additional land titles with this infrastructure,
- No overhead power lines to connect the BESS to the existing MTS,
- Increased renewable generation in Western Victoria. Western Victorian renewable generation is set to increase further in coming years and the ability for a BESS to act as a generator or load depending on renewable generation output and load in Victoria will help to encourage further investment.

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- Available space. In working with AusNet this terminal station had the most available space for a BESS.

Based on future expansion plans provided by AEMO to Neoen the only part of the 60ha MTS site that could be committed to the BESS is a 4.2 hectare area in the south-east corner of the terminal station site. This location of the VBB on the MTS site represents a strategic application of land use; two similar pieces of infrastructure, an existing electrical substation and a BESS, are being installed on the same land title.

Preliminary investigations assessing the ecological values and hydrological constraints of the site have also been undertaken as part of the planning for this facility.

Overall the south-east corner of the site has been identified as a suitable location for the facility as follows:

- It avoids the VBB clashing with any foreseen expansion of the MTS as described to Neoen by AusNet and AEMO;
- It avoids conflict with any existing AusNet power infrastructure;
- It allows for two similar pieces of infrastructure, an existing electrical substation and a BESS, to be installed on the same land title;
- All cabling from the BESS to MTS can be underground without crossing any watercourses or categorized native vegetation;
- It utilises the existing entrance to the property,
- It has excellent access from a road rated to carry over-dimensional vehicles and is only 10km (and one turn) away from the Geelong Ring Road; and
- It avoids drainage issues identified in the south-west part of the site which may have required the battery facilities to be sited on raised platforms to separate them from flood water.

Overall, the VBB helps to achieve the objectives of all levels of Governments by reducing power prices and providing system security. The location of the project, on the same land title as an already operating terminal station is apt, as the kinds of works that make up a BESS (listed above) are similar to those that make up an electrical substation.

There is no other technology that can be developed to deliver required power to Melbourne in the short timeframes required to avoid shortfalls in the upcoming years, and no better location in the state to install a large battery to achieve the goals of reduced blackouts and lower power prices for Victorian customers.

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

See Appendix B

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

The subject site is known as 680 Ballan Road, Moorabool VIC 3213. It is located approximately 13 kilometres northwest of the Geelong city centre and 6 kilometres northwest of the Corio activity centre.

The site has a total area of 60 hectares and is an irregular quadrilateral shape. It is bound by Anakie Road in the north-east, and Geelong-Ballan Road in the west. The topography of the site and surrounds is relatively flat.

The site is currently partially occurpied by the existing MTS with the balance of the land grazed by sheep.

A waterway known as Cowies Creek traverses the site from the north to the south, entering via the north-west corner.The waterway in its current form comprises two sections of open drain, and two retarding basins located in the north and southwest parts of the subject site.

The Victorian Big Battery will be located on a 4.2ha section in the southeast corner of the 60ha site away from Cowies Creek.

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

The project will be made up of two sections on the MTS site, the battery in the south-east corner, and the connection works between the battery and the existing terminal station.

The total development area and disturbance footprint for the battery portion of the project is 4.2ha and is located in the southeast corner of the 60ha MTS site. This is the only part of the 60ha MTS site in which AEMO has no planned upgrades, expansion or augmentation. As a result there is no other part of the MTS site available and so this 4.2ha represents the only location on which a battery can be co-located on the MTS site.

Connection works for the project will consist of underground trenching and cabling for a length of approximately 325 metres and a width of 15 metres (to be reinstated after construction), an expansion to the existing 220kV busbar and several new transformers placed within the existing footprint of the MTS totaling 2ha.

1.7 Proposed action location

Address - 680 Ballan Rd, Moorabool, VIC, 3213, Australia

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1.8 Primary jurisdiction	Victoria

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

☐ Yes ☑ No

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

☑ Yes ☐ No

1.10.1 Is there a local government area and council contact for the proposal?

☑ Yes ☐ No

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer	Tim Webb
1.10.1.2 E-mail	twebb@geelongcity.vic.gov.au
1.10.1.3 Telephone Number	(03) 5272 4408

1.11 Provide an estimated start and estimated end date for the proposed action	Start Date	20/03/2020
	End Date	01/12/2020

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

Greater Geelong City Council are the responsible authority that administers the Greater Geelong Planning Scheme that governs the use and development of land as directed by the Planning and Environment Act 1987.

As per definitions within the planning scheme, the proposed Battery Storage Facility is to be assessed as a 'Utility Installation'. The existing terminal station that has operated at the site for 30 years is also defined as a utility installation and considered an existing use of the land.

As such planning consent is required only for the construction of buildings and works and vegetation removal.

The land on which the VBB is proposed is zoned Farming Zone (FZ). Planning approval is required under the FZ for the buildings and works of a 'utility installation' and buildings and works within 40 metres of the Road Zone Category 2.

The subject site currently accommodates the Moorabool Terminal Station (complementary infrastructure) within the FZ and has capacity to accommodate the proposed battery storage footprint within the property. No significant impacts are expected on the agricultural opportunities or values within the local area given the existing MTS present on site. The battery storage facility will not negatively impact agricultural operations within the surrounding area as no additional land is proposed to be used as part of this proposal.

The subject site is wholly affected by the Environmental Significance Overlay – Schedule 4 'Grasslands within the Werribee Plains Hinterland' (ESO4). A permit is required to construct a building, construct or carry out works associated with a utility installation. A permit is also required under the ESO4 to remove native vegetation.

The majority of the subject site is covered by non-native pasture grasses. Whilst some scattered patches of EVC132_61 are located where the works are proposed, the proposal will not cause significant impact to the quality and extent of Plains Grassland in the area and will not detrimentally impact flora and fauna within the Victorian Volcanic Plain, as protected under the ESO4.

The removal of native vegetation is regulated through Clause 52.17 of all planning schemes. The project will require removal of native vegetation. Impacts to native vegetation are assessed using the Guidelines for the removal, destruction or lopping of native vegetation (DELWP, 2017). The state-wide provision aims to reduce vegetation biodiversity loss and prescribes the application requirements for projects that intend to remove, destroy or lop native vegetation.

Despite the efforts undertaken to avoid and minimise impacts to native vegetation during the design phase of the project, the removal of 0.583 hectares of EVC 132_61 will be required to facilitate the works.

A planning permit application has being prepared will be submitted to City of Greater Geelong for assessment against these planning provisions. It will be submitted around the same time as this application.

The project is not located within an area of cultural heritage sensitivity and therefore a mandatory Cultural Heritage Management Plan (CHMP) under the Aboriginal Heritage Act 2006 is not required to facilitate the proposed development.

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

Neoen is an industry leader in community consultation across its 11 operating and under-construction renewable energy projects in Australia. As the Moorabool Terminal Station site is shared with AusNet, Neoen is developing a joint communications and engagement plan with AusNet's commercial arm, Mondo to ensure the best outcome for both parties.

