

Willavale Park Battery Energy Storage System

Application Number: **03001**

Commencement Date:
17/07/2025

Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Willavale Park Battery Energy Storage System

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 *

01/06/2026

1.1.4 Estimated end date *

01/02/2028

1.2 Proposed Action details

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

X-Elio Willavale Park Pty Ltd (the Applicant) proposes to construct, operate, maintain and decommission the Willavale Park Battery Energy Storage System (BESS) (the Proposed Action), a renewable energy development located at 20541 Hume Highway, Wollongorang, New South Wales 2581. The Proposed Action is located on the Southern side of Hume Highway, approximately 22 kilometres (km) southwest of Goulburn in the Southeast and Tableland region. The Proposed Action sits within the Goulburn Mulwaree Local Government Area (LGA).

X-Elio Willavale Park Pty Ltd is a wholly owned company of X-Elio and is the Proponent for the Project. The relevant contact detail are:

- X-Elio Willavale Park Pty Ltd as Trustee of X-Elio Willavale Trust ACN: 669 311 157;
- Address: Level 7, 67 Palmerston Cres, South Melbourne VIC 3205

The Proposed Action involves the construction, operation, maintenance and decommissioning (where applicable) of a large-scale BESS and associated infrastructure. This would comprise:

- Large-scale BESS with a storage capacity of up to 300 megawatts (MW) / 1,200 megawatt hours (MWh);
- Electrical reticulation infrastructure:
 - High-voltage substation;
 - Switching station (330 kV); and
 - Internal transmission (130 kV) and feeder lines (330 kV). Project will connect into the existing 330 kV Yass-Marulan transmission line
- Permanent associated and ancillary infrastructure
 - Operations & Maintenance (O&M) facility;
 - New and/or upgraded internal access roads;
 - New and/or upgraded drainage system; and
 - Security fencing and lighting;
- Temporary construction facilities.

The Project Area covers a total of approximately 189.87 hectares (ha), with an anticipated Disturbance Area of approximately 26.14 ha. The Disturbance Area represents the maximum area expected subject to disturbance during construction and operation of the Project and includes the footprint of the Battery Energy Storage System (BESS) (20.67 ha) and a section of Wollongorang Road between the Hume Highway intersection and the southern access point (5.47 ha). This section of road requires minor localised widening to support the construction of Project infrastructure.

Project construction will last approximately 18 months, and will involve:

- Construction hours as per standard daytime construction working hours
- Average annual workforce of 150 Full Time Equivalent (FTE), 250 during peak construction
- Delivery of Project components, including battery modules, substations, transformers and associated components. Main equipment and Over Size, Over Mass (OSOM) deliveries via Port Botany
- Access roads upgrade
- Associated external road upgrades (also used for operational maintenance or decommissioning activities)
- Installation of underground and overhead cabling, maintenance and environmental management processes and equipment
- Subdivision and boundary adjustments relating to lease arrangements, where required

In terms of operations, the Development Consent is in perpetuity and infrastructure life is a minimum of 20-30 years. The BESS will operate 24 hours a day, seven days a week. The operation workforces is required periodically for maintenance activities, this will be equivalent to approximately four FTE.

No Threatened Ecological Communities (TEC) identified under the EPBC Act occur within the Disturbance Area. An occurrence of the state-listed TEC White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland under the NSW Biodiversity Conservation Act 2016 (BC Act) occurs within the External Road Works Study Area. However, it does not meet the criteria thresholds to be considered part of the Commonwealth listed entity.

The Proposed Action is declared State Significant Development (SSD) under Clause 2.6(1) of the State Environmental Planning Policy (Planning Systems) 2024 (Planning Systems SEPP). The Applicant is seeking development consent for the Proposed Action under Part 4, Division 4.7 of the Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act). As part of the SSD consent process, the Applicant has engaged Environmental Resources Management Australia Pty Ltd (ERM) to prepare an Environmental Impact Statement (EIS) for the Proposed Action. The EIS would consider both the temporary and operational Disturbance Area, noting the temporary impacted areas would be rehabilitated post construction completion. The main potential impacts of the Proposed Action (during construction and operation) on biodiversity that would need to be assessed include:

- Loss of extant native vegetation communities and associated fauna and flora habitat and the subsequent impacts to local population of native species, particularly threatened species;
- Increased habitat fragmentation; and
- Mortality and injury from vehicle strike and vegetation clearing.
- The Proposed Action is situated on multiple lots outlined below:
 - Deposited Plan (DP) 1120472: Lot 10 (freehold); and
 - DP 732520: Lot 13 (freehold).

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 Willavale BESS EPBC Act Self-Assessment Report (provided in Att A_Willavale Park BESS_EPBC Act Self Assessment, Section 1, pp 5.) for the proposed action outlines the specific Commonwealth legislation associated with the proposed development. Additionally, relevant state and local legislation has been outlined below:

Commonwealth Legislation

- *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). This referral addresses the potential impact on matters of national environmental significance and whether the Proposed Action is expected to be a controlled action requiring environmental approval; and
- *Native Title Act 1993*. A review of the potential for native title will be undertaken for the Proposed Action. The Project Area is not located within the boundaries of a native title claim or determination.

