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Amendment Report

Coleambally Battery Energy Storage System

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Acronyms and abbreviations

AHIMS	Aboriginal Heritage Information Management System
BC Act	<i>Biodiversity Conservation Act 2016 (NSW)</i>
Biosecurity Act	<i>Biosecurity Act 2015 (NSW)</i>
Cth	Commonwealth
DPE	Department of Planning and Environment (NSW)
DPIE	(Former) Department of Planning, Industry and Environment (NSW) (now DPE)
EIA	Environmental impact assessment
EIS	Environmental impact statement
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
ESD	Ecologically Sustainable Development
ha	hectares
km	kilometres
LGA	Local government area
m	metres
MW	Megawatt
NPW Act	<i>National Parks and Wildlife Act 1974 (NSW)</i>

1. Introduction

1.1. Applicant details

The Applicant is The Trustee for Coleambally BESS Trust (Coleambally BESS) who are a subsidiary of Risen Energy Development Pty Ltd (Risen Energy). The Australian Business Number for Coleambally BESS is 61 371 314 839. The business address is Level 1, 35 Miles Platting Road, Eight Mile Plains QLD 4113, Australia.

Risen Energy is an international renewable energy company delivering projects across a number of countries around the world including China, Germany, Australia, Mexico, India, Japan, and the United States of America. Risen Energy is the third largest global solar module manufacturer, developing approximately 8,600 MW/year and has reached a module production capacity of 14 gigawatts (GW).

Risen Energy was founded in 1986 and established its presence in the Australian market in 2008, supplying solar PV panels and energy storage systems to the residential market, commercial market and utility-scale market. It is one of the pioneers in the solar industry and has committed to this industry as a research and development expert, an integrated manufacturer from wafers to modules, a manufacturer of off-grid systems, an investor, a developer and solution provider for large commercial and utility-scale projects.

Risen Energy has invested, established and is currently operating utility-scale solar farm projects across Australia, including the 132MW Merredin Solar Farm in Western Australia and the 134MW Yarranlea Solar Farm in Queensland. These large-scale solar farm projects are each capable of generating enough energy to supply at least 32,000 Australian homes.

Risen Energy will continue to develop and invest in renewable energy projects in Australia with a target of 2 GW over the next three years. This includes progressing a number of large to small scale solar farms and battery storage facilities within NSW.

1.2. Project background

The Project has reached the submissions phase of the development application, this phase will include the lodgement of a Submissions Report (NGH, 2023) and this Amendment Report. The Submissions Report responds to 16 submissions on the Coleambally Battery Energy Storage System (BESS) Environmental Impact Statement (EIS). This Section provides an overview of the EIS and the steps in the Coleambally BESS undertaken to date.

1.2.1. Previous steps in the assessment

To determine the most appropriate project, a Scoping Report (NGH, 2021) for the Development Site was undertaken in the early planning stages to determine environmental constraints associated with the Proposal. The Scoping Report (NGH, 2021) was used to assist with developing the early Proposal layout and planning the detailed environmental assessment methodologies for the EIS. The Scoping Report was submitted to request the project-specific SEARS to guide the EIS for the Coleambally BESS. The SEARs were received for the Project on 27 August 2021.

The Coleambally BESS EIS was prepared in accordance with the Project-specific Secretary's Environmental Assessment Requirements (SEARs), issued on 27 August 2021. The key environmental issues investigated in the EIS were visual amenity, noise, land use, biodiversity,

Aboriginal heritage, hazards and risk, soil and landforms, social and traffic. Detailed safeguards and mitigation measures were developed and included as commitments of the Project.

The EIS was placed on public exhibition from 13 January 2023 until 10 February 2023:

<https://www.planningportal.nsw.gov.au/major-projects/projects/coleambally-battery-energy-storage-system>.

1.2.2. The EIS Project overview

The proposed Coleambally Battery Energy Storage System (BESS) (the Proposal) is located on Ercildoune Road, off the Kidman Way, approximately nine kilometres (km) northeast of the township of Coleambally. It is situated within the Murrumbidgee Local Government Area (LGA). Griffith is the closest major regional centre for local residents to access services and is located approximately 59km north of the Proposal along the Kidman Way.

The Environmental Impact Statement (EIS) proposed the construction, operation and decommissioning of a ground-mounted lithium-ion battery storage system with an anticipated capacity of 100MW / 400MWh (i.e., 100MW of electricity discharged over 4 hours). The Proposal requires development consent under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The Proposal is classified State Significant Development (SSD) under the EP&A Act as it is development for the purpose of electricity generating works with a capital investment value of greater than \$30 million (Schedule 1 (20)(a) of the *State Environmental Planning Policy (Planning Systems) 2021*).

Key features of the Proposal in the EIS include the following:

- 40 battery system blocks and each block has one power conversion system (PCS)
- One substation, including:
 - 33 kilovolt (kV) switchgear
 - One 33/132 kV transformer
 - One 132 kV circuit breaker.
- One operations and maintenance building
- One switch room
- Storage and warehouse building
- Trenches for underground cabling
 - Includes two transmission line routes Option A and Option B to traverse Ercildoune Road to connect with the existing Coleambally Substation (with Option A being the preferred option)
- New site access point from Ercildoune Road
- Internal gravel access tracks to allow for BESS maintenance
- Drainage infrastructure
- Onsite car parking
- Water tanks
- Site office
- Security fencing.

The proposed transmission lines Option A and Option B have both been assessed as a worst-case scenario in this EIS and specialist studies.

The Proposal's construction and commissioning phase is expected to last around eight to ten months with a peak construction period of around four to six months.

1.3. This Report

This Amendment Report has been prepared to set out in full, and assess where required, changes made to the project since the exhibition of the EIS. Proposed amendments are summarised in Section 1.4 and further detailed in Section 2 of this Amendment Report.

The report is guided by the *State significant development guidelines – preparing an amendment report* (DPIE, 2021), and is structured as follows:

- Section 1.4 and Section 2 details the amendments
- Section 3 summarises the updated statutory context
- Section 4 details the community engagement relevant to the amendments taken since the exhibition of the EIS
- Section 5 provides an updated assessment of impacts based on all proposed amendments
- Section 6 provides an updated project justification.

1.3.1. Relationship to other reports

The Submissions Report has been completed and lodged concurrent with this Amendment Report. The Submissions Report contains the detailed responses to all submissions received during the EIS public exhibition and includes supporting information, where required. It also details further consultation undertaken since the EIS exhibition. It includes a:

- Specific response to each issue raised in the public submissions
- Specific response to each government agency issue raised.

1.4. Proposed amendments

Proposed amendments to the Coleambally BESS proposal are not a result of submissions received on the EIS, rather a result of additional consultation. Proposed amendments to the Project involve the increase of the development footprint to support:

- A new control room and associated underground cabling
- Extension of the substation bench to accommodate a new connection bay within the TransGrid substation lot, as requested by Lumea
- Amend commitments around providing a Community Benefit Scheme (CBS) and replacing with voluntary payments to meet the requirements of the Council Section 7.12 Development Contributions Plan.

In addition and as a result of the submission from Save our Surroundings, output calculations were checked and refined. The annual output of the proposal was wrongly calculated at 380,000 MWh if calculated in one charge/discharge per day. This has now been updated to 146,000 MWh.

Refer to Table 1-1 for a comparison of amendments to the Project. Figure 1-1 shows the amended layout of the proposal.

Table 1-1 Comparison of amendments to the Project in terms of key parameters

	Scoping report	EIS Project	Amended Project	<i>Difference between EIS and Amended Project</i>
Proposed infrastructure				
Capacity of BESS	100MW / 400MWh	100MW / 400MWh	100MW / 400MWh	No change
Development footprint area	4ha	5.18ha	5.67ha	+0.49ha
Development Site area	13.74ha	13.74ha	14.25ha	+0.51ha

1.4.1. Justification of amendments

The proposed amendment allows additional area needed to capture the required bench extension for the new switch bay and the new control room, as per the request by Lumea.

The proposed amendments also meet Murrumbidgee Council requested contributions under its Section 7.12 Development Contributions Plan for the payment of a Developer Contribution Levy under an appropriate Voluntary Planning Agreement (VPA). As such, the Applicant is in negotiation with Council to replace it's proposed CBS with a VPA.

The amendment is justified, as:

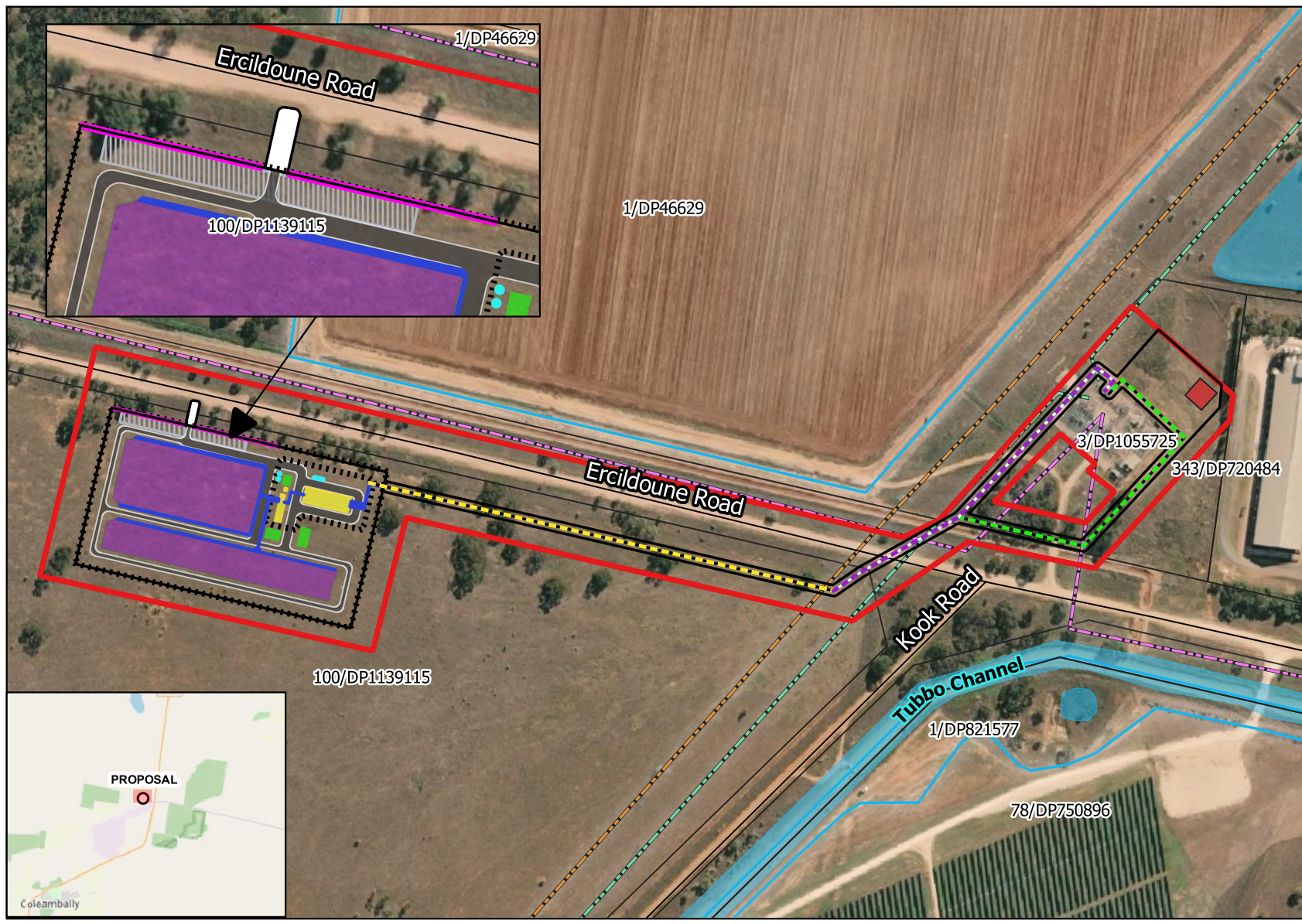
- The additional development footprint is entirely within the area subject to archaeological survey for the Aboriginal Cultural Heritage Assessment (ACHA), with no Aboriginal objects, sites or areas of potential archaeological deposits (PAD) recorded
- The amendments are for existing substation works, within land zones utilities and managed by Essential Energy
- The additional development footprint has been surveyed, and determined to be mostly exotic low condition grasslands, derived from PCT 26 Weeping Myall Woodland
- No further adverse impacts are proposed
- The VPA will achieve the same community benefits as the CBS, to give a direct share of capital payments to the local community surrounding the project.

Coleambally BESS Indicative layout

- Development Site
- Development Footprint
- Exiting elements
 - Waterbodies
 - Lot
 - Road
 - 132kV Transmission Line
 - 220kV Transmission Lines
 - 33kV Transmission Linbe
- Proposed Elements
 - Site access
 - BESS area
 - Laydown
 - Fencing
 - Internal access roads
 - Internal transmission lines
 - Site buildings
 - Substation & switchroom
 - Watertanks
 - Tree screening planting area
 - Essential Energy Control Room
- Proposed Transmission Route
 - Option A
 - Option B
 - Road

Data Attribution
 © NGH 2023
 © ESRI 2023
 © Risen 2023
 Ref: 22-522 Coleambally BESS EIS
 20221108 \ 20-618 Proposal layout
 Author: S. Hillis
 Date created: 27.07.2023
 Datum: GDA94 / MGA zone 55

0 100 200 m



1.5. Strategic context

1.5.1. Regional setting

The regional setting for the Project remains consistent with the EIS. A key feature summary of the Project as amended is detailed in Table 1-2 below. Amendments to the summary are highlighted in **bold red**.