The key goal of the stategy, as captured in this document, is to:

- Establish and maintain a social licence to develop, design, construct and commission the Victorian Big Battery through best practice stakeholder and community engagement.
- Increase awareness and understanding of the Victorian Big Battery, including its benefits and the process of project development, approvals, design, construction and commissioning.
- Ensure stakeholders and the community understand how and when they can provide input and/or feedback to the

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project team.

- Minimise impacts to stakeholders and community by proactively mitigating potential impacts and providing timely responses to issues via easily accessible communication channels.
- Foster trust in Mondo's and Neoen's ability to deliver the Victorian Big Battery.

The stakeholders of interest, as listed in the Communications and Engagement Plan are: Federal ministers, Federal MPs, State Government Departments and Agencies, State Ministers, State MPs, Local Government/Councillors, AEMO/regulators, industry bodies/associations, utilities/service Providers, neighbouring residences, community groups, Registered Aboriginal Party, nearby education institutions, local businesses and media.

With respect to stakeholder engagement during approvals (including EPBC Act Approval) Neoen and Mondo are seeking to achieve the joint goals of ensuring awareness of the project to potentially impacted groups and ensuring that these groups understand how they can provide input on the project. Neoen and Mondo will undertake the following actions to ensure this occurs:

- Website
- Fact sheets
- Media release
- Newspaper adverts
- Social media adverts
- FAQs
- Emails to local community/ sporting/ education groups, etc
- Project e-newsletters
- Well-advertised drop-in sessions

In terms of shaping the project and how it is carried out, Neoen and Mondo are actively opening up as many parts for discussion with the community as possible. The following list of items are specifically listed in the community engagement plan as being open for negotiation with the community:

- How the community would like to be engaged throughout the project
- Opportunities to maximise local benefits
- Input into local knowledge and issues
- Construction traffic routes
- External appearance (e.g. screening) of battery system
- Measures to minimise construction impacts (e.g. dust suppression, sound attenuation, etc.).

While not being an exhaustive list, this shows that Neoen and Mondo have thought about how to actively involve the community even prior to reaching out to them.

In terms of engagement with indigenous stakeholders both Neoen and Mondo are keen to involve them in the project. A Cultural Heritage Management Plan is not a statutory requirement for the project, and as a result other means of involvement will be developed in consultation with the Wathaurung Aboriginal Corporation.

Overall Neoen and AusNet have outstanding reputations with respect to stakeholder and community engagement, have developed a beyond best-practice document to manage engagement, and will be seeking input from all potentially impacted stakeholders to achieve a social licence to operate for the Victorian Big Battery.

As the project is still at the early development stage, public consultation is yet to be undertaken. Early enagement with Government stakeholders and authorities at local, State and Federal level has commenced.

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

Ecological assessments have been undertaken to support the design phase of the project, this EPBC referral and the planning permit application to Greater Geelong Council.

The ecological assessment for the project considered that it was unlikely that the project will have significant environmental effects that would require referral under the Victorian Environment Effects Act 1978. The preparation of an Environmental Effects Statement is not considered likely to be required and has not been undertaken to date.

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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Section 2

Matters of national environmental significance

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☑ Yes ☐ No

Species or threatened ecological community

The threatened ecological community Natural Temperate Grassland of the Victorian Volcanic Plain (Critically Endangered under the EPBC Act) occurs within the proposed project area.

Patches of Heavier Soils - Plains Grassland (EVC 132_61) within project area meet condition thresholds to be the threatened community based on cover of native tussock grasses. The vegetation is a mix of Rytidosperma setaceum (Bristly Wallaby-grass) and Austrostipa bigeniculata (Spear-grasses) under planted non-native and native trees (Eucalyptus camaldulensis; River Red-gums). The patches are moderately weedy (25-50% cover of weeds) and common weeds include Lolium perenne (Perennial Rye-grass), Bromus hordaceous (Soft Brome), Bromus diandrus (Great Brome) and Phalaris aquatica (Toowoomba Canary-grass). Weeds listed under the Catchment and Land Protection Act 1994, Weeds of National Significance (WoNS) and High threat weeds are present e.g. Serrated Tussock and Chilean Needle Grass (but comprise <5% cover)

Impact

Natural Temperate Grasslands of the Victorian Volcanic Plain

The following impacts on NTGVVP are proposed:

— Permanent loss of small area of community, equating to 0.583 hectares (battery storage facility)

— Permanent loss of individual plants that form the community, equating to 0.583 hectares (battery storage facility)

Without mitigation measures, additional impacts may include:

— Potential introduction of new weed species and/or spread of established weeds into areas of NTGVVP to be retained. This could ultimately lead to further degradation of the NTGVVP proposed to be retained, if not managed.

— Potential loss of additional areas of NTGVVP beyond the construction footprint, if not managed.

— Potential changes to surface water run-off e.g. inundation of NTGVVP, if additional surface water run-off from the increased hard surface is not diverted away from NTGVVP.

Up to 0.583 hectares of the NTGVVP community is proposed to be removed, which equates to approximately 13% of the total 4.5 hectares present within the site. When calculating likely losses, it is assumed that the area of NTGVVP between the proposed Battery Storage Facility and the north-eastern boundary fence will be either removed or compromised in the long-term. A narrow strip of NTGVVP will be retained between the construction area and north-eastern boundary fence, approximately 30 m wide. However, such a narrow strip of NTGVVP is unlikely to be ecologically viable in the long-term, as it will be fragmented by hard surface to the south-west (by the Battery Storage Facility) and to the north-east (by Anakie Road) and may be shaded by the proposed infrastructure (Figure 5). Therefore, GHD has taken a pre-cautionary approach when calculating potential impacts and this vegetation is considered lost.

When siting the location of infrastructure, Neoen has avoided most of the areas supporting NTGVVP (refer to Figure 5).

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Impacts will also be avoided and minimised through preparation and implementation of a Construction Environmental Management Plan for the construction phase. Noting the project is constrained, as only a small portion (4.2 Ha) of the Moorabool Terminal Station is available for Neoen to locate the infrastructure and some of the infrastructure (e.g. the busbar must be located at certain locations to connect to the existing Termonal Station).

The NTGVVP vegetation within the study site is of low quality, receiving a score of 17 out of a possible 100 using the Victorian Vegetation Quality Assessment Methodology (VQA, also referred to as habitat hectare methodology). Nevertheless, the vegetation within the study site met the condition thresholds for the NTGVVP community based on: > 50% of the cover of perennial grasses were native grasses at the time of survey. The surrounding properties mostly support ploughed and cropped land and heavily grazed paddocks.