State (NSW) legislation

- *Environmental Planning and Assessment Act 1979* (EP&A Act). Under Section 4.2, the Proposed Action requires development consent in accordance with Clause 2.36 of the State Environmental Planning Policy (Transport and Infrastructure) 2021. The Proposed Action is classified as “electricity generating works”, which is permitted with consent in prescribed non-residential zone. The Proposed Action is zoned as RU1 Primary Production under the Goulburn Mulwaree Local Environmental Plans; and
- *Biodiversity Conservation Act 2016* (BC Act). Under Section 7.9, a Biodiversity Development Assessment Report (BDAR) must be prepared because the Proposed Action is a State Significant Development under Clause 2.6 of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP).
- *Local Land Services Act 2013* (LLS Act). Under Part 5A Division 2, a Land Category Assessment Report has been prepared to assist in determining the final extent of Category 2 regulated lands that require assessment.

The Bilateral Agreement established between the Commonwealth and NSW Governments allows the Federal Minister for the Environment to rely on the NSW environmental impact assessment processes when assessing actions under the EPBC Act. The Bilateral Agreement applies to certain types of major projects under the EP&A Act including projects for State Significant Development that also require assessment and approval under the EPBC Act. The Commonwealth may elect to issue supplementary assessment requirements to address specific matters not covered by the Bilateral Agreement.

The Bilateral Agreement allows for the use of the NSW Biodiversity Offset Scheme (BOS) to address any residual impacts arising from the Proposed Action. Offsets are determined by application of the NSW Biodiversity Assessment Method and associated Biodiversity Assessment Method Calculator to the satisfaction of the NSW Environment Agency head and Minister for Planning.

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. *

The Proponent recognises individual communities are diverse and unique, working closely with residents and businesses to ensure a positive long-term impact. Community and stakeholder engagement commenced in June 2024 and consisted of government engagement, engagement with landowners and neighbours, and communication to the broader community. Consultation efforts are summarised as follows:

- Introductory letters sent to:
 - NSW State Member for Goulburn, Mrs. Wendy Tuckerman;
 - Goulburn Mulwaree Council;
 - Rural Fire Service;
 - Marulan Chamber of Commerce;
 - Goulburn Chamber of Commerce/ Goulburn 2580;
 - Pejar Local Aboriginal Land Council;
 - Breadalbane Hall Association; and
 - Breadalbane Public School
- Introductory meetings with representatives from:
 - Community Energy 4 Goulburn (community solar farm);
 - Marulan Chamber of Commerce ;
 - Goulburn Mulwaree Rural Fire District;
 - Pejar Local Aboriginal Land Council;
 - NSW Member for Goulburn, Mrs Wendy Tuckerman MP;
 - Goulburn Mulwaree Council; and
 - Upper Lachlan Shire Council
- Follow-up meetings with:
 - Pejar Local Aboriginal Land Council;
 - Goulburn Mulwaree Council; and
 - Goulburn Mulwaree Rural Fire District.
- Door knocking with immediate neighbours
- Community engagement sessions:
 - One online information session (webinar);
 - Three in-person community information pop-up stands, held at Goulburn Marketplace shopping centre, Goulburn Rotary Markets, and Breadalbane Community Hall.
- Communication channels and tools:
 - Established a website, contact email and FAQs;
 - Three mailed newsletters; and
 - Online surveys.

Community and stakeholder engagement during the preparation of the EIS would build on relationships established through early engagement activities and complement formal consultation required under planning regulations.

1.3.1 Identity: Referring party

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Confirm that you have read and understand this Privacy Notice *

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN 12002773248
Organisation name ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED
Organisation address 2000 NSW

Referring party details

Name Jemma Boyce
Job title Senior Consulting Associate
Phone 0432660659
Email jemma.boyce@erm.com
Address Level 14 207 Kent Street Sydney NSW 2000

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 60669311157
Organisation name X-ELIO WILLAVALLE PARK PTY LTD
Organisation address Level 7, 67 Palmerston Cres South Melbourne VIC 3205

Person proposing to take the action details

Name Visal Arambage
Job title National Renewable Energy Development Manager
Phone +61 459 889 226
Email visal.arambage@x-elio.com
Address 67 Palmerston Crescent South Melbourne, VIC, 3205

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. *

The Proponent is an international organisation that specialises in the development, operation and maintenance of large-scale assets, predominantly focusing on solar and industrial scale battery storage. X-Elio have submitted three EPBC referrals in the past; Sixteen Mile Solar Farm (2024/09827), North Burnett Renewables Energy Hub (2024/09827), and Canyonleigh BESS (2025/10233).

They also have other renewables projects in development, including Pagoon Solar Farm and BESS (NSW) (also referred as Rollsvile Solar Farm and BESS (NSW)), which will be submitting EPBC referral later in the year. They have several more renewable projects under construction and in operation, such as Blue Grass Solar Farm (Qld) and Forest Glen Solar Farm (NSW). X-Elio are an international company with renewable projects in Chile, France, Italy, Honduras, Japan and USA.

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

X-Elio considers the environment a key element in their sustainability agenda and one of the key elements in achieving a sustainable energy model. They are committed to the following guiding principles:

- Observing environmental regulations and complying with legal requirements in the countries where they operate.
- Managing and mitigating the risks and impacts on the environment related to their operations with continuous improvement as a global objective.
- Consume with responsibility, by making a sustainable, efficient and conscientious use of natural resources.
- Establish adequate management systems, based on continuous improvement, that contribute to reduce environmental risks.
- Respect nature, biodiversity and historical and artistic heritage in the natural environments in which the company's assets are located.
- Establish a constructive dialogue with public administrations, regulatory bodies, non-governmental organizations, multilateral organizations, shareholders, customers, local communities and other stakeholders.