Table 1-2 Key aspects of the proposed Coleambally BESS

Proposal element	Description
Proposal	Coleambally Battery Energy Storage System (BESS)
Proponent	The Trustee for Coleambally BESS Trust
Capacity	Up to approximately 100MW / 400MWh
Updated Development Site	The Development Site is approximately ~~14ha~~ 14.25ha and inclusive of the BESS hardstand, site access and transmission line easement. The Development Site is located in part of Lot 100 DP1139115, lot 3 DP1055725 and part of Ercildoune Road.
Updated Development Footprint	Approximately ~~5.18ha~~ 5.67ha (BESS is 4.04ha and transmission line is approximately ~~1.14ha~~ 1.63ha).
Site description	Located within part of Lot 100/DP1139115, zoned as RU1 Primary Production under Murrumbidgee LEP. Site access via Kidman Way (State Road) then either Ercildoune Road or Kook Road (local roads).
Local Government	Murrumbidgee Council
Subdivision	Required for Development Footprint and Transmission Line (TL) easement within Lot 100/DP1139115.
Proposal	40 battery system blocks - Each block has 3 battery cabinet strings, each string has 12 battery cabinets. Each block has 1 Power Conversion System (PCS). - One substation will include: 33kV switchgear - One 33/132kV transformer - One 132kV circuit breaker
Substation	33/132kV substation to step up medium voltage (MV) to transmission line voltage class for interface with TransGrid transmission substation.
Grid connection	A new 132kV underground cable transmission line

Proposal element	Description
	connecting the BESS switching substation to the TransGrid Coleambally transmission substation.
Access tracks	External access tracks: unsealed gravel suitable for all weather conditions. New site access point from Ercildoune Road. Internal access tracks: up to 1.1km gravel road including 400m long 6m wide sealed road from entry gate to site substation, and 700m long 4m wide unsealed road surrounding battery cabinets.
Ancillary infrastructure	• Operations and maintenance building, which would accommodate: ○ 33kV switchgear ○ Control and protection equipment • Site office • Operation & Maintenance (O&M) Building 11m x 15m, and relay room with approximate dimensions of 25M*7M • Separate storage and warehouse building with approximate dimensions of 10m x 19m • Water tanks (quantity and capacity to be confirmed with RFS in detail engineering stage) • Drainage infrastructure subject to final design • On site car parking • 10m Asset Protection Zone (APZ) • Updates to the Essential Energy substation, including: ○ Control room ○ Underground cabling ○ Extension of substation bench ○ New connection bay.
Security fencing, lighting and CCTV	Steel security fence 2.3m high with barbed wire topping. Security system with CCTV and local flood lighting.
Screening	Vegetation screening would be located along the north-eastern boundary of the BESS, adjacent to Ercildoune Road.
Construction hours	Standard daytime construction hours would be 6.00am to 5.00pm Monday to Friday and 7.00am to 1.00pm on Saturdays. Any construction outside of these standard construction hours, if required, would be kept to a minimum and only be undertaken with prior approval from relevant authorities, or unless in emergency circumstances (e.g.

Proposal element	Description
	to make work safe.)
Construction timing	Approximately 8 to 10 months commencing Quarter 2 2024; peak construction period of 4 to 6 months.
Workforce	Construction – up to 80 jobs during construction with 40 people on site during peak construction period. Operation – One full time staff member expected for ongoing operation and maintenance.
Operation period	Approximately 35 to 40 years.
Decommissioning	The Proposal would be returned to its pre-developed state following decommissioning. All above ground and below ground infrastructure would be removed. The removal of internal roads and pavements would be in consultation with the landowner. The Development Footprint would be rehabilitated consistent with future land use requirements. The subdivided land would likely return to agricultural practices. Topsoil condition would be re-established.
Ground disturbance	Ground disturbance activities would be limited to: • The installation of a large building pad, for all Proposal infrastructure including: ○ Construction of internal gravel access tracks and access bridges ○ Trenching and boring for the installation of underground cables ○ Excavation of building and infrastructure footings ○ Construction of parking area ○ Construction of perimeter security fencing ○ Construction laydown area ○ Control room for existing substation. • Potential additional topsoil laydown areas. • Excavation and foundation work for substation • Civil works for drainage if required
Subdivision	A subdivision of Lot 100/DP1139115 is required for the BESS hardstand, which is a total of 4.04ha.
Capital investment	Estimated \$184 million.

1.5.2. Policy context

The strategic policy context of the Project remains consistent with Chapter 2.2 (Strategic needs) in the Coleambally BESS EIS (NGH, 2022). The Project would contribute to full clean energy deficits during the peak demand hours.

2. Description of the amendments

As detailed above, the proposed amendments to the Coleambally BESS Proposal are a result of additional consultation with Lumea and Murrumbidgee Council.

2.1. Increase to development footprint

Proposed amendments to the Project involve the increase of the development footprint to support a new control room and associated underground cabling, and extension of the substation bench to accommodate a new connection bay within the TransGrid substation lot.

The amendment has changed the expected impact area but has had no impact on the capacity of the Project. The Applicant proposes to increase the development footprint for the following reasons:

- To capture the required bench extension for the new switch bay
- To accommodate room to build a new control room
- To satisfy Lumea's concerns regarding lack of space for above mentioned facilities.

The disturbance footprint of the Coleambally substation would be increased from 5.18ha to 5.67ha. This increase to the northern boundary of the previous footprint would allow ample room to construct and safely operate the switch bay and control room. The updated area in comparison to the old area is shown in Figure 2-1.

2.2. Amendment to community benefits

As detailed above, Murrumbidgee Council requested contributions under its Section 7.12 Development Contributions Plan for the payment of a Developer Contribution Levy under an appropriate VPA. As such, the Applicant is in negotiation with Council to replace its proposed CBS with a VPA. The VPA will achieve the same community benefits as the CBS, to give a direct share of capital payments to the local community surrounding the project.

The draft VPA will require the Applicant to make a monetary contribution to the Council in the total amount of \$450,000 (exclusive of GST). The monetary contribution will be payable by the Applicant to the Council over 10 years in equal instalments of \$45,000 (exclusive of GST) per annum.

Council would determine how the Applicants contributions would be used, and would be responsible for expenditure/investment. However, it is proposed that contributions will go towards a pre-school as detailed within Section 1 – Works Program of the Murrumbidgee Council Section 7.12 Development Contributions Plan.

The Planning Agreement will exclude the application of ss 7.11, 7.12 and 7.24 of the EP&A Act to the development on the Land.

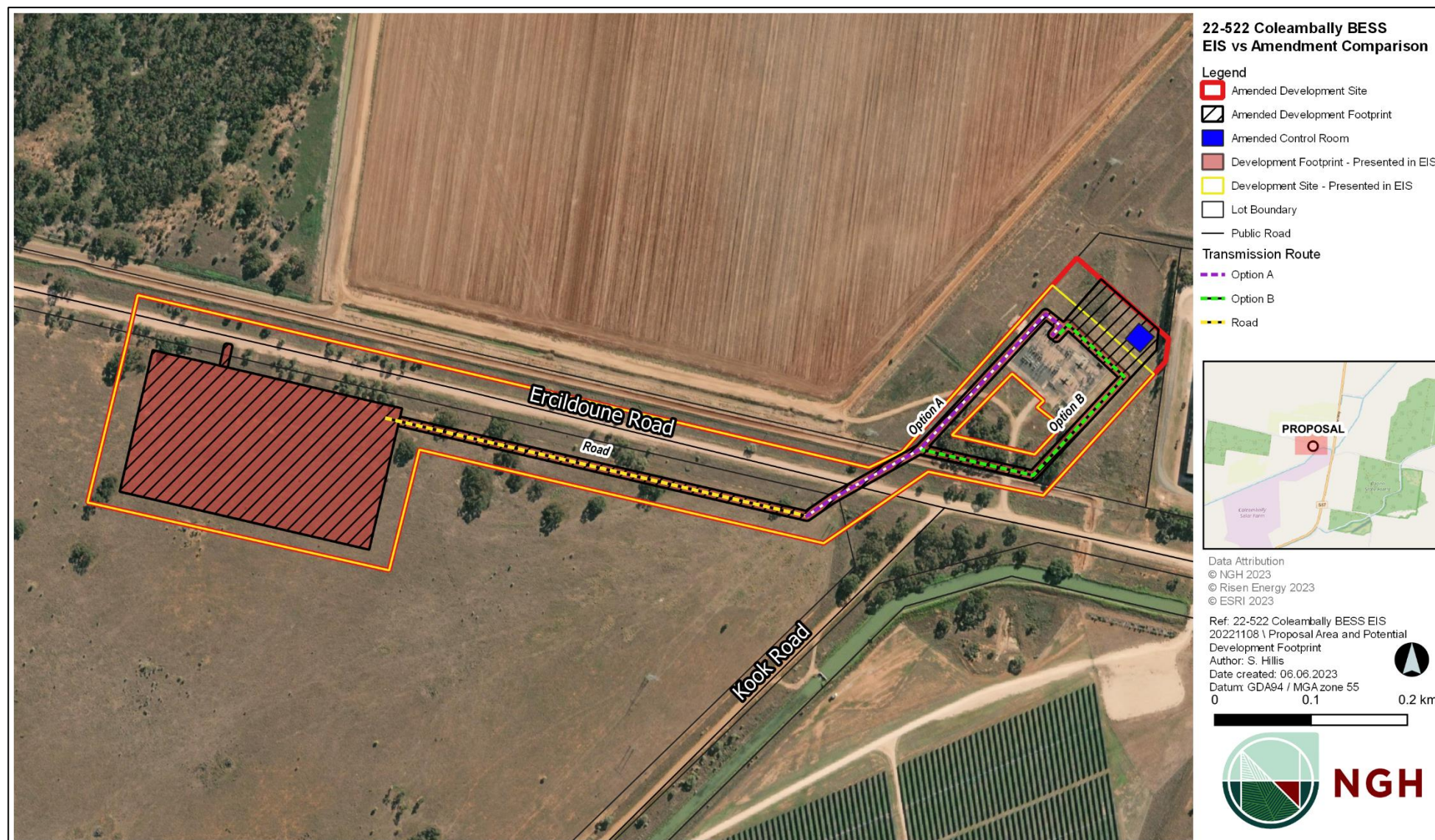


Figure 2-1 Updated development site and footprint after amendments

3. Statutory context

The statutory context of the Project remains consistent with Section 4 of the EIS (NGH, 2022), as summarised below:

Table 3-1 Summary of statutory context

Act	Approval Pathway
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	Development assessment provisions are contained in Part 4 of the Act. Section 4.36 of the EP&A Act provides that a development would be SSD if it is declared to be SSD by a State Environmental Planning Policy (SEPP). The State Environmental Planning Policy (Planning Systems) 2021 declares the Coleambally BESS to be SSD as it is development for the purpose of electricity generating works with a capital investment value of greater than \$30 million (Section 2.6(1)(b), Schedule 1, Clause 20(a)).
<i>State Environmental Planning Policy (Planning Systems) 2021</i> (Planning Systems SEPP)	Section 20 of Schedule 1 of the Planning Systems SEPP identifies development which is SSD due to the size, economic value or potential impacts of the development. Clause 20 of Schedule 1 of the Planning Systems SEPP defines SSD as including: <i>Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:</i> <i>a) has a capital investment value of more than \$30 million</i> <i>b) Has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.</i> Electricity generating works are defined in the Standard Instrument – Principal Local Environment Plan (2006) as: <i>A building or place used for the purpose of:</i> <i>a) Making or generating electricity, or</i> <i>b) Electricity storage.</i> The primary purpose of the Proposal is for electricity storage, and it is expected to have a capital investment value of more than \$30 million. Energy from the BESS would be used to supplement the national network during peak periods. Therefore, the Proposal meets the definition of development for the purpose of electricity generating works per Section 20 of Schedule 1 of the SEPP Planning Systems. Accordingly, the Proposal is classified as SSD under Part 4 of the EP&A Act and approval would be given by the NSW Minister for Planning and Public Spaces (the Minister), or the Independent Planning Commission of NSW (IPC), as delegated by the Minister in certain circumstances.
<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>	Section 2.36(1b) of the TISEPP provides that development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone. The Subject Land is zoned as RU1 Primary Production under the Murrumbidgee

Act	Approval Pathway
(Transport and Infrastructure SEPP)	LEP and therefore the Proposal meets the definition of a prescribed rural, industrial or special use zone. Accordingly, the Proposal is permissible with consent.
<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> (Resilience and Hazards SEPP)	Chapter 3 of the Resilience and Hazards SEPP defines and regulates the assessment and approval of potentially hazardous or offensive development (NSW Government, 1992). Resilience and Hazards SEPP defines ‘potentially hazardous industry’ as: <i>...development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:</i> <i>(a) to human health, life or property, or</i> <i>(b) to the biophysical environment,</i> <i>and includes a hazardous industry and a hazardous storage establishment</i> ‘Potentially offensive industry’ defined as: <i>...a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.</i> Appendix 3 of the Applying State Environmental Planning Policy No.33 Hazardous and Offensive Development Guidelines (SEPP 33 now superseded by the Resilience and Hazards SEPP) lists industries that may be considered potentially hazardous development; the lists do not include solar farms and energy storage facilities.
<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i> (Biodiversity and Conservation SEPP)	Chapter 3 of the Biodiversity and Conservation SEPP aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas. Per section 3.3 of the Biodiversity and Conservation SEPP, the SEPP provisions apply to each local government listed in Schedule 2. Murrumbidgee LGA is not identified in the listed LGAs under Schedule 2. However, as the Proposal is SSD, assessment of impacts to the Koala and Koala habitat would be carried out under the <i>Biodiversity Conservation Act 2016</i> (BC Act) (NSW) (refer to Section 6.4 of EIS).
<i>Murrumbidgee Local Environmental Plan 2013</i> (Murrumbidgee LEP)	The Proposal is subject to the provisions of the Murrumbidgee LEP. Under the LEP, the Subject Land is zoned as RU1 Primary Production. Development for the purpose of electricity generation is prohibited within this land zoning, however, section 2.36(1b) of the TISEPP provides that development for purpose of electricity generation works may be carried out by any person with

Act	Approval Pathway
	consent on any land in a prescribed non-residential zone. RU1 Primary Production zone meets the definition of a non-residential zone per section 2.35 of the TISEPP. The area required for the BESS hardstand would require subdivision from Lot 100 DP1139115. The proposed subdivision would be approximately 4ha in size and would not contain any existing or new dwellings, and therefore meets the conditions for subdivision of land zoned as RU1 Primary Production under Clause 4.2 of the Murrumbidgee LEP. Given that the proposed subdivision would continue to meet the provisions of the TISEPP which prevails over the Murrumbidgee LEP, the Proposal is permissible on the proposed subdivision.

4. Community engagement

4.1. Community consultation

4.2. Agency and organisation consultation

During the EIS exhibition and the preparation of the response to submissions, the following consultation was undertaken (refer Appendix F):

Agency stakeholder	Date	Consultation comments
DPE	Teams meeting 23 March 2023	NGH and Risen held a virtual (Teams) meeting with DPE to discuss the submissions and the proposed method for responding to comments.
Biodiversity Conservation Division (BCD)	Email to BCD 31 March 2023 Response received 31 March 2023 Phone conversation and email to BCD 4 May 2023 Response received 5 May 2023	NGH emailed BCD to clarify requirements of Point 2 of their submission. NGH confirmed they had obtained a Charge Quote for the Proposal, but noted the Client wished to finalise the Biodiversity Development Assessment Report (BDAR) prior to the survey period for additional species. As such, NGH wished to know BCD's position on assuming presence for those species. BCD responded, stating they accept the approach of assuming presence of candidate flora species for the Proposal. NGH called and followed up with an email to confirm BCDs position on proposed floristic surveys outside of the survey periods, to determine quality of vegetation and suitability to support threatened flora species. BCD responded, stating that a vegetation integrity plot and justification for excluded species could be documented into the revised BDAR.
Lumea	Emails and phone calls received 10 and 13 February	Lumea notified Risen that the EIS does not adequately cover the required substation connection works. It was noted that a minimum 20m extension to the development footprint would be required to accommodate bench extension and some buffer room for the construction works and the cable trenching, and a new control room building. A final recommendation was that the updated Development Footprint be included as an Amendment Report. NGH and Risen confirmed an amended Development Footprint to capture the required works within the substation.
Murrumbidgee Council	Meeting at Council Chamber April 5 2023 Online meeting 27	Risen and Council held a meeting at the Murrumbidgee Council Chambers, to discuss options for the contribution plan. Contribution values and schedules are yet to be agreed, however, Council have confirmed the projects that Council wish Risen to contribute to.