The project will reduce the extent of the NTGVVP community: 0.583 hectares of NTGVVP is proposed to be removed or affected by the proposed works, which equates to 13% of NTGVVP present. NTGVVP within the site is already highly fragmented, occurring as 7 fragmented patches. NTGVVP will not be further fragmented by the proposed works. However, the outer part of one of the largest patches is proposed to be removed.

The removal is unlikely to reduce the number of stepping stones within the broader landscape e.g. for seed dispersal and genetic dispersal. The ecological community occurs across a large area from Melbourne to the South Australian border. In this landscape context, the proposed removal would not significantly reduce the extent of the community.

The proposal will not modify or destroy abiotic (non-living) factors (e.g. water, nutrients, or soil) necessary for the ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns. Invasive species will be manged through the implementation of a Construction Environmental Management Plan.

In summary, the project is unlikely to have a significant impact on the NTGVVP based on: 1) the small extent of proposed removal (0.583 hectares), 2) the highly fragmented occurrence of the community within the project area (a total of 4.5 Ha occurs within the 60 Ha site, spread across 7 somewhat fragmented patches), 3) the relatively low quality of the vegetation, and 4) past and current disturbance e.g. planted trees occur within NTGVVP. Nevertheless, the loss will contribute (a small part) to cumulative losses of NTGVVP across the VVP Bioregion. It is also noted that threatened community description includes small patches (0.05 Ha) and regenerating grassland.

Please refer to section 7.3.3 in the GHD Flora and Fauna Report for further details.

Species or threatened ecological community

Potential habitat for the Golden Sun Moth (listed as critically endangered under the EPBC Act) was deemed to be present within the site. This species is a medium-sized moth with discrete larval and adult life stages. Larvae spend two to three years underground, feeding on the roots of native and exotic grasses, then pupate into adult moths to breed between mid-October and early January. The adult stage lasts up to four days. Larvae are vulnerable to soil disturbance, ploughing, heavy grazing, removal of grasses, water logging and compaction.

The species' habitat comprises native grasslands and grassy woodlands containing Wallaby Grass and Speargrass, as well as exotic Chilean Needle-grass. It occurs mainly in one threatened ecological community in Victoria: the 'Natural Temperate Grassland of the Victorian Volcanic Plain'.

Please refer to section 7.3.4 in the GHD Flora and Fauna Report for further details.

Impact

The majority of the grassed areas of the 60 ha site provides potentially suitable low-quality habitat for this species (i.e., mostly non-native grassland subject to historical disturbance). Targeted surveys for this species across the site were undertaken under appropriate conditions and in accordance with the EPBC survey guidelines in December 2019. No moths were detected, which indicated that the species is absent from the site.

Impacts expected include:

— Permanent loss of area of potential but currently unoccupied habitat (equating to 4.4 hectares: battery storage facility and BESS Connection 220kV Switchgear area). Targeted surveys for this species in appropriate conditions in December 2019 resulted in no moths being detected.

— Temporary, reversible loss of 0.49 Ha of potential habitat (cable installation).

According to the EPBC significant impact criteria for the GSM, and with the knowledge that the species is not currently present at the site and the potential habitat there is unoccupied and dominated by non-native grassland flora, no significant impact on GSM is expected as a result of this project.

The project will not lead to fragmentation or changes in the size of a population, or reduce the species' area of occupancy or adversely affect critical habitat for the species. It will not disrupt breeding, or change the quality of habitat to the extent that the species is likely to decline. It is not expected to result in the establishment of invasive species that are harmful to the Golden Sun Moth, or introduce disease that may cause the species to decline.

The project is not expected to interfere with the recovery of the species, but it is acknowledged that the project will reduce the area and therefore availability of low quality potential habitat in the broader region. It is possible that the species' recovery might include observations of the species expanding into such habitat in future years. However, this site was found to be currently unoccupied by the Golden Sun Moth, and there is no certainty that it was ever occupied.

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Species or threatened ecological community

Potentially suitable habitat for Striped Legless Lizard, Delma impar, (SLL) (listed as vulnerable under the EPBC Act) was identified across much of the study site. SLL is found only in temperate grassland habitats, where it is active during the day from late spring to early autumn, feeding on insects. The species spends nights and periods of rest within the soil layer or at the base of tussocks (DSEWPaC 2011).

Across the SLL's range, there are four distinct historically isolated lineages (i: NSW and ACT; ii: South Australia and central west Victoria; iii: central and south west Victoria; and iv: eastern Victoria) (Maldonado 2009). Each lineage is reported to have a high level of genetic divergence, indicating that each should be considered as a separate Evolutionary Significant Unit (ESU) for management purposes. The study site is within the central and south west Victoria ESU.

Impact

All areas of the site are equally potentially suitable for this species, except for the wetter sections (a dam that was dry and a small waterway that held water at the time of the site visit) in the north-west of the site, which do not provide suitable habitat.

The habitat at the site is dominated by non-native flora and is consequently not of high quality for the Striped Legless Lizard. However, it does provide areas of dense tussock grassland, and some of the non-native grass species are high-threat weeds that are known to be used by Striped Legless Lizards at other sites (e.g., Chilean Needle Grass and Serrated Tussock). There is surface rock within the soil in some parts of the site, but not where the battery storage facility is proposed. Rocks appear to be historically undisturbed in some sections (mainly in the south-west of the site), while relocated and mounded for land-use purposes in others (e.g., two large mounds in north-east and east sections).

The project timeframe does not allow for targeted surveys to be done at an appropriate time of year. Therefore, the species is presumed to be present within the study site. Because the species is listed as vulnerable under the EPBC Act, a significant impact on this species would be one that impacts on an important population (important for future conservation, maintaining population viability, supporting gene flow and dispersal), or on the species as a whole. Because this species has a broad distribution that spans more than 800 km (from the ACT, through NSW and Victoria, to South Australia), this project is highly unlikely to impact on the species as a whole.

Section 7.3.5 of the flora and fauna report discusses whether or not the species may be present as an important population. The site is considered unlikely to support an important population of the Striped Legless Lizard. The site does not support a well-studied population of Striped Legless Lizard. The location of the site with respect to the species' range and Evolutionary Significant Units (ESUs) mean that a population, if present, is not automatically considered an important population (the site is within the area of the central and south west Victoria lineage). Given the landscape context of the site, the site is considered unlikely to meet any of the important population criteria according to DSEWPaC (2011b). If the Striped Legless Lizard is present at the site, it is unlikely to be considered a key source population for breeding or dispersal, it is unlikely to be considered necessary for maintaining genetic diversity, and it is not near the limit of the species' range. Furthermore, the habitat condition within the site is generally poor to moderate with grassland dominated by non-native species, there is evidence of previous ground disturbance within parts of the site particularly in the east and north, and the existing landuse and fragmentation on neighbouring land and across the broader region is considered unlikely to be advantageous for the Striped Legless Lizard.