More information can be found within X-Elios HSSE Policy (X-Elio 2021).

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	60669311157
Organisation name	X-ELIO WILLAVALLE PARK PTY LTD
Organisation address	Level 7, 67 Palmerston Cres South Melbourne VIC 3205

Proposed designated proponent details

Name	Visal Arambage
Job title	National Renewable Energy Development Manager
Phone	+61 459 889 226
Email	visal.arambage@x-elio.com
Address	67 Palmerston Crescent South Melbourne, VIC, 3205

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	12002773248
Organisation name	ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED
Organisation address	2000 NSW
Representative's name	Jemma Boyce
Representative's job title	Senior Consulting Associate
Phone	0432660659
Email	jemma.boyce@erm.com
Address	Level 14 207 Kent Street Sydney NSW 2000

✔ 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	60669311157
Organisation name	X-ELIO WILLAVALLE PARK PTY LTD
Organisation address	Level 7, 67 Palmerston Cres South Melbourne VIC 3205
Representative's name	Visal Arambage
Representative's job title	National Renewable Energy Development Manager
Phone	+61 459 889 226
Email	visal.arambage@x-elio.com
Address	67 Palmerston Crescent South Melbourne, VIC, 3205

✔ 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

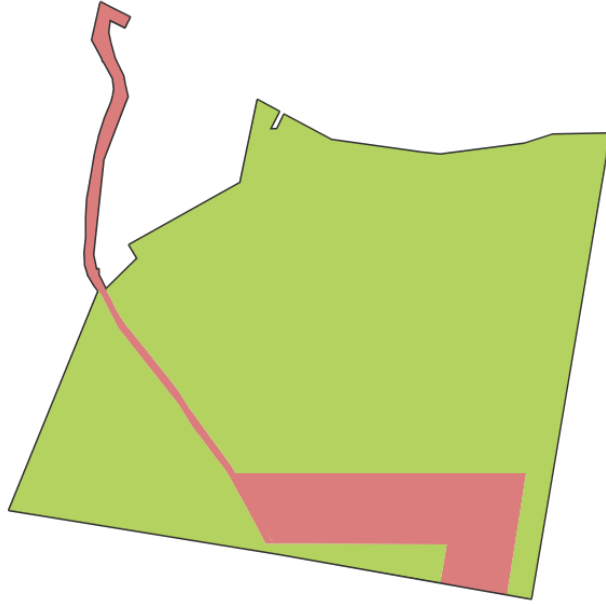
1.4 Payment details: Payment allocation

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



Project Area: 189.79 Ha **Disturbance Footprint:** 26.14 Ha **Retention Area:** 163.71 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

The address is 20541 Hume Highway, Wollongorang within the Goulburn Mulware LGA, comprising

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

New South Wales

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 applicant has entered a lease agreement with the landowner that is hosting the Project infrastructure. This is a 25-year lease term, with an additional term of five years each.

3. Existing environment

3.1 Physical description

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

The Proposed Action is located 170 km Southwest of Sydney, 22km southwest of Goulburn and 60 km Northeast of Canberra.

The Project is located entirely within the South Eastern Highlands Interim Biogeographical Regionalisation for Australia (IBRA) bioregion and the Monaro IBRA subregion. This subregion occurs on a sloping plateau that runs north to south and rises from 600 to 1,300 metres. The climate of the bioregion is temperate, with warm summers and year-round rainfall. Current land uses of the bioregion include crops and orchards, the Snowy Mountains Hydro-Electric scheme and agricultural practices, mining has ceased in the region as resources have been depleted. The Project Area has evidence of extensive agricultural activities such as clearing, crop production and livestock grazing.

The Project Area can be accessed from Wollogorang Road via Hume Highway, with internal access roads and other facilities across the Development Area. The appearance of these facilities would be similar to existing farm structures in the landscape and differences would be established as part of the Proposed Action.

The vegetation across the Project Area is largely associated with PCT 3376 Southern Tableland Grassy Box Woodland. This PCT occurs in a derived grassland and woodland form. The native vegetation present within the Project Area is generally described as degraded. The land use practices implemented across the Project Area is predominantly agricultural, primarily or irrigated cropping and grazing of livestock. Current agricultural uses that occupy most of the Project Area include cropping (e.g., wheat) and sheep grazing. Consequently, much of the pre-European tree canopy has been removed leaving scattered trees and isolated patches of trees with heavily modified groundcover vegetation comprising exotic species and some native species.

Native vegetation was ground-truthed within the Disturbance Area and was confirmed to occur within the External Road Works Study Area. Occurrences of PCT 3747 Southern Tableland Western Hills Scribbly Gum Forest and PCT 3376 Southern Tableland Grassy Box Woodland were recorded within the External Road Works Study Area over approximately 2.98 ha. PCT 3747 is not associated with any Threatened Ecological Community (TEC) under the EPBC Act and PCT 3376 does not conform to the EPBC Act listing of the Critically Endangered Ecological Community (CEEC) White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands. The remaining Disturbance Area, outside of the external road works and subject to the BESS development totals 20.67 ha is made up of non-native vegetation, proposed to be categorised as Category 1 exempt lands under the *Local Land Services Act 2013* (LLS Act). Lands within this area consist of planted *Pinus radiata* and disturbed grazing lands. Att A (Att A_Willavale Park BESS_EPBC Act Self-Assessment Report).