Agency stakeholder	Date	Consultation comments
	June 2023 Email 4 July 2023	Risen then held a meeting with Council via Teams, to negotiate the terms of the draft VPA. It was agreed that Risen would contribute money through mutually agreed VPA, with Council to manage expenditure and investment. The proposed VPA value and payment schedule have not been agreed, but Risen have committed to working with Council moving forward to reach a final agreement. Risen followed up their Teams meeting with an email to Council, with draft conditions for the VPA.
Coleambally Irrigation Co-Operative Limited (CICL)	Meeting 6 April 2023	Risen had a meeting with Coleambally Irrigation Co-Operative Limited (CICL) regarding the design, detailed engineering, construction, operations and maintenance stages of the Project. The following was discussed: 1. Water during construction would be piped from a nearby water channel, with water meter. Risen will bear the cost of infrastructure, with all arrangements actioned post-approval. 2. CICL are concerned about chemical leakage into water channels. Refer to response in Section 4.3 of the submissions report. 3. CICL are concerned about overheating batteries and cooling systems. Refer to response in Section 4.3 of submissions report. 4. CICL would like confirmation on load weights and bridge limits on Kidman Way. Refer to response in Section 4.3 of submissions report. 5. CICL request radio frequencies and licence registration for any radio use. Refer to response in Section 4.3 of submissions report.

Registered Aboriginal Parties (RAPs)

NGH sent an Amendment letter to the RAPs, notifying them of the proposed amendments to the Proposal. The letter stated that the amendments were sufficiently covered by survey in the EIS period, and no artefacts were located. An opportunity to respond to the Amendment Letter was provided.

Confirmation of receipt of the Amendment Letter was received by one RAP on 18 April 2023. No further comments have been received. A copy of the Addendum ACHA Letter is provided in Appendix E

5. Assessment of impacts

5.1. Visual

The visual impact of the proposal, as assessed in the EIS, would not be altered as a result of the proposed amendments. The proposed control room and upgraded switch bay are located to the north of the existing substation area. The substation would screen most of the views of the proposed infrastructure from Ercildoune Road. Therefore, the visual impact would not increase as a result of this amendment. Mitigation measures proposed in the EIS are sufficient to address the visual impacts as a result of this amendment.

5.2. Noise and vibration

The Project proposes to extend the development footprint to the north/northeast of the project, extending about 53m to the north/northeast of previously proposed works as shown in Figure 2-1. The amendment would take the development footprint 9m closer to receiver R13, which is a Community centre, reducing the separation distance from 2542m to 2533m, which would not have any significant impact in relation to noise and vibration impacts.

The EIS noted that the standard noise management level (NML) for R13 was 55dB(A) and the predicted construction noise level was less than 30dB(A). Considering both the separation distance and that the predicted construction noise management levels were way below the standard NML, there would be no additional noise or vibration impact due to the amended Proposal and, therefore, no further assessment is required.

Projected noise trigger levels for the same receiver is 43dB(A) during daytime and the operational noise levels is predicted to be 28 dB(A). The amended Project is unlikely to trigger the noise trigger level at this receiver.

5.3. Compatibility with existing land uses

The proposed amendments would increase the development footprint by 0.49ha within land categorised as 5.4.0 Utilities under the NSW State Land Use mapping; the current land use for the footprint increase is the Coleambally substation. As such, no additional impact to productive agricultural land or incompatibility with existing land uses is expected.

In addition, the NSW Department of Primary Industries Agriculture notes in their submission on the Proposal, "Due to the scale of the BESS proposal, there should not be any significant adverse impact on agricultural land uses or agricultural production". The small increase in the footprint for the amendment is therefore unlikely to have any significant adverse impact on agricultural land uses or agricultural production.

5.4. Biodiversity

5.4.1. Background

As a result of the proposed amendments, the BDAR is required to be updated to reflect the increase in the development footprint.

In addition to the required update, the BCD submission requested that the Applicant complete targeted surveys where possible, for assumed presence species credits species during the Response to Submissions period. As targeted surveys could not be undertaken until Spring, NGH confirmed with BCD they would accept the approach of assuming presence of the candidate flora species.

Within the areas of low condition vegetation in the increased development footprint, NGH contacted BCD to determine if floristic surveys conducted outside of the survey periods, to determine quality of vegetation and suitability to support threatened flora species, would be acceptable in the updated BDAR in lieu of targeted surveys. BCD confirmed that a vegetation integrity plot and justification for excluded species could be documented into the revised BDAR.

As such, the BDAR has been updated to reflect the additional survey and the increase in the development footprint.

The additional site visit was undertaken by a Senior Ecologist on 8 May 2023, and included the additional 0.49ha of development footprint required by Lumea for upgrades to the existing Essential Energy substation.

5.4.2. Key findings on the assessment

The additional footprint has been located in an area comprised of low condition vegetation, minimising impacts on biodiversity values.

The following areas of each zone would be cleared for the proposal, noting changes for the amendment in **bold** text:

Table 5-1 Development area and ecosystem credits generated

PCT	Area in EIS and original BDAR (ha)	Area in Amended BDAR (ha)	Difference (ha)	Ecosystem credits generated
PCT 26 derived grassland (zone 1)	0.07	0.07	0	1
PCT 16 moderate condition (zone 2)	0.45	0.45	0	13
PCT 26 moderate condition (zone 3)	0.02	0.02	0	1
PCT 26 low condition (zone 4)	0.04	0.04	0	1
PCT 26 exotic dominated grassland,(zone 5)	0.04	0.42	+0.38	0
PCT 16 low condition (zone 6)	0.33	0.44	+0.11	0
TOTAL			0.49	

No additional ecosystem credits have been generated as a result of the amendments.

Four flora species were unable to be surveyed during the optimal survey time in a small section of PCT 16 due to a change to the proposed transmission line route and substation upgrades in November 2022 and May 2023. These four species; Spear-grass (*Austrostipa wakoolica*),

Bindweed (*Convolvulus tedmoorei*), Red Darling-pea (*Swainsona plagiotropis*), and Slender Darling-pea (*Swainsona murrayana*) have been assumed present in a small area of PCT 16 just south of the existing substation and a small area of PCT 26 exotic dominated grassland in the north of the substation. The remaining species were surveyed during the optimal survey periods as recommended by the BAM Calculator (BAM-C) or vegetation integrity condition was considered too low to support threatened flora species,

The following updated species offsets would be required as a result of the proposed amendment:

Table 5-2 Species credits in original and updated BDAR

Species Credit Species	Area in EIS and original BDAR (ha)	Area in Amended BDAR (ha)	Difference (ha)	Species credits required in EIS	Species credits required in Amendment Report
A Spear-grass (<i>Austrostipa wakoolica</i>)	0.0	0.16	+0.16	0	1
Superb Parrot (<i>Polytelis swainsonii</i>)	0.45	0.45	0	15	15
Southern Myotis (<i>Myotis macropus</i>)	0.47	0.47	0	16	16
Bindweed (<i>Convolvulus tedmoorei</i>)	0.17	0.33	+0.16	8	10
Slender Darling Pea (<i>Swainsona murrayana</i>)	0.17	0.33	+0.16	6	7
Red Darling Pea (<i>Swainsona plagiotropis</i>)	0.17	0.33	+0.16	6	7

Updated mitigation measures

ID	Safeguards and mitigation measures	Des	C	O	Dec
Biodiversity					
B1	Time works to avoid critical life cycle events (September through to December). The EPC Contractor is to prepare a works schedule to avoid life cycle events.		X		
B4	Implement clearing protocols that identify vegetation to be	X	X		

ID	Safeguards and mitigation measures	Des	C	O	Dec
	retained (delineation of no-go areas with temporary fencing), prevent inadvertent damage and reduce soil disturbance: • Approved clearing limits to be clearly delineated with temporary fencing or similar prior to construction commencing. • No stockpiling or storage within dripline of any mature trees to be retained. • Where trees are to be retained, an adequate protection zone (TPZ) will be provided around each tree for the duration of construction, where possible. Details for calculating TPZs are provided within Australian Standard 4970-2009 – Protection of trees on development site. • Post-clearing survey report will be compiled by Project Ecologist or fauna spotter catcher and provided to the project Environmental Manager. • Monthly monitoring of high disturbance areas, exclusion zones and boundary fencing during construction. • Progressive monitoring of the cumulative amount of vegetation cleared. • Inspection of exclusion zone disturbance. • A trained ecologist or licensed wildlife handler would be present during clearing events and complete: ○ Pre-clearing checklist ○ Tree clearing procedure				
B12	Replace habitat provided by non-native vegetation with alternative habitat. The area where the pipeline would be installed would be revegetated as soon as practicable with a mix of local indigenous species representative of the vegetation in the development site.		X		
B14	Undertake maintenance of retained native vegetation on the Development Site through the implementation of the Adaptive Management Strategy detailed within the BDAR		X	X	X
B15	Undertake ecological restoration, rehabilitation actions and/or maintenance of retained native vegetation on, or adjacent to, the Development Site. Landscaping around the BESS should be comprised of species representative of Weeping Myall Woodland (PCT 26). An annual report within 1 year of construction is required to detail effectiveness, outcomes and follow up measures.		X	X	X

ID	Safeguards and mitigation measures	Des	C	O	Dec
B16	The following plans will be implemented: • Pest and Weed Management Plan (PWMP) to prevent/minimise the spread of weeds • A Flora and Fauna Management Plan (FFMP) detailing construction related safeguards, pre-clearing checklists and tree clearing procedures • A Rehabilitation Plan (RP) • Adaptive Management Strategy		X	X	X

5.5. Aboriginal heritage

As part of a desktop review, it has been determined by a qualified archaeologist (NGH Principal Heritage Consultant Kirsten Bradley) that the additional substation extension area and the new control room building are entirely within the area which was subject to archaeological survey for this project in October 2021. This area was surveyed in October 2021 by an NGH archaeologist with two Aboriginal community representatives with no Aboriginal objects, sites or areas of potential archaeological deposits (PAD) recorded. Therefore, it has been determined by NGH that the additional area which would be incorporated into the development site and the development footprint has been sufficiently surveyed and assessed for Aboriginal objects, and that this minor change to the mapping of the development site and development footprint (which also includes the area for the new control room building) would not change or modify the impact assessment, mitigation measures or the recommendations noted in the ACHA (version Final 2.0 dated 18/11/2022) for this project.

This change has been discussed with Registered Aboriginal Parties (RAPs) and they are satisfied with NGH's assessment and the outcome. Consultation with RAPs and their response is attached in Appendix E.

Mitigation measure **AH4** has also been included to reflect submission from Heritage NSW.

5.6. Hazards and risks

The proposed amendments have not altered the proposed layout of the Coleambally BESS. As such, no additional hazards or risks are expected as a result of the proposed amendments. Mitigation measures proposed in the EIS are sufficient to address hazard and risk impacts.

Mitigation measure **H1** has, however, been updated to address the submission from Murrumbidgee Council and Fire Rescue NSW, to include consultation as part of the development of the Emergency Management Plans and information packages.

5.7. Traffic and access

The proposed amendments do not require additional access from public roads or internal access routes. There would be no change in traffic movement during construction or operation as a result of proposed amendments. Mitigation measures proposed in the EIS are sufficient to address the traffic impacts.

Mitigation measures **T1** and **T2** have, however, been updated to address submissions from TfNSW, Murrumbidgee Council and Coleambally Irrigation.

5.8. Soils and landforms

Minor additional ground disturbance would be required to support the proposed control room and associated underground cabling, and extension of the substation bench to accommodate a new connection bay. These works would be similar to those detailed within the EIS for connection of the BESS to the grid. As such, mitigation measures proposed in the EIS are sufficient to address soil and landform impacts.

5.9. Social and economic

Murrumbidgee Council have requested contributions under its Section 7.12 Development Contributions Plan for the payment of a Developer Contribution Levy under an appropriate VPA. As such, the Applicant is in negotiation with Council to replace its proposed CBS with a VPA. The VPA will achieve the same community benefits as the CBS, to give a direct share of capital payments to the local community surrounding the project.

The draft VPA terms will require the Applicant to make a monetary contribution to the Council in the total amount of \$450,000 (exclusive of GST). The monetary contribution will be payable by the Applicant to the Council over 10 years in equal instalments of \$45,000 (exclusive of GST) per annum.

Council would determine how the Applicants contributions would be used, and would be responsible for expenditure/investment. However, it is proposed that contributions will go towards a pre-school as detailed within Section 1 – Works Program of the Murrumbidgee Council Section 7.12 Development Contributions Plan.

However, as discussed above the draft terms have not been agreed. Risen will continue to consult with Council to reach determination on the VPA contributions.

As such, the proposed amendments have not altered the social or economic outcomes of the proposal. As such, no additional social or economic risks are expected as a result of the proposed amendments. Mitigation measures proposed in the EIS are sufficient to address any impacts.

5.10. Hydrology, groundwater and surface water

No additional impacts are expected as a result of the proposed amendments. The assessment of hydrology, water use and water quality presented in the EIS remains unchanged irrespective of any proposed amendments. Mitigation measures proposed in the EIS are sufficient to address any hydrology, groundwater and surface water impacts.

5.11. Resource use and waste generation

Additional resource use and waste generation is not expected as a result of the proposed amendments. Mitigation measures proposed in the EIS are sufficient to address any resource or waste impacts.

Mitigation measure **WM1** has, however, been updated to address the submission from Murrumbidgee Council, committing to consultation with Council in the development of the Waste Management Plant.

5.12. Historic heritage

The desktop search area for the EIS incorporated the development footprint of the proposed amendments. The proposed amendments do not impact any additional items of historic heritage. As such, no additional heritage impacts are expected as a result of the proposed amendments. Mitigation measures proposed in the EIS are sufficient to address any impacts on historic heritage.

5.13. Air quality and climate

The proposed amendments would not create additional air quality and climate impacts. Mitigation measures proposed in the EIS are sufficient to address any impacts on air quality and climate.

5.14. Cumulative impacts

The assessment of cumulative impacts presented in the EIS remains unchanged. Mitigation measures proposed in the EIS are sufficient to address any cumulative impacts.

6. Justification

6.1. Updated assessment and outcomes now achieved

In response to the comments from Lumea, a small change has been made to the Coleambally BESS project as described in the EIS. The result is an updated Project description and accompanying environmental commitments which demonstrate the Project's desire to develop a Project that responds to local values and concerns of the community and stakeholders.

The updated environmental assessment of the Project's key impacts is summarised below.