Overall, expected impacts include:

— Permanent loss of area of potential habitat (equating to 4.4 hectares, battery storage facility and BESS Connection 220kV Switchgear area).

— Temporary, reversible loss of 0.49 Ha of potential habitat (cable installation).

— Potential injury or death of individuals, if they occur at the site

The project is not expected to impact on an important population of the Striped Legless Lizard, or on the species as a whole.

Please refer to section 7.3.5 in the GHD Flora and Fauna Report for further details.

2.4.2 Do you consider this impact to be significant?

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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

☐ Yes ☑ No

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Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

The study site consists of grazed paddocks (sheep currently) surrounding an existing transmission station. The paddocks are dominated by introduced pasture grasses. Some areas were disturbed (cleared) during construction of infrastructure at the site. However, there are fragmented patches of Heavier Soils - Plains Grassland (EVC 132_61), mostly concentrated along the boundary to the north-east and in the southern paddock. The Plains Grassland areas support a mix of Rytidosperma setaceum (Bristly Wallaby-grass) and Austrostipa bigeniculata (Spear-grasses) under planted non-native and native trees (Eucalyptus camaldulensis; River Red-gums). The site is moderately weedy and weeds include Lolium perenne (Perennial Rye-grass) and Bromus hordaceous (Soft Brome), Bromus diandrus (Great Brome) and Phalaris aquatica (Toowoomba Canary-grass). Declared Noxious Weeds (i.e. weeds listed under the Catchment and Land Protection Act 1994; CaLP Act), Weeds of National Significance (WoNS) and High-threat weeds occur throughout the site, although there has been some effort to control species such as Serrated Tussock.

Patches of Plains Grassland meet condition thresholds to be the nationally threatened (critically endangered) community: Natural Temperate Grasslands of the Victorian Volcanic Plain (NTGVVP) based on cover of native tussock grasses. The grassland community is also listed as a threatened community under the Flora and Fauna Guarantee Act 1988 (FFG Act): Western Basalt Plains Grassland Community. Approximately 4.5 hectares of the community was mapped throughout the study site.

A narrow wetland supporting Plains Grassy Wetland (EVC 125) occurs in the north-western part of the site along Cowies Creek, dominated by Amphibromus nervosus (Common Swamp Wallaby-grass) and Eleocharis acuta (Common Spike-rush). The wetland areas do not meet the criteria for the EPBC listed community: Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plain, as they are too small (0.064 hectares, which is well below the minimum area threshold of 0.5 Ha).

The assessment identified 24 rare or threatened species previously recorded or predicted to occur within the study area:

— 16 species listed under the EPBC Act
— 14 species listed as threatened under the Flora and Fauna Guarantee Act 1988 (FFG Act)
— 23 species considered rare or threatened on the Advisory List of Rare or Threatened Plants in Victoria (VROTS)

No listed rare or threatened flora were identified during the field assessment. Two of the EPBC listed flora species were considered to have a low likelihood of occurring within the study site, as suitable habitat is present (albeit modified/degraded habitat). These two species are:

— Amphibromus fluitans (River Swamp Wallaby-grass; vulnerable under EPBC Act);

This species may occur within the wetland areas within the broader study site (areas mapped as Plains Grassy Wetland (EVC 125) in the north-western corner of the Transmission Station). However, there is no suitable habitat for A. fluitans within the project area. The suitable habitat for the A. fluitans will be avoided by the project. The hydrology of the wetland area will not be altered by the project and thus suitable habitat for A. fluitans will not be affected by the project.

— Pimelea spinescens subsp. spinescens (Spiny Rice-flower; critically endangered under the EPBC Act).

This species may occur within areas mapped as NTGVVP (Plains Grassland; EVC 132), as it may be found in native grassland. This species was not observed during the field assessment (two searches were conducted). There are three previous records within 10 km but these records are located at least 5 km from the project area. Based on the paucity of records within the area and the recent flora survey where no individuals were detected, it is considered unlikely that this species occurs within the project area.

Fauna

In total, 246 fauna species may occur within 10 km of the study site. Of these, 43 are listed as threatened under the EPBC Act, FFG Act or the DELWP Advisory List of Threatened Vertebrate or Invertebrate Fauna of Victoria (DSE 2013; 2009) (see Appendix D of Flora and Fauna report). Seventeen species of Migratory fauna (all birds) listed under the EPBC Act are identified for the study area.

The site is dominated by treeless, degraded and modified grassland habitat, so provides limited habitat for most fauna. Potential habitat primarily for two EPBC Act-listed fauna, Golden Sun Moth and Striped Legless Lizard was identified within the study site. There are small numbers of records of both species within 10 km of the site and the site is considered to be potential habitat for both species. Targeted surveys for Golden Sun Moth in December 2019 determined that the species is not present currently. The Striped Legless Lizard is presumed to be present, because project timelines do not allow for targeted surveys in accordance with survey guidelines.

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

The study site is located within the upper catchment area of Cowies Creek. There appears to be no existing natural incised waterways through the assessment site. There are man-made drainage features present on the site including open drains, piped drains and storages (retarding basins / wetlands).

The drainage features are described as follows:

— 200 m long open drain between the Anakie Road culvert and a retarding basin (Basin 1).
— The drain is typically 0.5 m deep, with approximately 10:1 batters. There was no base flow in the drain at the time of

the site inspection.

— Basin 1 is approximately 0.8 ha in size and up to 3.0 m deep. The basin was completely dry at the time of the site inspection. The estimated basin storage volume is 13,000 m3.

— The Basin 1 outlet consists of a 0.6 m diameter pipe. The outlet pipe invert is elevated approximately 1 m above the basin floor.

— The Basin 1 pipe outlet discharge to a surcharge pit structure. Low flows are piped from the surcharge structure into the compound pipe network. High flows surcharge out of the top of the pit grate into an open drain which conveys flows around the western side of the compound.

— The open drain downstream of Basin 1 varies markedly in size along its route (depth varies from 0.2 m to 0.7 m, top width varies from 5 m to 30 m). The open drain discharges under an access road via a 0.6 m diameter culvert, 340 m downstream of the surcharge pit structure. The open drain then discharges to a small wetland located approximately 100 m downstream of the culvert.

— Outflows from the small wetland then discharge through a 200 m uneven rock field to a large retarding basin / wetland located in the southern corner of the site (Basin 2 – estimated storage volume 9,500 m3).

— Inflows into Basin 2 include the above inflows from the open drain and a 1.2 m diameter pipe drain. The pipe drain is the outlet for the pipe drainage network servicing the existing developed portion of the site.

— Outflows from Basin 2 are via a 0.375 m diameter pipe drain located towards the western side of the basin. The pipe drain discharges to a storage dam located within the adjoining south side property.