The stands of native vegetation present within the Project Area potentially provide important refuge, foraging and nesting habitat of native fauna. Within the broader Project Area, a number of locally native canopy trees were observed to contain hollows suitable for use by a number of fauna species. Other habitat values observed in the Project Area included rocky areas, fallen logs and bodies of water.

Impacts to such resources have been avoided by the Disturbance Area proposed, and few features, including hollows have been recorded within the External Road Works Study Area where impacts to such habitat features are likely.

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

Existing Uses:

The Project Area covers approximately 189.87 ha and is currently used for agricultural grazing and cropping. A review of historical aerial imagery shows a history of intensive agricultural activities such as cropping and pasture modification. Imagery from 1987, 1990 and 1997 shows significant groundcover disturbance through intensive cropping activities, pasture medication, mining activities and transport and communication utilisation. The areas of significant disturbance (northern portion of Project Area) are not highly visible in the black and white 1987 historical imagery but the clear delineation of paddocks is visible. The disturbance is clearer in the 1990 and 1997 historical imagery, now with evident bare ground, machinery lines and contour banks present. In addition to this, areas that were cleared of woody vegetation prior to 1990 have remained cleared from 1990, 1997 and until the present day shown in Att C_Willavale Park BESS_Land Category Assessment Report, figures 2-4 - 2-6, pp 2 - 4.

Proposed uses:

The broader Project Area in which the proposed development occurs totals approximately 189.87 ha and comprises native vegetation, non-native vegetation and farm dams. The Disturbance Area totals approximately 26.14 ha and includes 20.67 ha of non-native vegetation for the Disturbance Area associated with the BESS and associated infrastructure, and 5.47 ha of road reserve (i.e. External Road Works Study Area), including 1.14 ha of native vegetation associated with localised road upgrades required along Wollogorang Road.

Most of the Disturbance Area coincides with agricultural and cropping lands present within the Project Area with impacts to native vegetation restricted to 1.14 ha within the External Road Works Study Area (or 4.4% of the total Disturbance Area and 0.6% of the Project Area). The remaining 164.27 ha of the Project Area will not be impacted by the proposal and is not expected to result in any land use changes.

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

There are no relevant outstanding natural features or important and unique values associated with the Project Area.

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 topography is undulating, and areas of steeper incline are present, most of the woody vegetation across the Project Area is isolated to the external road works or on the boundary. Elevation ranges from approximately 650m - 745m, gently sloping toward the northern and southern boundaries of the Project Area.

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.

ERM has completed a Preliminary Biodiversity Assessment (Att B_Willavale Park BESS_Preliminary Biodiversity Assessment Report), a EPBC Act Self-Assessment (Att A_Willavale Park BESS_EPBC Self-Assessment Report) and a Land Category Assessment (LCA) (Att C_Willavale Park BESS_Land Category Assessment Report). *Please note some of these reports used previous iterations of the project design and may have a slightly different project area and disturbance footprint, the correct areas are the ones used in Section 2 of this application.*

A Biodiversity Development Assessment Report (BDAR) is currently being prepared to support an Environmental Impact Statement (EIS) for approval as State Significant Development under the NSW *Environmental Planning and Assessment Act 1979*.

The following field surveys have been conducted across the Project Area:

- 16-19 April 2024: rapid vegetation assessment, Biodiversity Assessment Method (BAM) plots/vegetation integrity plots), Land Category Assessment (LGA) transects, scattered tree assessments, habitat assessments of landscape and habitat features.
- 20 May 2024: LCA transects.
- 3-6 February 2025: rapid vegetation assessment, BAM plots/vegetation integrity plots), nocturnal spotlighting and call playback, targeted nocturnal aural visual surveys for frogs, dip netting
- 2-4 June 2025: rapid vegetation assessments, nocturnal spotlighting and call playback.

The field investigations, methods and locations are presented in Att A – Willavale Park BESS EPBC Act Self-Assessment, Section 2.3, pp 9-11.

Plant Communities and Threatened Ecological Communities

Ecological assessments of the Project Area determined the presence of two (2) native Plant Community Types (PCT):

- 3376 Southern Tableland Grassy Box Woodland
- 3747 Southern Tableland Western Hills Scribbly Gum Forest

The occurrence of PCT 3376 within the Project Area has been found not to conform with the criteria for the EPBC Act listed Box-Gum Woodland TEC due to a lack of ground covers and important native herb and forb species present, as well condition thresholds not being met. However, patches do conform to the BC Act listed community and therefore all areas of PCT 3376 are considered to form part of the BC Act TEC. This TEC is situated within the External Road Works Study Area and to the west of Wollongorang Road with 2.85 ha occurring within the External Road Works Study Area subject to disturbance.

Approximately 1.12 ha is anticipated to be impacted by required road upgrades to support the construction of the BESS. Additionally, 0.13 ha of PCT 3747 was recorded within the Project Area and is anticipated to be impacted in a very minor way with 0.02 ha to be disturbed for road upgrades. No further impacts to PCTs or TECs are proposed.

The Disturbance Area largely consists of non-native vegetation that has been disturbed due to the historical land use for agricultural purposes. These areas have been separated into areas of non-native vegetation and planted non-native vegetation. Both areas have been subject to extensive and prolonged disturbance and lack suitable habitat for threatened species.