Impact areas	Updated impact assessment
Visual	Minor change from the EIS, with all risks manageable. No additional mitigation measures included.
Noise and vibration	Minor change from the EIS, with all risks manageable. No additional mitigation measures included.
Compatibility with existing land use	No change from the EIS, with all risks manageable. No additional mitigation measures included.
Biodiversity	Minor species credit obligation increases, with all risks manageable. Mitigation measures B1 , B4 , B12 , B14 , B15 and B16 have been updated to reflect changes/clarification on mitigation requirements in the BDAR
Aboriginal heritage	No change from the EIS, with all risks manageable. Mitigation measure AH4 has been updated to address submission from Heritage NSW.
Hazards and risk	No change from the EIS, with all risks manageable. Mitigation measure H1 has been updated to address submission from Murrumbidgee Council and Fire Rescue NSW.
Traffic and access	No change from the EIS, with all risks manageable. Mitigation measures T1 and T2 has been updated to address submissions from TfNSW, Murrumbidgee Council and Coleambally Irrigation.
Soils and landforms	Minor change from the EIS, with all risks manageable. No additional mitigation measures included.
Social and economic	Minor change from the EIS, with all risks manageable. No additional mitigation measures included.
Hydrology, groundwater and surface water	No change from the EIS, with all risks manageable. No additional mitigation measures included.

Impact areas	Updated impact assessment
Resource use and waste generation	No change from the EIS, with all risks manageable. Mitigation measure WM1 has been updated to address submission from Murrumbidgee Council.
Historic heritage	No change from the EIS, with all risks manageable. No additional mitigation measures included.
Air quality and climate	No change from the EIS, with all risks manageable. No additional mitigation measures included.
Cumulative impacts	No change from the EIS, with all risks manageable. No additional mitigation measures included.

6.2. Benefits and costs to the Project

6.2.1. Justification for the amendments

The justification and benefit of the amended project remains the same as presented in EIS.

The Proposal would allow energy to be stored during times of low demand and released (or dispatched) at times of peak demand.

The Coleambally Battery Energy Storage System would contribute to stable and reliable energy supply in the area to maintain the ability for renewable energy to provide enough clean, renewable energy in NSW homes while displacing carbon dioxide. It would also assist the NSW and Commonwealth Governments to meet Australia's renewable energy targets.

The Proposal is considered compatible with existing land uses and highly reversible upon decommissioning, returning the site to its current land capability, for agricultural or other alternative land uses.

The Coleambally Battery Energy Storage System has been designed with the following objectives:

- Select a site that is suitable for a utility-scale battery storage system, connection to the grid network and environmental constraints
- Assist to mitigate the effects of climate change through the transition to reliable renewable energy
- Meet and exceed all relevant environmental and regulatory requirements for the proposal, in collaboration with key stakeholders
- Provide local and regional employment opportunities and other social benefits during the construction and operation of the facility
- Provide an energy storage system to support renewable energy to the high voltage transmission network.

The development of the Proposal on the Subject Land would:

- Assist the NSW and Commonwealth Governments to meet Australia's renewable energy targets

- Provide a storage system for clean and renewable energy to assist in reducing GHG emissions
- Provide a way to increase the stability and reliability of the renewable energy supply in the area with minimal negative impact on cultural and environmental impacts
- If approved, the Proposal would provide electricity stability and reliability to a region with renewable energy generation and would provide local and regional employment opportunities and other social benefits during all stages of the project.

6.2.2. Costs of not proceeding

The consequences of not proceeding with the proposed Coleambally BESS as identified in the EIS would result in:

- Missed opportunity to store solar energy and use it in high demand times outside of daylight hours
- Loss of additional electricity supply into the National grid during darker hours
- Potential loss of renewable energy if the daylight demand is not high enough to utilize the renewable energy from solar farms
- Loss of social and economic benefits created through the provision of direct and indirect employment opportunities during the construction and operation of the BESS
- Loss of a potential economic boost to the community through a Community Benefit Sharing Scheme.

6.3. Ability to be approved

The amended Coleambally BESS would result in numerous benefits, local and regional. At a time of crisis in the energy network, it forms an important part of NSW and Australia's transition to renewable energy generation, offering a more reliable and sustainable future.

The Project meets relevant planning requirements and is consistent with the principles of ESD, which have been incorporated in the design, and will be incorporated into construction, ongoing operations and decommissioning of the development.

The environmental values at this site are well understood, based on field surveys and specialist modelling outputs. To address inevitable areas of uncertainty, conservative approaches have been adopted. The updated specialist studies have informed the amended layout as well as the strategies that will manage the impacts during design, construction, operation and decommissioning. The result is a Project that responds well to its natural and cultural context as well as specific community expectations. The benefits of the Project clearly outweigh the costs of not developing the project.

On balance, the amended Project is considered appropriate:

- To the site's environmental constraints, avoiding high value areas and including long reaching mitigation strategies that will benefit the broader area in the longer term
- To the site's location where it will supply nearby population centres
- To meeting global state and local policy targets to reduce in global greenhouse gas emissions
- To the community's expectations.

It meets all relevant planning provisions and guidelines and is considered justifiable and acceptable.

7. References

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Appendix A Updated Project description

A summary of the Project is detailed below, with all amendments highlighted in **bold red**.

A.1 The Proposal

This chapter provides details and specifications on each stage of the Proposal including design, construction, operation, decommissioning and rehabilitation. It outlines the proposed quantity and type of infrastructure required for Proposal, as well as water requirements, traffic and access, work hours and work numbers for each stage of the Proposal.

Environmental constraints can be defined as factors which affect the ‘developability’ of a site and include physical, ecological, social and planning factors. A map of these constraints was prepared for the Scoping Report (NGH, 2021). Following the detailed field investigations, the mapping has been finalised for the EIS. This process demonstrates how the Proposal has appropriately responded to the site’s constraints. With reference to the site’s key constraints, the Proposal assessed in this EIS has:

- Avoided areas of high visual impact for surrounding residents
- Avoided areas of high biodiversity value.

The Proposal indicative infrastructure layout is provided in Figure 1-1. Indicative plans and images of infrastructure components and key areas are described in detail below.

Key aspects of the Proposal are provided in Table 7-1.

Table 7-1 Key aspects of the proposed Coleambally BESS

Proposal element	Description
Proposal	Coleambally Battery Energy Storage System (BESS)
Proponent	The Trustee for Coleambally BESS Trust
Capacity	Up to approximately 100MW / 400MWh
Development Site	The Development Site is approximately ~~14ha~~ 14.25ha and inclusive of the BESS hardstand, site access and transmission line easement. The Development Site is located in part of Lot 100 DP1139115, lot 3 DP1055725 and part of Ercildoune Road.
Development Footprint	Approximately ~~5.18ha~~ 5.67ha (BESS is 4.04ha and transmission line is approximately ~~1.14ha~~ 1.63ha).
Site description	Located within part of Lot 100/DP1139115, zoned as RU1 Primary Production under Murrumbidgee LEP. Site access via Kidman Way (State Road) then either Ercildoune Road or Kook Road (local roads).
Local Government	Murrumbidgee Council

Proposal element	Description
Subdivision	Required for Development Footprint and Transmission Line (TL) easement within Lot 100/DP1139115.
Proposal	40 battery system blocks - Each block has 3 battery cabinet strings, each string has 12 battery cabinets. Each block has 1 Power Conversion System (PCS). - One substation will include: 33kV switchgear - One 33/132kV transformer - One 132kV circuit breaker.
Substation	33/132kV substation to step up medium voltage (MV) to transmission line voltage class for interface with TransGrid transmission substation.
Grid connection	A new 132kV underground cable transmission line connecting the BESS switching substation to the TransGrid Coleambally transmission substation.
Access tracks	External access tracks: unsealed gravel suitable for all weather conditions. New site access point from Ercildoune Road. Internal access tracks: up to 1.1km gravel road including 400m long 6m wide sealed road from entry gate to site substation, and 700m long 4m wide unsealed road surrounding battery cabinets.
Ancillary infrastructure	- Operations and maintenance building, which would accommodate: 33kV switchgear - Control and protection equipment - Site office - Operation & Maintenance (O&M) Building 11m x 15m, and relay room with approximate dimensions of 25M*7M - Separate storage and warehouse building with approximate dimensions of 10m x 19m - Water tanks (quantity and capacity to be confirmed with RFS in detail engineering stage) - Drainage infrastructure subject to final design - On site car parking 10m Asset Protection Zone (APZ) Updates to the Essential Energy substation, including: Control room

Proposal element	Description
	○ Underground cabling ○ Extension of substation bench ○ New connection bay.
Security fencing, lighting and CCTV	Steel security fence 2.3m high with barbed wire topping. Security system with CCTV and local flood lighting.
Screening	Vegetation screening would be located along the north-eastern boundary of the BESS, adjacent to Ercildoune Road.
Construction hours	Standard daytime construction hours would be 6.00am to 5.00pm Monday to Friday and 7.00am to 1.00pm on Saturdays. Any construction outside of these standard construction hours, if required, would be kept to a minimum and only be undertaken with prior approval from relevant authorities, or unless in emergency circumstances (e.g. to make work safe.)
Construction timing	Approximately 8 to 10 months commencing Quarter 2 2024; peak construction period of 4 to 6 months.
Workforce	Construction – up to 80 jobs during construction with 40 people on site during peak construction period. Operation – One full time staff member expected for ongoing operation and maintenance.
Operation period	Approximately 35 to 40 years.
Decommissioning	The Proposal would be returned to its pre-developed state following decommissioning. All above ground and below ground infrastructure would be removed. The removal of internal roads and pavements would be in consultation with the landowner. The Development Footprint would be rehabilitated consistent with future land use requirements. The subdivided land would likely return to agricultural practices. Topsoil condition would be re-established.
Ground disturbance	Ground disturbance activities would be limited to: • The installation of a large building pad, for all Proposal infrastructure including: ○ Construction of internal gravel access tracks and access bridges ○ Trenching and boring for the installation of underground cables ○ Excavation of building and infrastructure footings

Proposal element	Description
	○ Construction of parking area ○ Construction of perimeter security fencing ○ Construction laydown area ○ Control room for existing substation. • Potential additional topsoil laydown areas. • Excavation and foundation work for substation • Civil works for drainage if required
Subdivision	A subdivision of Lot 100/DP1139115 is required for the BESS hardstand, which is a total of 4.04ha.
Capital investment	Estimated \$184 million.

The BESS footprint would only comprise approximately 4.04ha. The 4.04ha would become a hardstand for the BESS infrastructure and ancillary infrastructure and include ground disturbance and groundcover clearing. Batteries would sit firmly on a constructed pad surface. Additional ground disturbance outside the BESS would result from construction of the access tracks, trenches for cabling and footings for fencing and other equipment.

It is noted that the exact location of BESS infrastructure, including the ancillary facilities, would be determined at the detailed design phase. All work and infrastructure would be located within the proposed development envelope.

The annual output of the Proposal would be approximately 380,000MWh. The construction phase of the project is expected to take between 8 to 10 months with a capital cost of approximately \$184 million.

The Proposal is expected to have approximately 35 - 40-year operating life at which point the BESS would either:

- Be decommissioned, removing all above ground and below-ground infrastructure and returning the site to its existing land capability, or
- Continue operation, which could involve reconditioning, if the lease agreement is renewed. Reconditioning would involve replacing components that were originally installed with new components that reflect technology that is available at that time.

A.2 Subdivision

The Proposal would require subdivision of Lot 100 DP1139115 within the Murrumbidgee LGA. It is proposed to subdivide an area of approximately 4.04ha ('Lot B') from existing Lot 100/DP1139115. This land would be used for the BESS hardstand and associated infrastructure. The balance ('Lot A') of the land (approximately 174.5ha) would be retained by the current landowner for the purpose of carrying out agricultural activities. Landowner consents for the proposal are provided in in the EIS.

Council provided NGH with an email (dated 02 June 2021), stating that the configuration of the land is not permanently altered by the subdivision of land for leasehold purposes; as a result, council do not apply the provisions of the Murrumbidgee LEP. Council would not be concerned by subdivision for leasehold purposes.

A subdivision plan, with the proposed consolidation, is provided at Figure 7-4.

A.3 Proposed infrastructure

A3.1 Batteries

There would be a total of 40 battery system blocks on the site and 40 PCS. The battery model is SU340U85K or upgraded version, as shown in Figure 7-1, along with a simplified arrangement image in Figure 7-2.



Figure 7-1 Battery cabinet model

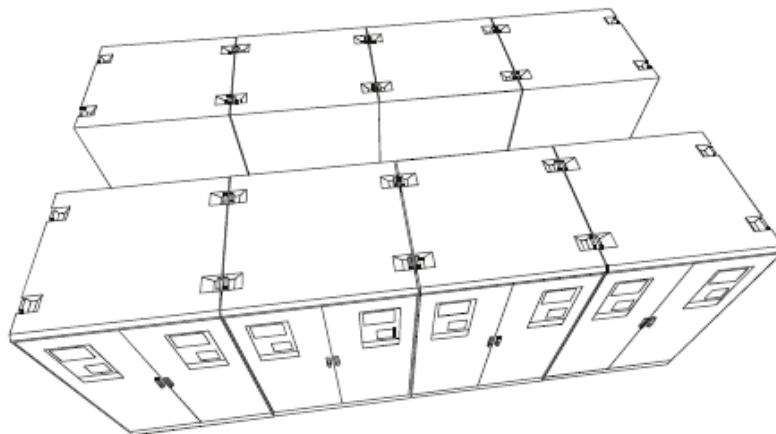


Figure 7-2 Battery cabinet arrangement example

A3.2 Power conversion systems

SMA SCS 3600 UP-XT power conversion system (PCS) would be used in this project. The grid forming technology-based inverter station will contribute to improve system strength of grid network.

A3.3 Connection to substation

The connection of the BESS to the Coleambally Substation would be via a new 132kV underground transmission line. The cable would be installed along the northern boundary of Lot 100 DP1139115 up to its northeast corner. Two potential transmission line routes Option A and Option B are proposed from this corner and would traverse Ercildoune Road into Lot 3 DP1055725 to connect with the existing substation from the west (Option A) or the east (Option B). Refer to Figure 1-1 for the indicative layout.

A3.4 Site access and internal tracks

Internal access tracks

The on-site tracks would be made of compacted gravel. If required, geotextile would be laid between the soil and the gravel. Internal access tracks would be up to 6m wide to allow for the safe delivery, unloading and installation of key components such as the batteries, cabinets and BESS substation equipment. In addition, allow for the safe ingress, movement and egress of emergency services vehicles where required. The total length of the access track is expected to be around 1km from the most recent detailed design drawings. This would be formally determined during the detailed design phase and would be subject to ongoing design changes. Internal access tracks are private roads designed and constructed only for the construction, operation and maintenance of the BESS, and not necessarily suitable for any other purpose. Access roads would be maintained over the life of the BESS.

Site access

Site access would be off Ercildoune Road, which runs west off Kidman Way. A new access track would be constructed, about 20m long, and constructed in the same manner as the internal access tracks. The access road would connect to into the internal access track network.

A3.5 Security and fencing

Security fencing on the site is expected to be a 2.3m high chain mesh security fencing along the site boundary and the BESS substation boundary. Single strand barbed wire would be placed along the top of security fencing.

A3.6 Temporary construction facilities

Temporary construction facilities such as portable toilets and a portable site office would be required for the construction of the Proposal. These amenities would be required for the duration of the construction works or until the proposed permanent site amenities buildings have been constructed.