The above Basins 1 and 2, the open drain link between them, and the open drain link between Basin 1 and Anakie Road represent the existing form of the designated waterway through the site. The original development of the Moorabool Terminal Station site, including the associated drainage infrastructure has significantly changed the form of the original waterway, which is expected to have been a broad depression, similar to what remains present on the upstream side of Anakie Road.

The Battery Storage Facility is proposed in the south eastern sub area (12.5 ha). This area has no significant concentration of runoff. A pipe drain currently services the access road into the existing compound through this area. Runoff from a battery storage facility located within this sub-area will be discharged to Basin 2 for detention and water quality treatment. The Battery Storage development will increase the amount of runoff generated compared to the existing (pre development) conditions. However, this run-off can be diverted to Basin 2 for treatment and is not expected to create a significant impact.

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

The study site consists of grazed paddocks surrounding the existing transmission station.. The paddocks have been grazed for many years by sheep and are dominated by introduced pasture grasses. Some areas were also disturbed (cleared) during construction of infrastructure at the site. However, there are small fragmented patches of Heavier Soils - Plains Grassland (Ecological Vegetation Class; EVC 132_61). These patches are mostly concentrated around the north-eastern boundary of the site. Within the 60 hectare study site, approximately 4.5 hectares is comprised of native vegetation and the remainder is dominated by introduced flora (with scattered native plants throughout).

The Heavier Soils - Plains Grassland areas support a mix of Rytidosperma setaceum (Bristly Wallaby-grass) and Austrostipa bigeniculata (Spear-grasses) under planted non-native and native trees (Eucalyptus camaldulensis; River Red-gums). The patches are moderately weedy and common weeds include Lolium perenne (Perennial Rye-grass) and Bromus hordaceous (Soft Brome), Bromus diandrus (Great Brome) and Phalaris aquatica (Toowoomba Canary-grass). Declared Noxious Weeds (i.e. weeds listed under the Catchment and Land Protection Act 1994; CaLP Act), Weeds of National Significance (WoNS) and High threat weeds occur throughout the site (e.g. Serrated Tussock and Chilean Needle Grass). There has been some effort to control species such as Serrated Tussock.

The patches of Heavier Soils - Plains Grassland meet condition thresholds to be the nationally threatened community: Natural Temperate Grasslands of the Victorian Volcanic Plain Bioregion (NTGVVP) based on cover of native tussock grasses (i.e. > than 50% of the perennial grass cover was native at the time of assessment). This community is listed as critically endangered under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The grassland community is also listed as a threatened community under the Flora and Fauna Guarantee Act 1988 (FFG Act): Western Basalt Plains Grassland Community. Approximately 4.5 hectares of the community was mapped throughout the study site.

There is a narrow wetland supporting Plains Grassy Wetland (EVC 125) in the north-western part of the site along Cowies Creek. The Plains Grassy Wetland is dominated by Amphibromus nervosus (Common Swamp Wallaby-grass) and Eleocharis acuta (Common Spike-rush). The wetland areas do not meet the criteria for the EPBC listed community: Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plain, as the wetland areas are too small (0.064 hectares, which is well below the minimum area threshold of 0.5 Ha). Although the wetland vegetation is connected to another patch of native vegetation (Plains Grassland), the total area of native vegetation (wetland and other native remnant) is < 1.0 Ha – refer to Figure 2 (DSEWPaC 2012) and thus does not meet the definition of the EPBC community.

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

There are no World or National Heritage places (as defined in the Matters of National Environmental Significance Guidelines 2013) near the study site, therefore the project will not have a significant impact on any outstanding natural features or unique values with respect to ecological concerns.

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

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

Approximately 4.5 hectares of Heavier Soils - Plains Grassland (EVC 132) is present throughout the 60 Ha study site. This EVC is endangered within the Victorian Volcanic Plain Bioregion in Victoria. The patches of Heavier Soils - Plains Grassland (EVC 132) also meet condition thresholds to be considered the EPBC listed community: Natural Temperate Grasslands of the Victorian Volcanic Plain Bioregion (NTGVVP). For example, the dominant native species represent at least 50% of the native species and the perennial tussock cover (DSEWPaC 2011). The NTGVVP community is listed as critically endangered under the EPBC Act 1999.

The NTGVVP community within the study site is of low quality, receiving a score of 17 out of a possible 100 using the Victorian Vegetation Quality Assessment Methodology (VQA, also referred to as habitat hectare methodology). Nevertheless, the vegetation met the condition thresholds for the NTGVVP community based on > 50% of the cover of perennial grasses were native grasses at the time of survey. The surrounding properties mostly support ploughed and cropped land and heavily grazed paddocks.

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

Not applicable

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

Weeds

The majority of the study site and project area is dominated by introduced pasture grasses, common weed species include: Lolium perenne (Perennial Rye-grass), Bromus hordaceous (Soft Brome), Bromus diandrus (Great Brome) and Hordeum marinum (Common Barley-grass).

Weeds of National Significance (WoNS) are scattered throughout the study site, some of which occur within the project area: Nassella trichotoma (Serrated Tussock), Nassella neesiana (Chilean Needle-grass) and Lycium ferocissimum (African Box-thorn). The cover of WoNS within the project area is low (< 5%). These species are also listed as declared noxious weeds in Victoria (listed under the Victorian Catchment and Land Protection Act 1994), and additional declared noxious weeds are present within the study site e.g. Cirsium vulgare (Spear Thistle).

There has been some control of Serrated Tussock over recent years, which is evident from presence of dead plants.

Feral animals

Numerous non-native feral species are likely to be present at the study site, including cats, foxes, rabbits, rats, mice.

Erosion

There is no obvious evidence of erosion within the proposed area of impact.

Grazing

The study site and project area is regularly grazed by sheep. The land has not been cropped or cultivated within the last 10 years.

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

Not applicable

3.9 Describe any Indigenous heritage values relevant to the project area

In considering potential risk to Aboriginal cultural heritage material from the proposed works, it is noted that the proposed works area is located approximately 2 km to the east of the nearest waterway, and does not contain landforms that were focal points for Aboriginal occupation in the past. As such, the risk of harm to Aboriginal cultural heritage material from the proposed works is assessed as being low.

The area of proposed works, as well as the wider existing Moorabool Terminal Station site, is not located within an area of cultural heritage sensitivity. As the area of proposed works are not located within an area of cultural heritage sensitivity, a mandatory CHMP is not required under the Aboriginal Heritage Regulations 2018.

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

The proposed works are wholly contained within the property at 680 Ballan Road, Moorabool VIC 3213 (formally referred to as Lot 1 TP 237645).

The property is owned by GPU Powernet Pty Ltd (now AusNet Services).

Neoen have engaged with AusNet services to arrange tenure on their property and ensure the design and siting of the facility is compatible with the current and future operation of the Moorabool Terminal Station.