Threatened Flora

Surveys were conducted across the Project Area and within areas of PCT 3376 and PCT 3747 over the 16 – 19 April 2024 and 3 – 6 February 2025. Floristic surveys were undertaken through LCA Transects, BAM Plots and Rapid Vegetation Assessments, as well as Scattered Tree Assessments.

Surveys determined that suitable habitat for the following EPBC listed threatened flora species occurs within the broader Assessment Area:

- Hoary Sunray (*Leuchochrysum albicans* subsp. *tricolor*)
- Buttercup Doubletail (*Diuris aequalis*)

The EPBC Self-Assessment (Att A_Willavale Park BESS_EPBC Act Self-Assessment, Section 4.4, pp 39-42) confirmed that both of these species have been recorded within the locality, in the south-west of the broader Assessment Area. Neither of these species occur within the Disturbance Area. Given the nearby records and habitat available across the Project Area, both species are considered likely to occur. No additional threatened species have been identified within the Disturbance Area during surveys and habitats for threatened flora species are considered highly degraded within the Disturbance Area.

Threatened Fauna

Targeted fauna searches for threatened fauna with a potential or higher likelihood of occurrence to occur within the Project Area were undertaken for the following species:

- Powerful Owl (*Ninox strenua*)
 - Spotlighting transects and call playback surveys confirmed there was no evidence of the species.
- Barking Owl (*Ninox connivens*)
 - Spotlighting transects and call playback surveys confirmed there was no evidence of the species.
- Green and Golden Bell Frog (*Litoria aurea*)
 - Nocturnal aural-visual and call playback surveys with spotlighting transects confirmed the species was not present
- Yellow-spotted Tree Frog (*Litoria castanea*)
 - Nocturnal aural-visual and call playback surveys with spotlighting transects confirmed the species was not present
- Southern Bell Frog (*Litoria raniformis*)
 - Nocturnal aural-visual and call playback surveys with spotlighting transects confirmed the species was not present
- Dusky Woodswallow (*Artamus cyanopterus*)
 - Detected through incidental observation within the Project Area.
 - Note: this species is not listed under the EPBC Act.
- Pink-tailed Legless Lizard (*Aprasia parapulchella*)
 - An expert report has been prepared, outlining no need for surveys within the Project Area

Several additional fauna species listed as threatened under the EPBC Act that are considered known or likely to occur within the broader Assessment Area, as assessed through a desktop analysis, were considered to have the potential to be adversely impacted by the proposal. An additional MNES Risk Assessment also identified fauna species that have the potential to occur. While no targeted surveys for these species have been conducted the majority of the Disturbance Area consists of non-native grasslands and agricultural and cropping lands that are non-native. Therefore, it is considered that the following fauna species that rely on, or utilise woodland habitat are only considered potentially or likely present in limited sections of the Disturbance Area, associated with the presence of PCT 3376 along the External Road Works Study Area:

- Diamond Firetail (*Stagonopleura guttata*)
- Grey-headed Flying-fox (*Pteropus poliocephalus*)
- Pink-tailed Legless Lizard (*Aprasia parapulchella*)
- Striped Legless Lizard (*Delma impar*)
- Green and Golden Bell Frog (*Litoria aurea*)

Habitat connectivity for native fauna across the Disturbance Area is also considered low with only small patches of scattered trees occurring across the majority of the Disturbance Area and connectivity features largely being limited to scattered canopy trees within the External Road Works Study Area.

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

The biodiversity values within the Project Area have been disturbed through historical and current agricultural land use and are characterised by grazed native and modified grasslands resulting from vegetation clearing, cropping and livestock grazing.

Native vegetation is present within the Disturbance Area but is restricted to areas within the External Road Works Study Area. Regardless, these areas are highly fragmented due to historical clearing and current agricultural land uses, as well as ongoing roadside activities, such as mowing and grazing. The eastern portion of the Project Area provided little habitat connectivity and consists of scattered trees with a highly disturbed understory whilst the western portion of the Project Area contains patches of remnant woodland in proximity to other larger retained wooded areas beyond the Project Area. Areas containing remnant native vegetation have been avoided and excluded from the Disturbance Area.

The value of habitat connectivity across the Project Area is low as it remains disjunct and impeded by fencing, overgrazing and land use practices. There are no karsts, caves, crevices, cliffs or other geological features of significance present within the Disturbance Area.

The entire portion of the Disturbance Area identified for the purpose of the BESS and associated infrastructure (totaling 20.67 ha) consists of non-native vegetation. A row of planted *Pinus radiata* have been identified through the middle of this Disturbance Area, and on the eastern and western boundaries of this area. The Project Area contains 184.06 ha of non-native vegetation with 20.58 ha identified within the Disturbance Area and 4.33 ha within the external road works area.

Soil mapping indicates the Project Area is found across the Garlands and Wyangala soil landscapes. The local soils are classified as Sodosols and Kandosols and tend to have low fertility and land use is generally restricted to grazing pastures. No soil testing was undertaken during the field surveys.

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.

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

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

An Aboriginal Cultural Heritage Assessment Report (ACHAR) is currently underway as part of the EIS.

The Monaro sub-bioregion generally consists of sloping plateau rising 600 to 1300 m north to south. A number of heritage studies conducted within the Goulburn Mulwaree Local Government Area (LGA) and broader region, including those by Koettig and Lance (1986), Fuller (1989), and Australian Museum Business Services (AMBS, 2012), demonstrate that Aboriginal cultural heritage sites, particularly artefact scatters are widespread across a range of landforms.