A3.7 Staff amenities and office building

Staff amenities and office areas would be constructed in the O&M building on site near the BESS substation. Its dimensions would be approximately 11m wide and 15m long. Another building, a storage building, would be built just east of this, measuring 19m by 10m. This storage building may also contain amenities.

A3.8 Landscaping and revegetation

Landscaping on site would be minimal with the 4.04ha BESS hardstand for infrastructure and the perimeter Asset Protection Zone (APZ). Landscaping for the purposes of screening infrastructure is unlikely to be required due to the distance of sensitive receivers from the Proposal and scattered existing vegetation. However, the Proponent has included 160m length and 2m width of screening vegetation along the north-eastern perimeter of the BESS hardstand, adjacent to the Ercildoune Road boundary. Native trees and shrubs belonging to the plant community types located on and in proximity to the Development Footprint would be used for the screening vegetation.

Areas disturbed during the construction phase would be stabilised and revegetated where required with suitable perennial grass species. Groundcover species would be selected to facilitate sheep grazing at the site to control grass height and bushfire hazard, and in consultation with the landowner.

A3.9 Essential Energy Substation works

To support the proposed Coleambally BESS, Essential Energy are required to construct a new control room and associated underground cabling, and extension of the substation bench to accommodate a new connection bay within the TransGrid substation lot.

A.4 Proposed implementation and cost

This section describes the proposed activities and requirements for the Proposal, with environmental constraints shown in Figure 7-3 (note: no sensitive receivers are present within a 2km radius of the Proposal).

A4.1 Preconstruction works

Prior to construction, several activities are proposed:

- Use of temporary site access points (e.g., existing farm accesses)
- Slashing and/or removal of areas of non-native vegetation within footprint and access points
- Survey, geotechnical and other preliminary investigations
- Establishment of new boundary fencing
- Establishment of ancillary facilities including the site compound and laydown areas
- Establishment of parking and laydown areas.

A4.2 Construction activities

The construction and commissioning phase is expected to last around 10 months. The main construction activities are proposed to include:

- Clearing and vegetation removal

- Construction of the site access point and road upgrades
- Construction of gravel internal access tracks
- Construction of O&M building and maintenance
- Installation of infrastructure pads
- Installation of foundation system for site infrastructure
- Placement of site infrastructure including batteries, cabinets, inverters, Medium Voltage Power Station (MVPS), transformer and substation
- Construction of the 132 kV underground transmission line, switch gear and equipment
- Connection of the 132kV underground transmission line to the Coleambally substation
- Connection of all onsite transmission lines and ancillary infrastructure
- **Upgrades to the Essential Energy substation**
- Removal of temporary construction facilities and rehabilitation of disturbed areas.

A4.3 Hours of operation during construction

Works would be undertaken during standard working hours:

- Monday – Friday 6am to 5pm
- Saturdays – 7am to 1pm.

During the connection of the transmission line to the substation, there would likely be a temporary power outage for Essential Energy customers. In order to reduce this impact, the works would be completed between the hours of 12am and 5am (night works), in consultation with relevant roads authorities, where required, and in consideration of audible noise impacts to near residents.

A4.4 Required materials

The main construction materials would include:

- Aggregates, gravel road base, and concrete
- Steel fencing materials
- Steel piles and ground screws
- Steel mounts and bolts
- Cabling, conduit, and weather-proof junction boxes
- Skid-based modules containing the battery units and associated PDSs, RMUs and transformers
- Steel framing and Colorbond sheeting for operations and maintenance building and control room
- Timber and fixtures for building fit-out.

A4.5 Operation

The operational phase of the Proposal is anticipated to commence in mid-2025. Once operational, activities would include daily/weekly operations and maintenance. This would include:

- Routine visual inspections, general maintenance and cleaning operations of the BESS infrastructure
- Vegetation management of the screening vegetation along the north-eastern boundary of the BESS to ensure that the vegetation planted is maintained and any losses are replaced

- Replacement and repair of equipment and infrastructure, as required.
- Site security if a security event occurs.

Up to two light vehicles per day would be expected on site during normal operation of the BESS. Standard work hours would be maintained for operational activities. Additionally, contractors may be engaged to undertake specific tasks from time to time.

A4.6 Water Requirements

It is expected that 5,000L of potable water and 20,000L of non-potable water would be required annually during operation. It is expected that 1,000L of potable water and 15,000L of non-potable water would be required daily during construction. This is a maximum estimate and would be highly dependent on specific site activities on a day-by-day basis.

A4.7 Transport and access

The main access point to the site is off Ercildoune Road; this access point would be maintained throughout the lifetime of the BESS. Transport and access are detailed in Section 6.7 of the EIS.

A4.8 Personnel and work hours

There is expected to be one full time equivalent (FTE) ongoing role for the operation and maintenance of the BESS. Operational works would be undertaken during standard working hours:

- Monday – Friday 9am to 5pm.

A.5 Decommissioning and rehabilitation

At the end of the BESS operational life, the Development Footprint would be either reconditioned or decommissioned. During decommissioning, all above ground and below-ground infrastructure would be removed. Key elements of project decommissioning would include:

- The BESS would be disconnected from the Coleambally substation
- The site infrastructure would be decommissioned and removed from the site
- All site amenities and equipment would be removed, and materials recycled or reused, wherever possible
- Posts and cabling would be removed and recycled
- Fencing would be removed (some fencing may be retained if it is requested by the landowner)
- The hardstand would be removed unless a request for it to remain is received from the landowners.

Traffic required for decommissioning would be similar in type but of shorter duration than that required for the construction phase.

Towards the end of the operational life of the BESS, there is potential for the infrastructure to be upgraded to extend the life of the BESS. The works would be determined at the time and do not form part of the Proposal assessed in the EIS. Further assessment and environmental approvals would be reviewed if the Proposal is to be reconditioned.

A Rehabilitation and Decommissioning Management Plan would be established prior to the decommissioning date, designed in consultation with the landowner and would be submitted for approval to the NSW Department of Primary Industries. The Rehabilitation and Decommissioning Management Plan would include the following:

- Rehabilitation objectives and strategies
- Expected timeline for rehabilitation
- Description of the design criteria
- Indicators to guide the land back to agricultural production
- Monitoring and mitigation measures
- Removal of all above ground infrastructure
- Removal of all below-ground infrastructure
- Removal of gravel from internal access tracks where required, in consultation with landowner
- Reverse any compaction by mechanical ripping
- Reinstate irrigation infrastructure in consultation with landowner, including laser levelling and contour/bund reconstruction where required.

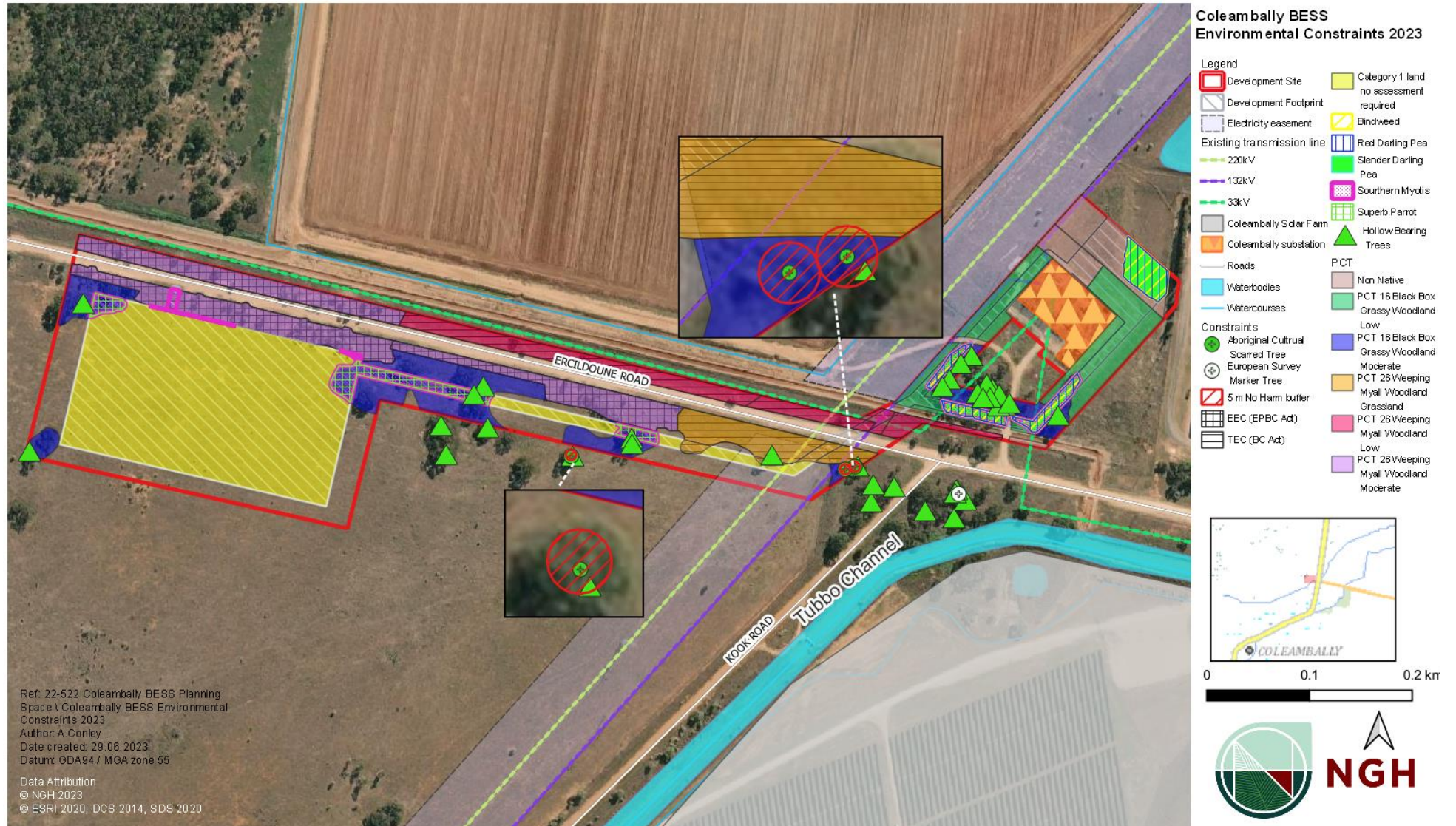


Figure 7-3 Environmental constraints

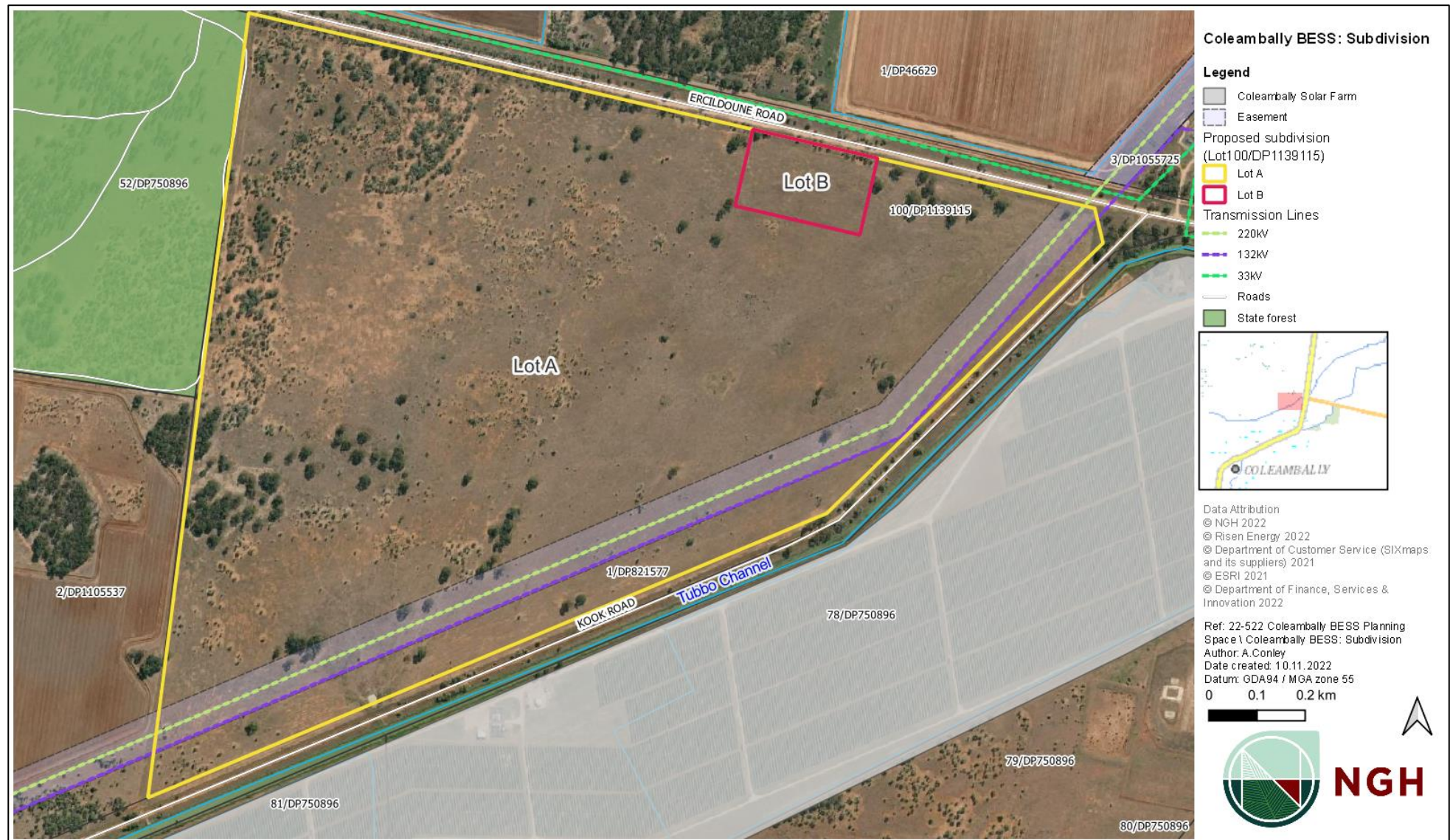


Figure 7-4 Proposed subdivision of the 4.04ha BESS hardstand from Lot 100 DP1139115

Appendix B Updated statutory compliance table

The statutory compliance of the proposed Coleambally BESS remains consistent with the EIS, and is detailed below:

Category	Statutory Requirements	Relevance to Project
Power to Grant Consent	Environmental <i>Planning and Assessment Act 1979</i> (EP&A Act) NSW. State <i>Environmental Planning Policy (Planning Systems) 2021</i> (Planning Systems SEPP).	The EP&A Act and its associated regulations and instruments set the framework for development assessment in NSW. Development assessment provisions are contained in Part 4 of the Act. Section 4.36 of the EP&A Act provides that a development would be SSD if it is declared to be SSD by a State Environmental Planning Policy (SEPP). Clause 20 of Schedule 1 of the Planning Systems SEPP states that the following development is considered SSD: <i>Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:</i> (a) <i>Has a capital investment value of more than \$30 million, or</i> (b) <i>Has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.</i> Electricity generating works are defined in the Standard Instrument – Principal Local Environment Plan (2006) as: <i>A building or place used for the purpose of –</i> (a) <i>Making or generating electricity, or</i> (b) <i>Electricity storage.</i> The primary purpose of the Proposal is for electricity storage, and it is expected to have a capital investment value of more than \$30 million. Energy from the BESS would be used to supplement the national network during peak periods. Therefore, the Proposal meets the definition of development for the purpose of electricity generating works per Clause 20 of the State and Regional SEPP. Accordingly, the Proposal is classified as SSD under Part 4 of the EP&A Act and approval would be given by the NSW Minister for