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

The Moorabool Terminal Station is owned by AusNet Services and is located centrally within the subject site. The majority of the MTS's operations are remotely accessed and no permanent staff are employed at the MTS.

Main access to the MTS is provided via an existing accessway and entry point towards the south-east corner of the site, off Anakie Road. A secondary access track is located to the west of the MTS with its associated entry point off Geelong-Ballan

Road.

Existing infrastructure on the site associated with the MTS includes a relay and maintenance building, clustered together with ancillary structures including a fire pump building, firefighting storage tank, diesel generator building, substation and septic tank located centrally within the MTS footprint ("service core").

A 500kV switchyard and row of transformer benches are located immediately northeast of this service core, whilst a 220kV switchyard is located immediately northwest. Numerous high-voltage pylons up to 40m high are scattered throughout the subject site, supporting overhead transmission cabling which distributes power from the MTS to the surrounding region. Two high-voltage transmission corridors extend outward from the MTS, to the north-east and south-west respectively.

A microwave tower and a water retarding basin are also located on the subject site further north of the 500kV switchyard. A further water retarding basin is located in the southwest corner of the property. Car parking for the MTS is accommodated near the relay building within the service core. The balance of the subject site comprises open grassed areas. Limited treed vegetation is present, with the exception of scattered trees along site boundaries and road interfaces, and some trees located near the service core south of the existing switchyards.

The existing footprint of the MTS covers approximately 16 hectares of the 60 hectare subject site. Future expansion reservations, as required by AEMO, have been considered as part of this project when identifying a suitable location for the battery storage facility to be sited. These 'no-go' areas are shown in the Site Constraints Map provided with this referral. Importantly, the site constraints imposed by AEMO and AusNet effectively limit the potential location of the battery storage facility to a 4.2ha area in the south-east corner of the site.

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

Section 4

Measures to avoid or reduce impacts

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

Natural Temperate Grasslands of the Victorian Volcanic Plain

The location of the battery storage facility and cabling has been located to minimise impact on the NTGVVP community. The construction footprint will be confined to the area shown in Figure 3. Up to 0.583 hectares of the community is proposed to be removed, which equates to approximately 13% of the total 4.5 hectares present within the study site.

In calculating the above area of impact, it is assumed that the area of the community between the proposed footprint and the boundary fence to the north-east is likely to be affected in the long-term, as the vegetation would be a narrow (30 m wide) strip surrounded by hard surface (concrete pad for the Battery Storage Facility) and may be shaded by the infrastructure. Although, this narrow strip will be retained, it is considered lost (pre-cautionary approach).

A Construction Environmental Management Plan (CEMP) will be prepared and implemented. The CEMP will include measures to ensure works do not occur outside of the construction footprint and include measures to protect areas of the community to be retained during construction. Such measures will include:

— Vegetation protection fencing and No-Go signage;

— Vehicle and machinery hygiene protocols to prevent the introduction of new weed species into the site and the spread of existing established weeds within the site;

— Weed control before construction works commences for Weeds of National Significance and Declared Noxious Weeds;

— Sediment and erosion control measures to prevent sediment deposition onto adjacent areas of NTGVVP to be protected.

Stormwater run-off will be designed so that adjacent areas of NTGVVP community will not be compromised. Run-off from the Battery Storage Facility will be directed to retarding basin 2 and treated before discharge

Golden Sun Moth and Striped Legless Lizard

Targeted surveys determined that the GSM is absent from the site at present. However, the site is still considered to be potential habitat, albeit not of high quality.

The Striped Legless Lizard is presumed to be present, because project timelines do not allow for targeted surveys under appropriate conditions and in appropriate seasons.

To minimise impacts on the grassland habitat for both species, the project will:

- Minimise the area of ground disturbance and habitat removal (e.g., minimise the project footprint, and use boring rather than trenching techniques where possible)
- Use previously disturbed areas of the site as much as possible, including for lay-down and access (e.g., existing road, previous soil deposition sites) and
- Reinstate areas of grassland that are impacted by the project but not required for long-term use by the project (e.g., cable route if trenched, laydown areas).

To further minimise the likelihood of impacts on Striped Legless Lizard, the project will:

- Repeatedly slash the area of impact to an increasingly low level (i.e., cut the grasses shorter and shorter to effectively remove cover gradually over a period of approximately four to six weeks) in advance of construction, to encourage SLL to move out of the area if they occur there, and to discourage SLL from moving into the area if they occur in adjacent habitat.
- Add temporary lizard-proof fencing around trenches, if left open overnight.
- Engage an ecologist to check trenches left open overnight for the presence of trapped SLL. This must be done prior to work resuming that day.
- Undertake salvage of SLL along the cable route, if trenched. This would be done during the first soil disturbance (i.e., tyning, sample digs if SLL found). SLL found would be relocated to adjacent habitat, where SLL densities are expected to be low on the basis of habitat condition. Salvage of individuals in this way would allow the species to re-colonise the cable route when grassland is reinstated.

To prevent the introduction or spread of weeds that could further reduce the grassland quality for both species, a Construction Environmental Management Plan (CEMP) will be prepared and implemented, and include:

— Maintaining hygiene on vehicles and machinery passing through GSM habitat, to minimise weed spread

— Avoiding introducing weeds or non-indigenous plants into site

— Reducing weed cover in and around the construction area, including as far as practicable, across the broader site, taking care to avoid drift of herbicides onto native vegetation (for example use selective herbicide application and not aerial application)

— Weed control before stripping topsoil

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

Natural Temperate Grasslands of the Victorian Volcanic Plain

The areas of NTGVVP outside the proposed footprint for the project will be retained and protected during construction.

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

These areas are currently owned and managed by AusNet. Neoen has no ability to control or manage these areas. Therefore, it is beyond the scope and control of the proponent (Neoen Pty Ltd) to protect and manage these additional areas of NTGVVP that occur outside their agreed leased area. Therefore, in relation to NTGVVP, no environmental outcomes are proposed.

Golden Sun Moth

Grassland areas outside the proposed footprint for the project will be retained and protected during construction. These areas are currently owned and managed by Ausnet. Therefore, it is beyond the scope and control of the proponent (Neoen Pty Ltd) to protect and manage these additional areas that occur outside their agreed leased area.

Areas of grassland that are impacted by the project but not required for long-term use by the project (e.g., cable route if trenched, laydown areas) will be reinstated.

Striped Legless Lizard

Grassland areas outside the proposed footprint for the project will be retained and protected during construction. These areas are currently owned and managed by Ausnet. Therefore, it is beyond the scope and control of the proponent (Neoen Pty Ltd) to protect and manage these additional areas that occur outside their agreed leased area.

Areas of grassland that are impacted by the project but not required for long-term use by the project (e.g., cable route if trenched, laydown areas) will be reinstated.