These studies indicate that artefact scatters are the most common site type in the region, typically found within 100 metres of water sources and on well-drained lower slopes. Quarries, culturally modified trees, grinding grooves, and burial sites have also been recorded within the broader landscape, although their presence is considered rare due to natural degradation and land use changes. Rock shelters, bora grounds, and carved trees are typically associated with elevated areas, outcrops, or mature vegetation features that are present in parts of the Project Area, indicating the potential for heritage values to occur.

Previous archaeological surveys within and near the Project Area have identified a range of Aboriginal cultural heritage sites, including artefact scatters and isolated finds. The presence of large granitic boulders, creek lines, and elevated terrain in the Project Area align with environmental characteristics typically associated with Aboriginal site locations in the region.

Two Aboriginal objects (artefacts) are currently recorded within the Project Area in the Aboriginal Heritage Information Management System (AHIMS). A new site (artefact scatter) was also identified during a heritage survey, completed in June 2025. These are addressed in detailed in the ACHAR (Att D_Willavale Park BESS_ Aboriginal Cultural Heritage Assessment Report, Section 8, pp 44) that has been completed as part of the EIS. The ACHAR involved consultation with Registered Aboriginal Parties (RAPs), ground survey, and the development of appropriate management strategies.

Based on the landscape context, predictive modelling, and previous archaeological research, there is potential for Aboriginal cultural heritage values to be present within the Project Area. The findings of the ACHAR will inform the development of a Cultural Heritage Management Plan (CHMP) to ensure that Aboriginal cultural heritage is appropriately identified, assessed, and managed throughout the project lifecycle.

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 is located in the Lachlan Catchment which covers an area of approximately 84,700 km². The catchment supports a range of water users including agriculture, tourism, fishing and aquaculture, utility providers and domestic supplies. There are five rivers and two major dams in the proximity of the Project Area: Wollongorang Creek (1.7km east), Hannans Creek (1.2km north), Poyeys Creek (0.7km southwest), and Wollongorang Lagoon (0.8km southeast).

Wollongorang Creek is mapped as a Key Fish Habitat, and multiple surrounding watercourses are within Modelled Threatened Species Distribution of the Southern Pygmy Perch (*Nannoperca australis*). However, the Project Area only contains multiple farm dams and minor unnamed streams, no-named watercourses are mapped within the Project Area.

There are no wetlands of international importance, nationally important wetlands, aquatic, terrestrial or subterranean Groundwater Dependent Ecosystems mapped within the Project Area.

A Flooding and Hydrology Assessment and a Water Impact Assessment will be conducted. These assessments will involve the following:

- Assessing the existing and post development flood behaviour
- Reviewing the CEMP to aim to minimise mitigation and management measures
- Assessing impacts on hydrology and groundwater
- Determining if a water access license is required under the Water Management Act 2000.

Noting all required licenses and approvals would be obtained prior to the commencement of construction activities.

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
S18	Threatened Species and Ecological Communities	No	Yes
S20	Migratory Species	No	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

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

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

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

—

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

No

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

*

No MNES World Heritage Sites occur within the Project Area or within a 50 km radius.

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.

—

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.

*

No MNES National Heritage Sites occur within the Project Area or within a 50 km radius.

4.1.3 Ramsar Wetland

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

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

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

Direct impact	Indirect impact	Ramsar wetland
No	No	Banrock Station Wetland Complex
No	No	Hattah-Kulkyne Lakes
No	No	Riverland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

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

No

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

*

There are no RAMSAR wetlands or wetlands listed in the Directory of Important Wetlands in Australia within the locality. The nearest RAMSAR sites, Hattah Kulkyne Lakes and Riverland, are located approximately 600 to 800 km from the Project Area. Banrock Station Wetland Complex, along with the Coorong, and Lakes Alexandrina and Albert Wetland, are situated roughly 800 to 900 km away. Due to their distance, these wetlands are not expected to be impacted by the construction, operation or decommissioning of the Project.

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>Amphibromus fluitans</i>	River Swamp Wallaby-grass, Floating Swamp Wallaby-grass
No	No	<i>Anthochaera phrygia</i>	Regent Honeyeater
No	No	<i>Aphelocephala leucopsis</i>	Southern Whiteface
No	No	<i>Aprasia parapulchella</i>	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard
No	No	<i>Botaurus poiciloptilus</i>	Australasian Bittern
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo
No	No	<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo
No	No	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat
No	No	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)
No	No	<i>Commersonia prostrata</i>	Dwarf Kerrawang
No	No	<i>Dasyurus maculatus maculatus</i> (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)
No	No	<i>Delma impar</i>	Striped Legless Lizard, Striped Snake-lizard
No	No	<i>Diuris aequalis</i>	Buttercup Doubletail
No	No	<i>Dodonaea procumbens</i>	Trailing Hop-bush
No	No	<i>Euastacus armatus</i>	Murray Crayfish
No	No	<i>Eucalyptus aggregata</i>	Black Gum
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe

Direct impact	Indirect impact	Species	Common name
No	No	<i>Grantiella picta</i>	Painted Honeyeater
No	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Lathamus discolor</i>	Swift Parrot
No	No	<i>Lepidium aschersonii</i>	Spiny Peppercross
No	No	<i>Lepidium hyssopifolium</i>	Basalt Pepper-cress, Peppercross, Rubble Pepper-cress, Pepperweed
No	No	<i>Leucochrysum albicans</i> subsp. <i>tricolor</i>	Hoary Sunray, Grassland Paper-daisy
No	No	<i>Litoria aurea</i>	Green and Golden Bell Frog
No	No	<i>Maccullochella peelii</i>	Murray Cod
No	No	<i>Macquaria australasica</i>	Macquarie Perch
No	No	<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin, Hooded Robin (south-eastern)
No	No	<i>Neophema chrysostoma</i>	Blue-winged Parrot
No	No	<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	No	<i>Polytelis swainsonii</i>	Superb Parrot
No	No	<i>Prasophyllum petilum</i>	Tarengo Leek Orchid
No	No	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox
No	No	<i>Rostratula australis</i>	Australian Painted Snipe
No	No	<i>Rutidosis leptorhynchoides</i>	Button Wrinklewort
No	No	<i>Senecio macrocarpus</i>	Large-fruit Fireweed, Large-fruit Groundsel
No	No	<i>Stagonopleura guttata</i>	Diamond Firetail
No	No	<i>Synemon plana</i>	Golden Sun Moth
No	No	<i>Thesium australe</i>	Austral Toadflax, Toadflax

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Natural Temperate Grassland of the South Eastern Highlands
No	No	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

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

No

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

*

An EPBC Self-Assessment undertaken (Att A_Willavale Park BESS_EPBC Act Self-Assessment, Section 4.4, pp 34-47) determined that the proposed action is unlikely to have a significant direct or indirect impact on any of the MNES entities listed below:

- Diamond Firetail (*Stagonopleura guttata*)
- Grey-headed Flying-fox (*Pteropus poliocephalus*)
- Hoary Sunray (*Leuchochrysum albicans* subsp. *tricolor*)
- Buttercup Doubletail (*Diuris aequalis*)
- Pink-tailed Legless Lizard (*Aprasia parapulchella*)
- Striped Legless Lizard (*Delma impar*)
- Green and Golden Bell Frog (*Litoria aurea*)

None of the above species were recorded within the Project Area or Development Area during surveys.

Hoary Sunray

This species is known to occur in modified habitats such as roadsides and is highly dependent on bare ground for germination with disturbance identified as a requirement for successful establishment in some areas. 244 records of this species has been logged with BioNet within the broader locality. Due to the location of the Project Area in relation to the surrounding records, along with the proposal incorporating roadsides as part of the Development Area.

Pink-tailed Legless Lizard

No targeted surveys were undertaken for this species due to the difficulty in detecting this species. An expert report has been prepared in line with the requirements of the NSW Biodiversity Assessment Method 2020 (BAM) for Pink-tailed Legless Lizard (*Aprasia parapulchella*) in replacement of survey effort. This approach was adopted to meet the specific requirements of the BAM under the NSW Biodiversity Conservation Act 2016.

Earlier mapping had identified potential habitat in association with PCT 3376 and 3747 within the External Road Studys Area; however, further site-specific assessment has confirmed that these areas do not support the rocky substrates or microhabitat features required by the species. As such, the species is considered unlikely to be impacted by the Proposed action.

Dusky Woodswallow

It is noted that the presence of Dusky Woodswallow (*Artamus cyanopterus cyanopterus*) was recorded within the Project Area during surveys and is associated with PCT3376- Southern Tableland Grassy Woodland and PCT3747- Southern Tableland Western Hills Scribbly Gum Forest, both of which were recorded within the Project Area. Approximately 1.14 ha of suitable potential habitat for the species wholly within the External Road Works Study Area will be directly impacted, which consists of 1.12 ha of PCT 3376 Southern Tableland Grassy Woodland and 0.02 ha of PCT3747- Southern Tableland Western Hills Scribbly Gum Forest.

This species is listed as Vulnerable under the NSW BC Act but is not listed under the EPBC Act. Therefore, it has been excluded from assessment under MNES and this EPBC Referral. Regardless, impacts to suitable habitat for this species have been avoided and minimised in accordance with the BAM, and residual impacts to this species have been addressed within the Biodiversity Development Assessment Report (BDAR).

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	<i>Actitis hypoleucos</i>	Common Sandpiper
No	No	<i>Apus pacificus</i>	Fork-tailed Swift
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Calidris melanotos</i>	Pectoral Sandpiper
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Motacilla flava</i>	Yellow Wagtail
No	No	<i>Pandion haliaetus</i>	Osprey

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

No

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

*

The PMST search and likelihood of occurrence assessment indicated that the Southern Whiteface, Sharptailed sandpiper and Latham's snipe would potentially be present within the Project Area. However, following a risk matrix assessment, the residual consequences of the Proposed Action on the species would be low. Therefore, no direct and/or indirect impacts are expected to these species nor other migratory species identified in the PMST search.

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.

*

The Project does not involve a nuclear 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.

—

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.

*

Commonwealth Marine area was not identified within 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.

*

Not identified within the Project Area or within a 50 km radius.

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

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

No

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

*

The Project does not involve coal seam gas or coal mining development.

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.

—

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 Project does not involve any Commonwealth Land.

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.

—

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 Project does not involve work outside the Project Area and will not impact on Commonwealth Heritage places outside the Australian jurisdiction.

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 Applicant undertook a site selection process, with alternative locations assessed in the region. The site has been selected due to its strategic advantages and favourable conditions including:

- Proximity to Infrastructure;
- Compatible Land use;
- Topography;
- Low Environmental Impact;
- Amenity Considerations; and
- Mixed Surrounding Land Uses.