Category	Statutory Requirements	Relevance to Project
		Planning and Public Spaces (the Minister), or the Independent Planning Commission of NSW (IPC), as delegated by the Minister in certain circumstances.
Permissibility	State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) <i>Murrumbidgee Local Environmental Plan 2013</i> (Murrumbidgee LEP)	The Proposal is located within the Murrumbidgee LGA and is subject to the provisions of the Murrumbidgee LEP. Under the LEP, the Subject Land is zoned as RU1 Primary Production. Development for the purpose of electricity generation is prohibited within this land zoning, however, section 2.36(1b) of TISEPP provides that development for the purpose of electricity generation works may be carried out by any person with consent on any land in a non-prescribed residential zone. RU1 Primary Production zone meets the definition of a non-prescribed residential zone per section 2.35 of the TISEPP. The provisions of the TISEPP prevail over the Murrumbidgee LEP and the Proposal is permissible on this land. The area required for the BESS hardstand would need to be subdivided from Lot 100 DP1139115. Clause 4.2 of the Murrumbidgee LEP allows for the subdivision of land zoned as RU1 Primary Production, provided that the subdivided land is less than the amount given in the Lot Size Map of the Murrumbidgee LEP, and provided that no existing dwelling is located, or new dwelling is erected on the subdivided land. The land to be subdivided is shown in the Lot Size Map of the Murrumbidgee LEP as having a minimum lot size of 200ha. The proposed subdivision would be approximately 4ha in size and would not contain any existing or new dwellings, and therefore meets the conditions for subdivision of land zoned as RU1 Primary Production. Given that the proposed subdivision would continue to meet the provisions of the TISEPP which prevails over the Murrumbidgee LEP, the Proposal is permissible on the proposed subdivision. An email was received from Council confirming no objection to the subdivision is provided in Appendix D.1 of the EIS.
Other approvals	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	The Commonwealth EPBC Act (Australian Government, 1999) is administered by the Commonwealth Department of Climate Change, Energy,

Category	Statutory Requirements	Relevance to Project
	State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and conservation SEPP) State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP)	the Environment and Water (DCCEEW). Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have or is likely to have a significant impact on a Matter of National Environmental Significance (MNES) or Commonwealth land, then the action may not be undertaken without prior approval of the Minister. The EPBC Act identifies nine MNES. Actions that adversely affect these matters may be deemed to be a 'controlled action' under the EPBC Act. A search of the Commonwealth Protected Matters Search Tool was undertaken on 11 January 2021 for the Subject Land with a 10 km buffer. The findings of the search are outlined in Table 4-1 of the EIS. The potential for these entities to occur would be investigated as part of the EIS. At this stage, a significant impact on an MNES and the requirement to refer the Proposal under the EPBC Act is not considered likely. The Biodiversity and Conservation SEPP, chapter 3, aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas. Per section 3.3 of the Biodiversity and Conservation SEPP, the SEPP provisions apply to each local government listed in Schedule 2. Murrumbidgee LGA is not identified in the listed LGAs under Schedule 2. However, as the Proposal is SSD, assessment of impacts to the Koala and Koala habitat would be carried out under the <i>Biodiversity Conservation Act 2016</i> (BC Act) (NSW). The Resilience and Hazards SEPP defines and regulates the assessment and approval of potentially hazardous or offensive development (NSW Government, 1992). Resilience and Hazards SEPP provides for systematic assessment of potentially hazardous and offensive development for the purpose of industry or storage. For development Proposals classified as 'potentially hazardous industry' the policy requires a preliminary hazard analysis (PHA) to determine risks to people, property and the environment.
Pre-condition to exercising the power	<i>Roads Act 1993</i> (Roads Act)	Under Section 4.42 of the EP&A Act, several authorisations cannot be refused

Category	Statutory Requirements	Relevance to Project
to grant approval		if they are necessary for and consistent with an approved SSD. These are outlined below: • An aquaculture permit under Section 144 of the <i>Fisheries Management Act 1994</i> (NSW). • An approval under Section 15 of the <i>Coal Mine Subsidence Compensation Act 2017</i> (NSW). • A mining lease under the <i>Mining Act 1992</i> (NSW). • A production lease under the <i>Petroleum (Onshore) Act 1991</i> (NSW). • An environment protection licence under Chapter 3 of the <i>Protection of the Environment Operations Act 1997</i> (NSW) (for any of the purposes referred to in Section 43 of that Act). • A consent under Section 138 of the Roads Act 1993 (NSW). • A licence under the <i>Pipelines Act 1967</i> (NSW). Only the <i>Roads Act 1993</i> (NSW) (Roads Act) is relevant to the Proposal. The Roads Act provides for the classification of roads as classified and unclassified roads and for the declaration of roads under the care of local councils or Transport for NSW (TfNSW) and other road authorities. It also regulates the carrying out of various activities in, on and over public roads (NSW Government, 1993). The Roads Act regulates the carrying out of various activities in, on and over public roads. Under Section 138, the consent of the appropriate road's authority is required to: - Erect a structure or carry out a work in, on or over a public road - Dig up or disturb the surface of a public road - Remove or interfere with a structure, work or tree on a public road - Pump water into a public road from any land adjoining the road - Connect a road (whether public or private) to a classified road. Intersection treatments and road upgrades may be required to obtain site access. Final site access arrangements would be determined by further traffic

Category	Statutory Requirements	Relevance to Project
		investigations. Additional approval in the form of a Section 138 permit from TfNSW is expected to be required to carry out road upgrades. Access and traffic are further discussed in Section 5.7.
Mandatory matters for consideration	<i>Biodiversity Conservation Act 2016, Biosecurity Act 2015, Heritage Act 1977, National Parks and Wildlife Act 1974, The Rural Fires Act 1997</i>	<i>Biodiversity Conservation Act 2016</i> (NSW) (BC Act) The Proposal would likely impact on native vegetation and biodiversity values. A Biodiversity Development Assessment Report (BDAR) has been prepared as part of the EIS, taking into consideration requirements raised by Biodiversity Conservation and Science (BCS) of the DPE during consultation. Biodiversity is discussed further in Section 6.4 of the EIS. <i>Biosecurity Act 2015</i> (NSW) (Biosecurity Act) The EIS provides for the as needed control of weeds occurring at the Development Site as part of the proposed works (refer Section 6.4 of the EIS). <i>Heritage Act 1977</i> (NSW) (Heritage Act) Based on preliminary searches, no heritage items have been identified within the Subject Land. Heritage is further discussed in Section 6.5 of the EIS. <i>National Parks and Wildlife Act 1974</i> (NSW) (NPW Act) The NPW Act regulates access to National Parks. There are no National Parks located in proximity to the Proposal. The NPW Act also sets out to protect and preserve Aboriginal heritage values. Part 6 of the NPW Act refers to Aboriginal objects and places and prevents persons from impacting on an Aboriginal place, object or relic, without consent or a permit. Additional to the NPW Act, Heritage NSW sets out a code and guidelines for required assessment and consultation protocols for Aboriginal heritage impact assessments. Aboriginal Heritage is discussed further in Section 6.5 of the EIS. The <i>Rural Fires Act 1997</i> (NSW) (Rural Fires Act) addresses and facilitates the mitigation and suppression of rural bushfires in Local Government area listed as rural fire districts. The Proposal is not located on land that is

Category	Statutory Requirements	Relevance to Project
		considered bushfire prone (NSW Government, 1997). This Proposal is SSD and is therefore exempt from requiring a bush fire safety authority (BFSA) under section 4.41(f) of the EP&A Act. Section 5.16(3) requires “the Planning Secretary is to consult relevant public authorities and have regard to the need for the requirements to assess any key issues raised by those public authorities”, which includes consulting with the New South Wales Rural Fire Service (NSW RFS). The EIS provides an assessment of bushfire risk and mitigation measures in Section 6.6.

Appendix C Updated mitigation measures

ID	Safeguards and mitigation measures	Des	C	O	Dec
Visual					
V1	The materials and colour of onsite infrastructure will, where practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend with the landscape. Where practical: - Proposed new buildings will be non-reflective and in eucalypt green, beige or muted brown. - Pole mounts will be non-reflective. - Security fencing posts and wire would be non-reflective.	X	X		
V2	Night lighting will be minimised to the maximum extent possible (i.e. manually operated safety lighting at main component locations). It will be directed away from the Kidman Way, so as not to cause light spill that may be hazardous to drivers.	X	X	X	X
V3	Vegetation screening will be implemented along the north-eastern boundary of the BESS hardstand, adjacent to Ercildoune Road. Vegetation will be maintained, and losses replaced.		X	X	
Noise and vibration					
N1	Carry out construction works during standard work hours where possible		X	X	X
N2	Plant and equipment should be properly maintained		X	X	X
N3	Avoid any unnecessary noise when carrying out manual operations and when operating plant.		X	X	X
N4	Any equipment not in use for extended periods during construction work should be switched off.		X		
N5	Establish good relations with people living and working in the vicinity of a construction site at the beginning of a project and maintain throughout the project. Provide regular updates of progress and address any complaints. The person selected to liaise with the community shall be adequately trained and experienced.		X	X	X
Land use					

ID	Safeguards and mitigation measures	Des	C	O	Dec
L1	Consultation with adjacent landholders would be ongoing to manage interactions between the BESS and other properties.	X	X	X	X
L2	Consultation to be undertaken with TransGrid regarding connection to the substation and design of electricity transmission infrastructure.	X	X	X	X
L3	Consultation with DPIE-Crown Lands would be ongoing, and the following would be undertaken: Prior to construction, a permit will be applied for to allow construction of the transmission line and application for a transmission line easement.	X	X		
L4	A Rehabilitation and Decommissioning Management Plan is to be prepared in consultation with NSW Department of Primary Industries and the landowner prior to decommissioning. The Rehabilitation and Decommissioning Management Plan is to include: - Removal of all above ground infrastructure - Removal of gravel from internal access tracks where required, in consultation with landowner - Reverse any compaction by mechanical ripping. Reinstate irrigation infrastructure in consultation with landowner, including laser levelling and contour/bund reconstruction where required.	X			X
L5	Prepare a Pest and Weed Management Plan to manage the occurrence of noxious weeds and pest species across the site during construction and operation. The plans shall be prepared in accordance with Murrumbidgee Council and NSW DPI requirements. Where possible integrate weed and pest management with adjoining landowners.		X	X	
Biodiversity					
B1	Time works to avoid critical life cycle events (September through to December). The EPC Contractor is to prepare a works schedule to avoid life cycle events.		X		
B2	Relocate habitat features (fallen timber) into retained vegetation patches.		X		
B3	Induct all staff prior to construction to identify vegetation to be retained, awareness of location of the threatened Superb Parrot and the Weeping Myall Woodland TEC, prevent inadvertent damage and reduce soil disturbance.	X	X		

ID	Safeguards and mitigation measures	Des	C	O	Dec
B4	Implement clearing protocols that identify vegetation to be retained (delineation of no-go areas with temporary fencing), prevent inadvertent damage and reduce soil disturbance: • Approved clearing limits to be clearly delineated with temporary fencing or similar prior to construction commencing. • No stockpiling or storage within dripline of any mature trees to be retained. • Where trees are to be retained, an adequate protection zone (TPZ) will be provided around each tree for the duration of construction, where possible. Details for calculating TPZs are provided within Australian Standard 4970-2009 – Protection of trees on development site. • Post-clearing survey report will be compiled by Project Ecologist or fauna spotter catcher and provided to the project Environmental Manager. • Monthly monitoring of high disturbance areas, exclusion zones and boundary fencing during construction. • Progressive monitoring of the cumulative amount of vegetation cleared. • Inspection of exclusion zone disturbance. • A trained ecologist or licensed wildlife handler would be present during clearing events and complete: ○ Pre-clearing checklist ○ Tree clearing procedure	X	X		
B5	Install noise barriers or daily/seasonal timing of construction and operational activities to reduce impacts of noise.		X	X	
B6	Install light shields or daily/seasonal timing of construction and operational activities to reduce impacts of light spill.		X	X	
B7	Implement adaptive dust monitoring programs to control air quality.		X		
B8	Implement hygiene protocols to prevent the spread of weeds or pathogens between infected areas and uninfected areas.		X		
B9	Staff are to be trained and attend site briefings to communicate environmental features to be protected and measures to be implemented.		X	X	
B10	Injury and mortality of fauna entering the proposal site during construction and road strike risk.		X		

ID	Safeguards and mitigation measures	Des	C	O	Dec
	If fauna are encountered during construction, allow fauna to leave an area without intervention as much as possible. The project manager and/or environment manager should ensure the contact details of the animal rescue agency/wildlife care group or vet are provided to the site manager, displayed in the site office and included in the Construction Environmental Management Plan (CEMP) or other relevant management plans for the project				
B11	Implement clearing protocols and undertake daily surveys of clearing (only required on days where clearing is being undertaken) to ensure over clearing does not occur.		X		
B12	Replace habitat provided by non-native vegetation with alternative habitat. The area where the pipeline would be installed would be revegetated as soon as practicable with a mix of local indigenous species representative of the vegetation in the development site.		X		
B13	Installing sediment barriers and spill management procedures to control the quality of water runoff released from the site into the receiving environment.		X		
B14	Undertake maintenance of retained native vegetation on the Development Site		X	X	
B15	Undertake ecological restoration, rehabilitation actions and/or maintenance of retained native vegetation on, or adjacent to, the Development Site. Landscaping around the BESS should be comprised of species representative of Weeping Myall Woodland (PCT 26). An annual report within 1 year of construction is required to detail effectiveness, outcomes and follow up measures.		X	X	X
B16	The following plans will be implemented: • A Pest and Weed Management Plan (PWMP) to prevent/minimise the spread of weeds • A Flora and Fauna Management Plan (FFMP) detailing construction related safeguards, pre-clearing checklists and tree clearing procedures • A Rehabilitation Plan (RP) • Adaptive Management Strategy		X	X	X
B17	Staff training and site briefings will be conducted to communicate the impacts of traffic strikes on native fauna		X	X	