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Section 5

Conclusion on the likelihood of significant impacts

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

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

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

The project will reduce the extent of the NTGVVP community within the site: 0.583 hectares of NTGVVP is proposed to be removed or affected by the proposed works, which equates to 13% of NTGVVP present. NTGVVP within the site is already highly fragmented, occurring as 7 fragmented patches. NTGVVP will not be further fragmented by the proposed works. However, the outer part of the largest patches are proposed to be removed.

The removal is unlikely to reduce the amount of stepping stones within the broader landscape e.g. for seed dispersal and genetic dispersal. The ecological community occurs across a large area from Melbourne to the South Australian border. In this landscape context, the proposed removal would not significantly reduce the extent of the community.

The proposal will not modify or destroy abiotic (non-living) factors (e.g. water, nutrients, or soil) necessary for the ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns. Invasive species will be manged through the implementation of a CEMP.

The project is unlikely to have a significant impact on the NTGVVP based on: 1) the small extent of proposed removal (0.583 hectares), 2) the highly fragmented occurrence of the community within the project area (a total of 4.5 Ha occurs within the 60 Ha site, spread across 7 somewhat fragmented patches), 3) the relatively low quality of the vegetation, and 4) past and current disturbance e.g. planted trees occur within NTGVVP. Nevertheless, the loss will contribute (a small part) to cumulative losses of NTGVVP across the VVP Bioregion.

A site assessment determined the site to be dominated by non-native grasses, but included some non-native grass species (weeds) that are known to support the Golden Sun Moth (GSM) (Chilean Needlegrass, Serrated Tussock). It was therefore deemed to be potential habitat for the GSM, but not of high quality. Targeted surveys for the GSM under appropriate conditions in December 2019 failed to detect the species, leading to the conclusion that the species is not present at the site.

Therefore, no significant impact on the GSM is expected as a result of this project. The project will not lead to fragmentation or changes in the size of a population, or reduce the species' area of occupancy or adversely affect critical habitat. It will not disrupt breeding, or change the quality of habitat to the extent that the species is likely to decline. It is not expected to result in the establishment of invasive species that are harmful to the GSM, or introduce disease that may cause the species to decline.

The project is not expected to interfere with the recovery of the species, but it is acknowledged that the project will reduce the area and therefore availability of low quality potential habitat in the broader region. It is possible that the species' recovery might include observations of the species expanding into such habitat in future years. However, this site was found to be currently unoccupied by the GSM, and there is no certainty that it was ever occupied.

Potentially suitable habitat for this species was identified across much of the study site. However, because the habitat is dominated by non-native grassland species and shows signs of previous disturbance, it is not considered to be of high quality. Project timelines do not allow for targeted surveys under appropriate conditions and in appropriate seasons, so this species is presumed to be present. Its actual presence is unknown – there is only one historical record of the species in the broader area.

The site is considered unlikely to support an important population of the Striped Legless Lizard (SLL). The site does not support a well-studied population of SLL. The location of the site with respect to the species' range and Evolutionary Significant Units (ESUs) mean that a population, if present, is not automatically considered an important population (the site is within the area of the central and south west Victoria lineage). Given the landscape context of the site, the site is considered unlikely to meet any of the important population criteria according to DSEWPaC (2011b). If the SLL is present at the site, it is unlikely to be considered a key source population for breeding or dispersal, it is unlikely to be considered necessary for maintaining genetic diversity, and it is not near the limit of the species' range. Furthermore, the habitat condition within the site is generally poor to moderate with grassland dominated by non-native species, there is evidence of previous ground

disturbance within parts of the site particularly in the east and north, and the existing landuse and fragmentation on neighbouring land and across the broader region is considered unlikely to be advantageous for the SLL

The project is not expected to impact on an important population of the SLL, or the species as a whole.

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Section 6

Environmental record of the person proposing to take the action

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

Neoen is the largest owner and operator of renewable energy projects in Australia and is the owner of the world's largest battery project, Hornsdale Power Reserve, in South Australia. Across all of these projects Neoen has always complied with all environmental protocols and has never been found to be in breach of any permit, law, or regulation.

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

Neoen has never had such proceedings taken against it.

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

☑ Yes ☐ No

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

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

At Neoen, we believe:

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

Accordingly, Neoen is committed to:

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

To achieve these objectives above, Neoen has published an over-arching environmental policy document titled Health, Safety and the Environment Management System (HSEMS).

The HSEMS covers the following components:

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

All HSEMS components are based on the guidelines of OHSAS 18001 and ISO 14001 standard frameworks. The HSEMS provides background and reference to the provisions of these standards that are being used as guidelines to NEOEN HSE Management System.

The HSEMS is organized according to a usual Plan/Do/ Check/Review approach to allow for the definition of the company's strategy and objectives (Plan), the tools to execute the strategy (Do), the controls required (Check), and the continuous review of the process to allow for improvement (Review).

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For each of the components listed above, the HSEMS describes:
- The objectives: what is it that the system aims at achieving
- The deliverables: what is the output expected
- The controls: how should the organization control that objectives are met
- The Procedures and tool box: documents, templates to be used to implement the HSEMS

The framework HSEMS is used to develop Neoen's specific HSE management plan for each asset. All Contractors (either construction or maintenance) are required to develop their detailed management plans in compliance with such the HSEMS and to have a unified tracking of KPIs to the satisfaction of Neoen.

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

☑ Yes ☐ No

6.4.1 EPBC Act No and/or Name of Proposal

Kaban Green Power Hub: 2018/8289
Kentbruck green Power Hub: 2019/8510
Western Downs Green Power Hub: 2018/8301
Bulgana Wind Farm: 2015/7460
Hornsdale Wind Farm: 2012/6573

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

Section 7

Information sources

Reference source

DEDJTR 2017. Invasive Plant Classifications. Department of Economic Development, Jobs, Transport and Resources. Available online at: http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/weeds/invasive-plant-classifications

DELWP 2017 Guidelines for the removal, destruction or lopping or native vegetation. Department of Environment, Land, Water and Planning, Victorian Government. December 2017

DELWP 2019 Victorian Biodiversity Atlas. Available on-line at: https://www.environment.vic.gov.au/biodiversity/victorian-biodiversity-atlas (accessed November 2019)

DELWP 2019 a NatureKit. Available on-line at http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit (accessed November 2019)

DELWP 2019 b Bioregions and EVC benchmarks. Available on-line at https://www.environment.vic.gov.au/biodiversity/bioregions-and-evc-benchmarks (accessed November 2019)

Reliability

All references are considered to be reliable.

Uncertainties

There are no known or obvious uncertainties associated with these references.