Not Carrying out the Development

The Project Area is currently used for agricultural Land uses. Not carrying out the Project would allow for continued use of the site for agricultural production. However, not proceeding with the Project would represent a missed opportunity to deliver approximately 300 MW of dispatchable renewable energy to the National Electricity Market. This would limit the potential to reduce Australia's reliance on fossil fuels and reduce associated greenhouse gas (GHG) emissions. Similarly, not proceeding with the Proposed Action would forgo social and economic benefits, including the provision of direct and indirect employment and economic stimulus, and contributions to local community facilities.

Alternative Sourcing of Energy

The primary alternative to Battery Energy Storage Systems (BESS) is continued reliance on fossil fuel-based energy sources, such as coal and gas. These conventional sources contribute significantly to Australia's GHG emissions and are inconsistent with the national and state climate and energy policy objectives.

The Australian Government's mandated Renewable Energy Target (RET) and NSW Renewable Energy Action Plan (REAP) reflect commitments to increasing the share of renewable energy and reducing GHG emissions. BESS projects play a key role in supporting the integration of renewable energy into the grid by providing energy storage, load balancing, and dispatchability.

Other large-scale renewable technologies such as hydro, tidal, and biomass are generally not as commercially viable or geographically flexible in the region, with the exception of wind energy. However, due to the site's existing transmission infrastructure and favourable development conditions, BESS technology is considered the most efficient and feasible option.

Design Evolution and Alternatives

Project Design has evolved in response to constraints to opportunities identified in technical assessments. Initial biodiversity surveys identified areas with ecological value on the western side of Wollogorang Road. Avoidance of these areas / receptors resulted in solar becoming non-viable, and as such the Project design was amended to be a standalone BESS development.

Design refinement has been guided by the outcomes of engagement with key stakeholder groups. This engagement, along with technical studies undertaken for the Project, has helped to refine the final Project Layout.

5. Lodgement

5.1 Attachments

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A_Willavale Park BESS_EPBC Act Self Assessment (Client Version).pdf Willavale Park BESS EPBC Self-Assessment Report	14/07/2025	Yes	High
#2.	Document	Att A_Willavale Park BESS_EPBC Act Self Assessment (Public Version).pdf Willavale Park BESS EPBC Self-Assessment Report	14/07/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	QHSSE https://www.x-elio.com/qhsse/			Medium

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A_Willavale Park BESS_EPBC Act Self Assessment (Public Version).pdf Willavale Park BESS EPBC Self-Assessment Report	14/07/2025	No	High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C_Willavale Park BESS_Land Category Assessment (Client Version).pdf Willavale Park BESS Land Category Assessment Report	15/07/2025	Yes	High
#2.	Document	Att C_Willavale Park BESS_Land Category Assessment (Public Version).pdf Willavale Park BESS Land Category Assessment Report	15/07/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A_Willavale Park BESS_EPBC Act Self Assessment (Public Version).pdf	14/07/2025	No	High

Willavale Park BESS EPBC Self-Assessment Report					
#2.	Document	Att B_Willavale Park BESS_Prelim Bio Report (Client Version).pdf Willavale Park BESS Preliminary Biodiversity Report	15/11/2024	Yes	High
#3.	Document	Att B_Willavale Park BESS_Prelim Bio Report (Public Version).pdf Willavale Park BESS Preliminary Biodiversity Report	15/11/2024	No	High
#4.	Document	Att C_Willavale Park BESS_Land Category Assessment (Public Version).pdf Willavale Park BESS Land Category Assessment Report	14/07/2025	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att D_Willavale Park BESS_ACHAR Appendices (Client Version).pdf Willavale Park BESS Aboriginal Cultural Heritage Assessment Appendices	18/07/2025	Yes	High
#2.	Document	Att D_Willavale Park BESS_ACHAR Appendices (Public Version).pdf Willavale Park BESS Aboriginal Cultural Heritage Assessment Appendices	18/07/2025	No	High
#3.	Document	Att D_Willavale Park BESS_ACHAR Report (Client Version).pdf Willavale Park BESS Aboriginal Cultural Heritage Assessment Report	18/07/2025	Yes	High
#4.	Document	Att D_Willavale Park BESS_ACHAR Report (Public Version).pdf Willavale Park BESS Aboriginal Cultural Heritage Assessment Report	18/07/2025	No	High

4.1.4.3 (Threatened Species and Ecological Communities) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A_Willavale Park BESS_EPBC Act Self Assessment (Public Version).pdf Willavale Park BESS EPBC Self-Assessment Report	14/07/2025	No	High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	12002773248
Organisation name	ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED
Organisation address	2000 NSW
Representative's name	Jemma Boyce
Representative's job title	Senior Consulting Associate
Phone	0432660659
Email	jemma.boyce@erm.com
Address	Level 14 207 Kent Street Sydney NSW 2000

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, **Jemma Boyce of ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA 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	60669311157
Organisation name	X-ELIO WILLAVALLE PARK PTY LTD
Organisation address	Level 7, 67 Palmerston Cres South Melbourne VIC 3205
Representative's name	Visal Arambage

Representative's job title	National Renewable Energy Development Manager
Phone	+61 459 889 226
Email	visal.arambage@x-elio.com
Address	67 Palmerston Crescent South Melbourne, VIC, 3205

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, **Visal Arambage of X-ELIO WILLAVALLE PARK 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, **Visal Arambage of X-ELIO WILLAVALLE PARK 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. *