ID	Safeguards and mitigation measures	Des	C	O	Dec
Aboriginal heritage					
A1	A “no-go zone” with a 5 m buffer to ensure there are no inadvertent impacts to Coleambally BESS ST 1 (AHIMS#49-4-0231) and Ercildoune Rd 1 (DB#3) (AHIMS# 49-4-0014). The “no go zone” fence should be hi-visibility mesh and be in place for the duration of the Proposal.		X	X	X
A2	The location and the cultural values of the Coleambally BESS ST 1 (AHIMS#49-4-0231) and Ercildoune Rd 1 (DB#3) (AHIMS# 49-4-0014). should be inducted to the construction teams and future site employees. If further educational resources are required, Risen Energy should employ local Aboriginal groups to assist in cultural training.		X	X	X
A3	In the unlikely event that human remains are discovered during the development works, all work must cease in the immediate vicinity. Heritage NSW and the police should be notified. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal.	X	X	X	X
A4	Further archaeological assessment would be required if the proposal activity extends beyond the area of the current investigation. This would include consultation with the registered Aboriginal parties and may include further field survey.	X	X	X	X
AH5	A Cultural Heritage Management Plan (CHMP) will be prepared for the project to ensure the appropriate management of known sites. The CHMP should include an unexpected finds procedure to follow in the event that Aboriginal stone artefacts objects are discovered during the construction works to ensure that they can be appropriately collected, stored and/or relocated. The CHMP will also include a procedure for the unlikely event that human remains are identified. Preparation of the CHMP should be undertaken in consultation with the registered Aboriginal parties.		X		
Hazards and risks					
H1	The results of the PHA shall be used as inputs into other safety studies required as part of the SSD development application, including: • Bush fire Emergency Management and Operations Plan • Fire Management Plan • Emergency Response Plan • Fire Safety ~~Plan~~ Study	X	X	X	X

ID	Safeguards and mitigation measures	Des	C	O	Dec
	• Emergency Services Information Package • Emergency Responders Induction Package ○ Including detail on de-energising the site and construction access • Emergency Management Plans and Information Packages would be developed in consultation with Murrumbidgee Council and Fire Rescue NSW, in line with all relevant guidelines and papers.				
H2	All design and engineering of the Proposal would be undertaken by qualified competent persons with the support of specialists as required.	X	X		
H3	All electrical equipment would be designed in accordance with relevant codes and industry best practice standards in Australia.	X	X		
H4	With regard to bushfire risk mitigation, Asset Protection Zones (APZs) shall be: • Provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1 of PBP 2019 • Managed in accordance with the requirements of Appendix 4 of PBP 2019. • Wholly within the boundaries of the development site. • Located on lands with a slope less than 18 degrees.	X	X	X	
H5	With regard to bushfire risk mitigation, landscaping is to be: • In accordance with Appendix 4 of PBP 2019, and • Fencing is to be constructed in accordance with section 7.6 of PBP 2019.	X	X	X	
H6	With regard to bushfire risk mitigation, access components of the proposal are to ensure that: • Property access roads are two-wheel drive, all-weather roads • The capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tons), bridges and causeways are to clearly indicate load rating • There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available. • Access Specifications are to include: ○ Minimum 4m carriageway width; ○ A minimum vertical clearance of 4m to any	X	X	X	

ID	Safeguards and mitigation measures	Des	C	O	Dec
	overhanging obstructions, including tree branches; - Property access must provide a suitable turning area in accordance with Appendix 3; - Curves have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress; - The minimum distance between inner and outer curves is 6m; and - The crossfall is not more than 10 degrees; maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads.				
H7	With regard to bushfire risk mitigation, water and utility service components of the proposal are to ensure that: - A 10,000 litre minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available - All above-ground water service pipes external to the building are metal, including and up to any taps - Where no reticulated water supply is available, water for firefighting purposes is provided in accordance with Table 5.3d - A connection for firefighting purposes is located within the IPA or non-hazard side and away from the structure; 65mm Storz outlet with a ball valve is fitted to the outlet - Ball valve and pipes are adequate for water flow and are metal - Supply pipes from tank to ball valve have the same bore size to ensure flow volume - Underground tanks have an access hole of 200mm to allow tankers to refill direct from the tank - A hardened ground surface for truck access is supplied within 4m - Above-ground tanks are manufactured from concrete or metal - Raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F of AS 3959:2018) - Unobstructed access can be provided at all times - Underground tanks are clearly marked - Tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters - All exposed water pipes external to the building are metal, including any fittings	X	X	X	X

ID	Safeguards and mitigation measures	Des	C	O	Dec
	- Where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel-powered pump, and are shielded against bush fire attack - Any hose and reel for firefighting connected to the pump shall be 19mm internal diameter - Fire hose reels are constructed in accordance with AS/NZS 1221:1997 and installed in accordance with the relevant clauses of AS 2441:2005 - Where practicable, electrical transmission lines are underground - Where overhead, electrical transmission lines are proposed as follows: - Transmission lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas - No part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines. - Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used - All fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side - Connections to and from gas cylinders are metal - If gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion - Polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used - Above-ground gas service pipes external to the building are metal, including and up to any outlets.				
H8	The proposal shall apply Section 3 & Section 5 of AS 3959-2018 to buildings on site. This includes any dedicated storage areas for where essential equipment would be housed, or stored, so not to contribute to spreading fire to nearby vegetation.	X	X	X	
H9	With regards to suitable storage of essential equipment, only non-combustible structures shall be installed on site, or otherwise, structures shall incorporate basic ember protection measures to improve the buildings performance against ember attack. Basic ember protection measures could be achieved by enclosing or covering openings with a corrosion-resistant steel, bronze or	X	X	X	

ID	Safeguards and mitigation measures	Des	C	O	Dec
	aluminium mesh with a maximum aperture of 2mm.				
Traffic and access					
T1	A Haulage Plan would be developed and implemented during construction and decommissioning in consultation with Murrumbidgee Council, Coleambally Irrigation Co-Operative Limited and Transport for NSW, including but not limited to: - Assessment of road routes to minimise impacts on transport infrastructure. - Scheduling of deliveries of major components to minimise safety risks (on other local traffic). - Traffic controls (signage and speed restrictions etc.). Require that all vehicular access to the site be via the approved access route. Maximum size of vehicle is B-Double heavy vehicle (as defined within AS2890.2:2018) accessing the site. Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles.		X		X
T2	A Construction Traffic Management Plan (CTMP) would be developed and implemented during construction and decommissioning in consultation with Murrumbidgee Council, Coleambally Irrigation Co-Operative Limited and Transport for NSW. The plan would include, but not be limited to: - Assessment of road condition prior to construction on all local roads that would be utilised. - A program for monitoring road condition, to repair damage exacerbated by the construction and decommissioning traffic. - The designated routes of construction traffic to the site. - Carpooling/shuttle bus arrangements to minimise vehicle numbers during construction. - Scheduling of deliveries. - Community consultation regarding traffic impacts for nearby residents. - Consideration of cumulative impacts. - Traffic controls (speed limits, signage, etc.). - Procedure to monitor traffic impacts and adapt controls (where required) to reduce the impacts. - Providing a contact phone number to enable any issues or concerns to be rapidly identified and addressed through appropriate procedures. Proposed hours for construction activities. The management and coordination of the movement of vehicles for construction and worker related access to the site and to limit disruption to other motorists, emergency vehicles, school bus timetables and school zone operating times.	X	X	X	X

ID	Safeguards and mitigation measures	Des	C	O	Dec
	- Procedures for informing the public where any road access will be restricted as a result of the project. - A Driver Code of Conduct to address such items as; appropriate driver behaviour including adherence to all traffic regulations and speed limits, safe overtaking and maintaining appropriate distances between vehicles, etc and appropriate penalties for infringements of the Code. - A management plan to provide measures to suppress dust generation from the development site and the transportation route shall be prepared and implemented to the satisfaction of Council and TfNSW. - All Coleambally Irrigation Co-Operative Limited traffic management requirements, including: - Only one vehicle on the bridge at any one time (where signs are posted “No overtaking or passing”) - Trucks to allow dust to clear from previous truck so oncoming vehicles can be seen 60km/hr speed limit for trucks, to reduce risk of dynamic load on the bridge beams. - If a jump up or pothole develops between gravel and bridge deck, drivers are to slow down to reduce any bounce on the deck - CICL to be notified of any development of potholes asap to enable the organisation of maintenance and repairs - Cranes are restricted to 10km/hr on the bridge and to travel in the middle of the bridge - Removable counterweights (cranes) are to be removed and transported on a separate trailer.				
T3	The Proponent would further consult with the Murrumbidgee Council regarding a dilapidation report and maintenance of Ercildoune Road following construction. Any road works following construction would be subject to detailed design and must be designed and constructed to the relevant Australian road design standards.			X	X
T4	Any damage resulting from project traffic (except that resulting from normal wear and tear) shall be repaired as required at the proponent's cost.		X	X	X
Soils and landforms					
S1	A construction Erosion and Sediment Control Plan (ESCP) shall be prepared for the Proposal in accordance with Landcom's <i>Soils and Construction: Managing Urban Stormwater</i> (2004).		X	X	X
S2	The design, construction and decommissioning of the Proposal		X		X

ID	Safeguards and mitigation measures	Des	C	O	Dec
	shall minimise the extent and duration of ground disturbance and avoid ground disturbance near waterways.				
S3	Where ground disturbance is required the vegetation (organic matter) shall be retained and reused during rehabilitation.		X		X
S4	Handling of topsoil shall be undertaken when the topsoil is moist (not wet or dry) to avoid structural decline and avoid stockpiles greater than 2 m in height to prevent structural decline. It shall be stripped and stockpiled separately. Stockpiles shall be stabilised with a groundcover (i.e., geo-textile or similar) if stockpiling is required for more than 6 weeks.		X		X
S5	A Revegetation Plan (operation) and Rehabilitation Plan (decommissioning) shall be prepared and include stabilisation and topsoil amelioration (e.g., incorporation of organic matter to improve soil structure or gypsum to improve structure, reduce hard-setting surfaces and reduce soil dispersion).		X	X	X
S6	Subsoils disturbed during construction and with an exchangeable sodium percentage above 6% shall be treated with gypsum to increase the levels of calcium and magnesium, and thus lowering the exchangeable sodium percentage and the dispersiveness of the soil.		X		X
S7	Avoid altering the groundwater and surface water regime to prevent mobilisation of any salt stores, however low, in the soil.		X		
S8	Reference the soil survey results (this document), <i>Australian Soil and Land Survey Handbook</i> (CSIRO 2009), <i>Guidelines for Surveying Soil and Land Resources</i> (CSIRO 2008) and the <i>Land and Soil Capability Assessment Scheme: second approximation</i> (OEH 2012) when returning the site to the pre-development capability.				X
Social and economic					
E1	A Local Industry Participation Plan shall be developed to ensure a focus on maximising the involvement of local people and businesses in the Proposal.	X	X	X	
E2	A Local Procurement Policy shall be developed in consultation with local economic stakeholders to outline the proponent's commitment to providing local and regional businesses the opportunity to supply goods and services to meet Proposal needs during all phases of the Proposal.	X	X	X	

ID	Safeguards and mitigation measures	Des	C	O	Dec
E3	A Solar energy demonstration project shall be considered in consultation with a diverse range of stakeholders to promote and educate the community on solar energy development in the region.	X			X
E4	The existing Stakeholder Engagement Strategy shall be maintained to continue delivering robust stakeholder and community engagement.	X	X		X
E5	A Community Benefits Scheme shall be developed in consultation with a diverse range of local stakeholders to contribute support towards localised community initiatives that have community support.	X	X	X	
Hydrology, groundwater and surface water					
W1	All staff to be appropriately trained through toolbox talks for the minimisation and management of accidental spills.		X	X	X
W2	All fuels, chemicals, and liquids shall be stored at least 50 m away from any waterways or drainage lines and would be stored in an impervious bunded area.		X	X	X
W3	Adequate incident management procedures will be incorporated into the Construction and Operation Environmental Management Plans, including requirement to notify EPA for incidents that cause material harm to the environment (refer s147-153 <i>Protection of the Environment Operations Act 1997</i> (NSW)).	X	X	X	X
W4	The refuelling of plant and maintenance of machinery shall be undertaken in impervious bunded areas.		X	X	X
W5	Machinery shall be checked daily to ensure there is no oil, fuel or other liquids leaking from the machinery. All staff would be appropriately trained through toolbox talks for the minimisation and management of accidental spills		X		X
W6	Water supply agreements shall be secured in consultation with Murrumbidgee Council and/or Coleambally Irrigation prior to construction to ensure adequate water supply is secured for construction and operation.		X	X	
W7	Inspect stormwater control measures before and after rainfall of more than 10mm in 24 hours and at least quarterly.		X	X	X
W8	Ensure appropriate drainage controls are incorporated into the design to minimise the area of disturbance, runoff and pollutant	X			

ID	Safeguards and mitigation measures	Des	C	O	Dec
	generation.				
W9	All potential pollutants stored on-site shall be stored in accordance with HAZMAT requirements and banded.		X	X	X
Resource use and waste generation					
WM1	A Waste Management Plan (WMP) would be developed in consultation with Murrumbidgee Council and implemented during construction, operation and decommissioning to minimise wastes. It would include but not be limited to: • Identification of opportunities to avoid, reuse and recycle, in accordance with the waste hierarchy. • Quantification and classification of all waste streams. • Provision for recycling management onsite. • Provision of toilet facilities for onsite workers and how sullage would be disposed of (i.e., pump out to local sewage treatment plant). • Tracking of all waste leaving the site. • Disposal of waste at facilities permitted to accept the waste. • Requirements for hauling waste (such as covered loads).	X	X	X	X
WM2	All waste generated by the Proposal will be classified in accordance with the NSW Waste Classification Guidelines Part 1: Classifying Wastes (DECCW 2008), including: • All waste generated on site is to be transported off site and disposed of at landfill site approved to accept General Solid Waste (non-putrescible). • Waste is not to be burned or buried on-site and is not to be disposed of on other land, unless a Section 143 notice under the POEO Act is completed.		X	X	X
Historic heritage					
HH1	Should an item of historic heritage be identified, the Heritage Division (OEH) would be contacted prior to further work being carried out in the vicinity.	X	X	X	X
Air quality and climate					
AQ1	Development of a complaints procedure to promptly identify and respond to issues generating complaints.	X			
AQ2	Protocols to guide vehicle and construction equipment use, to minimise emissions would be included in construction and operational environmental management plans. This would include	X	X	X	

ID	Safeguards and mitigation measures	Des	C	O	Dec
	but not be limited to Australian standards and POEO Act requirements.				
AQ3	During construction, operation and decommissioning, dust would be managed to prevent dust leaving the Proposal area. This includes dust from stockpiled materials.	X	X	X	X
Cumulative impacts					
C1	The proponent would liaise with representatives of the Agriwaste energy from waste facility and the Woodland BESS to manage impacts on local services, accommodation and businesses.	X			X
C2	Accommodation and Employment Strategy for the development in consultation with Council. This strategy must: - Propose measures to ensure there is sufficient accommodation for the workforce associated with the development - Consider the cumulative impacts associated with other State significant development projects in the area, including nearby mines - Investigate options for prioritising the employment of local workers for the construction and operation of the development, where feasible - Include a program to monitor and review the effectiveness of the strategy over the life of the development, including regular monitoring and review during construction.	X			X

Appendix D Updated BDAR

Appendix E RAPs consultation letter

17 April 2023



To whom it may concern,

Re: 21-403/ 22-522 Coleambally BESS development footprint update

As you would be aware, you are a Registered Aboriginal Party (RAP) for the Coleambally Battery Energy Storage System (BESS) Aboriginal Cultural Heritage Assessment (ACHA).