Reference source

DELWP 2019c NVIM. Available online: https://nvim.delwp.vic.gov.au/TermsAndConditions?comeFrom=%2fBiodiversity (Accessed November 2019)

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DSEWPaC 2011. Nationally Threatened Ecological Communities of the Victorian Volcanic Plain: Natural Temperate Grassland & Grassy Eucalypt Woodland. A guide to the identification, assessment and management of nationally threatened ecological communities Environment Protection and Biodiversity Conservation Act 1999

DSEWPaC 2011b. Referral guidelines for the vulnerable striped legless lizard, Delma impar, Department of Sustainability, Environment, Water, Population and Communities

Reliability

All references are considered to be reliable.

Uncertainties

There are no known or obvious uncertainties associated with these references.

Reference source

DSEWPaC 2012. Approved Conservation Advice for the Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities

DSEWPaC 2013. Significant impact guidelines 1.1: Matters of National Environmental Significance. Environment Protection and Biodiversity Conservation Act 1999.

DoEE 2019 c Weeds of National Significance. Available on-line at http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html (accessed November 2019)

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DoE (2019). Delma impar in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat

Reliability

All references are considered to be reliable.

Uncertainties

There are no known or obvious uncertainties associated with these references.

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

Reference source

DoE (2019). Synemon plana in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.environment.gov.au/sprat

DSE 2004. Vegetation Quality Assessment Manual – guidelines for applying the habitat hectare scoring method. Department of Sustainability and Environment. East Melbourne, Victoria

DSE 2009: Advisory List of Threatened Invertebrate Fauna in Victoria – 2009. Victorian Department of Sustainability and Environment, East Melbourne, Victoria

DSE 2013: Advisory List of Threatened Vertebrate Fauna in Victoria – 2013. Victorian Department of Sustainability and Environment, East Melbourne, Victoria Standards Australia/Standards New Zealand Standard Committee (2009) AS/NZS ISO 31000:2009, Risk Management-Principles and Guidelines

GHD 2019. Neoen Battery Storage Facility. Hydrology Site Assessment. Report to Neoen Australia Pty Ltd by GHD

Reliability

All references are considered to be reliable.

Uncertainties

There are no known or obvious uncertainties associated with these references.

Reference source

Maldonado, S. (2009). Human-induced vs. historical habitat shifts: Identifying the processes that shaped the genetic structure of the Striped Legless Lizard, Delma impar. Honours Thesis, University of Melbourne.

Smith, W.J.S. & P. Robertson (1999). National Recovery Plan for the Striped Legless Lizard (Delma impar) 1999-2003. NSW National Parks and Wildlife Service & Wildlife Profiles Pty Ltd. Available from: http://www.environment.gov.au/resource/national-recovery-plan-striped-legless-lizard-delma-impar-1999-2003

Reliability

All references are considered to be reliable.

Uncertainties

There are no known or obvious uncertainties associated with these references.

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

Section 8

Proposed alternatives

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

Yes ☑ No

Australian Government
Department of the Environment and Energy

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

Section 9

Person proposing the action

9.1.1 Is the person proposing the action a member of an organisation?

☑ Yes ☐ No

Organisation

Organisation name	NEOEN AUSTRALIA PTY. LTD.
Business name	
ABN	57160905706
ACN	
Business address	16 Marcus Clarke St, Canberra, 2601, ACT, Australia
Postal address	
Main Phone number	+61431300834
Fax	
Primary email address	Matthew.parton@neoen.com
Secondary email address	

9.1.2 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

☐ Small business
☑ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations *

☐ Yes ☑ No

9.1.3 Contact

First name	Matthew
Last name	Parton
Job title	State Leader Victoria
Phone	
Mobile	+61431300834
Fax	
Email	Matthew.parton@neoen.com
Primary address	16 Marcus Clarke St, Canberra, 2601, ACT, Australia
Address	

Declaration: Person proposing the action

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

Signature: ..... Date: 14/01/2020

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

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

Australian Government

Department of the Environment and Energy

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

Proposed designated proponent

9.2.1 Is the proposed designated proponent a member of an organisation?

☑ Yes ☐ No

Organisation

Organisation name	NEOEN AUSTRALIA PTY. LTD.
Business name	
ABN	57160905706
ACN	
Business address	16 Marcus Clarke St, Canberra, 2601, ACT, Australia
Postal address	
Main Phone number	+61431300834
Fax	
Primary email address	Matthew.parton@neoen.com
Secondary email address	

9.2.2 Contact

First name	Matthew
Last name	Parton
Job title	State Leader Victoria
Phone	+61431300834
Mobile	
Fax	
Email	Matthew.parton@neoen.com
Primary address	16 Marcus Clarke St, Canberra, 2601, ACT, Australia
Address	

Declaration: Proposed Designated Proponent

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

Signature: ..... Date: 14/01/2020

Australian Government

Department of the Environment and Energy

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

Referring party (person preparing the information)

9.3.1 Is the referring party (person preparing the information) a member of an organisation?

☑ Yes ☐ No

Organisation	
Organisation name	NEOEN AUSTRALIA PTY. LTD.
Business name	
ABN	57160905706
ACN	
Business address	16 Marcus Clarke St, Canberra, 2601, ACT, Australia
Postal address	
Main Phone number	+61431300834
Fax	
Primary email address	Matthew.parton@neoen.com
Secondary email address	

9.3.2 Contact	
First name	Matthew
Last name	Parton
Job title	State Leader Victoria
Phone	+61431300834
Mobile	
Fax	
Email	Matthew.parton@neoen.com
Primary address	16 Marcus Clarke St, Canberra, 2601, ACT, Australia
Address	

Declaration: Referring party (person preparing the information)

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

Signature: ..... **Date:** 14/01/2020

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

Appendix A

Attachment

Document Type	File Name
action_area_images	Disturbance_footprint.kmz
action_area_images	BESS_impact_footprint.kmz
action_area_images	12516819_001_Study site and 10 km buffer area_A4L_revD-reduced.pdf
action_area_images	12516819_003_Ecological values -_A4L_revD.pdf
action_area_images	12516819_005_Matters of National Environmental _A4L_revG.pdf
action_area_images	12516819_002_Site context_A4L_revE.pdf
action_area_images	12516819_004_Indicative Concept Design_A4L_revC.pdf
action_area_images	12516819_007_Site Constraints_A4L_revB.pdf
public_consultation_reports	Victorian Big Battery_CommsPlan_External_.pdf
supporting_tech_reports	12516819-REP-0_Flora and Fauna Report EPBC referral.pdf
hydro_investigation_files	12516819-REP-0_VBB HydrologyReport.pdf
corp_env_policy_docs	HSE_Management_Sysetm_Vf_with_Annexes_Rev1.2.pdf

Appendix B

Coordinates

Area 1
-38.036834879949,144.29160131877
-38.032812479085,144.29707302516
-38.038541798426,144.30368198817
-38.042479389297,144.2928887791
-38.036834879949,144.29160131877