As part of the recent public exhibition of the environmental impact statement (EIS) for this project, it has been noted by the delegate for TransGrid (Lumea) that the Coleambally substation bench requires an extension that has not been sufficiently accounted for in the current mapping of the development site and development footprint for this project, and that the new control room building at the substation is not shown in the development footprint. These two items are required to be addressed as part of the Response to Submissions (RtS) and associated Amendment Report (AR) which NGH is now preparing.

To address these requirements, a minor change to the mapped area for the development site and development footprint for this project is required (the additional development site area is approximately 140 x 40 metres) and therefore any new impacts to Aboriginal Heritage are required to be considered and assessed.

As part of a desktop review, it has been determined by a qualified archaeologist (NGH Principal Heritage Consultant Kirsten Bradley) that the additional substation extension area and the new control room building are entirely within the area which was subject to archaeological survey for this project in October 2021. This area was surveyed in October 2021 by an NGH archaeologist with two Aboriginal community representatives (see Figure 1) with no Aboriginal objects, sites or areas of potential archaeological deposits (PAD) recorded. Therefore, it has been determined by NGH that the additional area which will be incorporated into development site and development footprint (see Figure 1 and Figure 2 below) has been sufficiently surveyed and assessed for Aboriginal objects, and that this minor change to the mapping of the development site and development footprint (which also includes the area for the new control room building) will not change or modify the impact assessment, mitigation measures or the recommendations noted in the ACHA (version Final 2.0 dated 18/11/2022) for this project.

Figure 2 has been provided to clearly show you the revised development site, revised development footprint and new control room building location compared to the two known Aboriginal sites (Coleambally BESS ST1 and Ercildoune Rd 1) and the European survey marker tree as noted in the ACHA (version Final 2.0 dated 18/11/2022) for this project.



SYDNEY

Unit 17, 21 Mary Street, Surry Hills NSW 2010

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ABN 31 124 444 622 ACN 124 444 622

This letter is now being provided to you to ensure that these minor changes to the proposed development site and development footprint for the Coleambally BESS have been clearly communicated to the RAPs. If you have any questions or comments regarding this update to the development site and/or development footprint please feel free to contact me.

Kind regards,



Kirsten Bradley
Principal Heritage Consultant
NGH Pty Ltd



SYDNEY

Unit 17, 21 Mary Street, Surry Hills NSW 2010

T. (02) 8202 8333 **E.** ngh@nghconsulting.com.au **W.** www.nghconsulting.com.au

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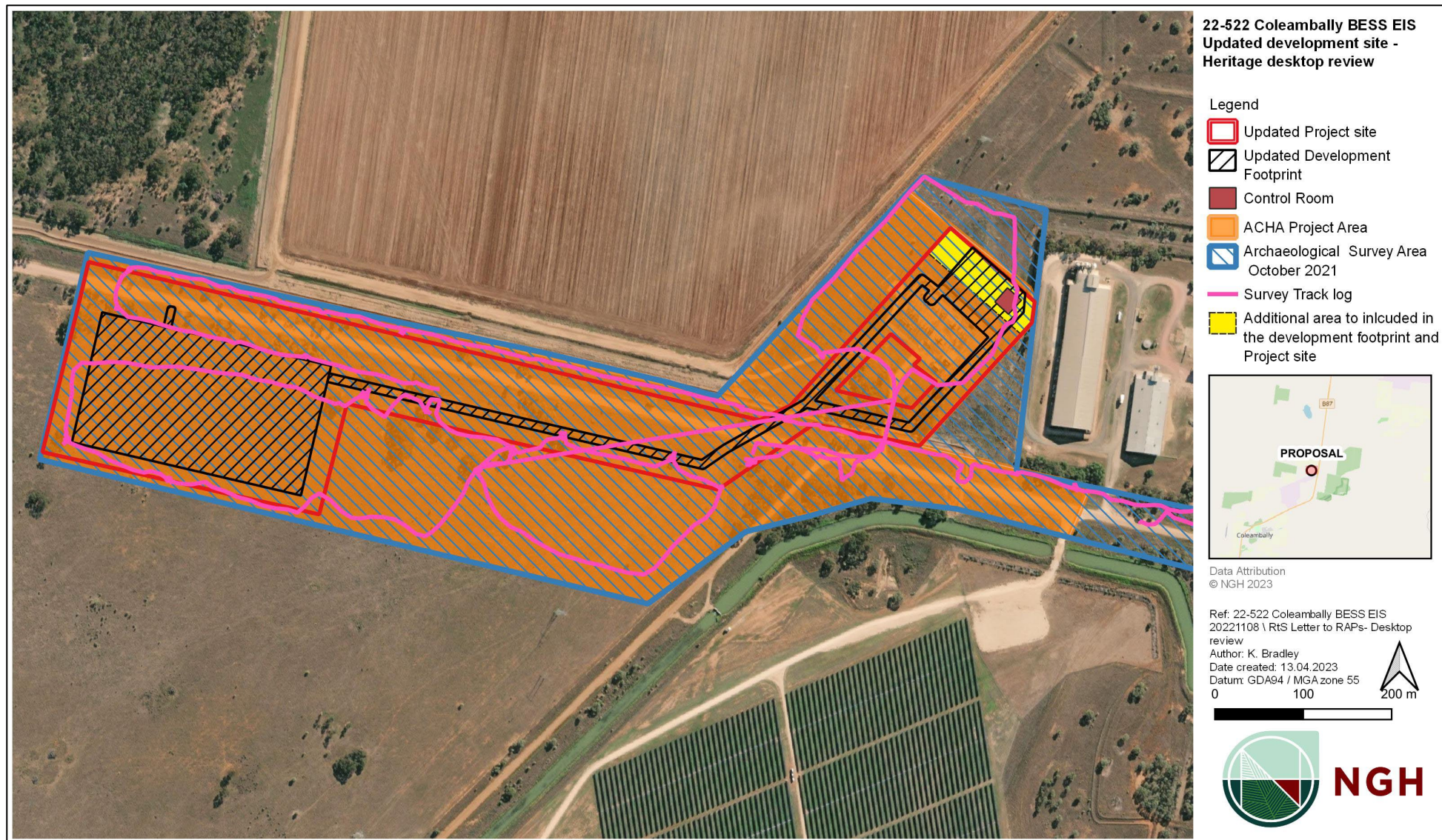


Figure 1 Desktop review of the additional substation extension area and the new control room building which were determined to be entirely within the area which was previously subject to archaeological survey for this project.

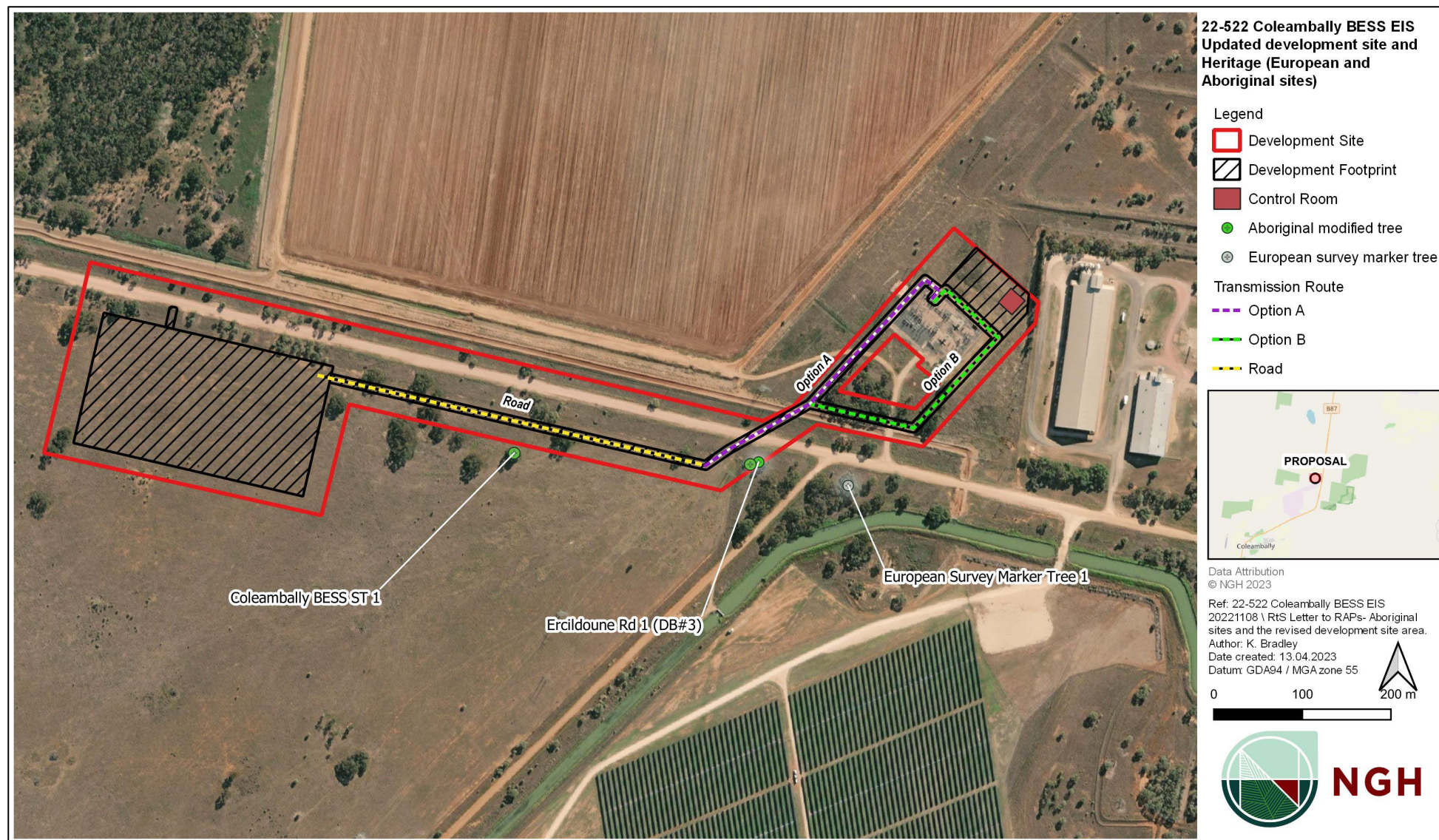


Figure 2 Aboriginal sites and the revised development site and development footprint area.

Appendix F Consultation

Sarah Hillis

From: Leigh Maloney <[REDACTED]>
Sent: Wednesday, 5 April 2023 8:19 AM
To: Julie Gooding; ROG South West Region Mailbox
Cc: Sarah Hillis
Subject: RE: Environmental Impact Statement – Coleambally Battery Energy Storage System (SSD-23368211)

Hi Julie,

Thanks for the discussion yesterday regarding the addition of an additional area of about 50m x 20m into the development footprint north of the substation.

The assessment for this area with a VI plot and justification for any excluded flora and fauna candidate species should be documented in the revised BDAR as discussed.

Cheers

Leigh Maloney
Senior Conservation Planning Officer – South West

Biodiversity and Conservation | Department of Planning and Environment



www.dpie.nsw.gov.au



Contact the South West Planning Team about biodiversity and flood management planning matters by emailing rog.southwest@environment.nsw.gov.au.

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Julie Gooding [REDACTED]
Sent: Tuesday, 4 April 2023 12:01 PM
To: Leigh Maloney [REDACTED]; ROG South West Region Mailbox
<rog.southwest@environment.nsw.gov.au>
Cc: Sarah Hillis [REDACTED]
Subject: RE: Environmental Impact Statement – Coleambally Battery Energy Storage System (SSD-23368211)

Hi Leigh,

Thanks for your response previously.

As per our phone conversation, we will also assess an additional area of the project footprint that occurs north of the substation, with a floristic plot to determine the quality of the vegetation. This area is regularly mown, and disturbed and suspected to be dominated by exotics. We will use the floristic plot and site visit to determine if the habitat is sufficiently degraded and unlikely to support threatened flora species. Justification will be documented in the BDAR if any candidate flora species are excluded.

Are you supportive of this approach?

Cheers,

JULIE GOODING
SENIOR ECOLOGIST

Accredited NSW BAM Assessor (BAAS18074)

Please note I work Tuesday, Wednesday and Friday



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From: Leigh Maloney [REDACTED]
Sent: Friday, March 31, 2023 3:33 PM
To: Julie Gooding [REDACTED] ROG South West Region Mailbox
<rog.southwest@environment.nsw.gov.au>
Subject: RE: Environmental Impact Statement – Coleambally Battery Energy Storage System (SSD-23368211)

Hi Julie,

Thank you for your enquiry regarding BCD's response to the Coleambally BESS (SSD-23368211).

With regards to point 2 of our response, and the additional information you have provided in this email, BCD accepts the approach of assumed presence for candidate flora species as outlined in the exhibited EIS and BDAR.

Please note that this approach is only considered appropriate for this project and should not be inferred for any future projects.

Regards

Leigh Maloney
Senior Conservation Planning Officer – South West



www.dpie.nsw.gov.au



Contact the South West Planning Team about biodiversity and flood management planning matters by emailing rog.southwest@environment.nsw.gov.au.

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Julie Gooding [REDACTED]
Sent: Friday, 31 March 2023 2:45 PM
To: ROG South West Region Mailbox <rog.southwest@environment.nsw.gov.au>
Cc: Leigh Maloney [REDACTED]
Subject: Environmental Impact Statement – Coleambally Battery Energy Storage System (SSD-23368211)

Hi Leigh,

Thankyou for your response to Coleambally BESS BDAR. I just wanted to clarify Point 2.

For point 2 –

2. Use targeted flora surveys to refine assumed presence
 - 2.1 Where possible, complete targeted surveys for assumed presence species credit species during the RTS period and recalculate the credit obligation if required.
 - 2.2 Contact the BCT to obtain a Charge Quote through the BCF Charge System to assist with determining and credit payments into the BCF for ecosystem and species credit species.

We have obtained a charge quote for the credits. The client wants to finalise the BDAR before the survey period (June to Sept) for the candidate flora species that were assumed present.

The client wants to confirm that BCD would be accepting of the approach to assume presence of the candidate flora species.

Can you please confirm this approach would be accepted by BCD.

Kind regards,

JULIE GOODING
SENIOR ECOLOGIST

Accredited NSW BAM Assessor (BAAS18074)

Please note I work Tuesday, Wednesday and Friday



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Sarah Hillis

From: Lena Li [REDACTED]
Sent: Wednesday, 22 February 2023 2:25 PM
To: Elissa-Jane Bowden
Cc: Bonan Shan; Sarah Hillis
Subject: RE: Coleambally BESS EIS - TG Due Diligence [Sensitive]

Importance: High

Hi EJ,
Can you please confirm the mapping below is sufficient?



Thanks and Best Regards!

Lena Li
Project Development & Investment Director

RISEN ENERGY (Australia) Pty Ltd.

[REDACTED]

website: <http://www.risenenergy.com.au>



Melbourne
Unit 35/15 Ricketts Rd, Mount Waverley VIC 3149, Australia

Brisbane
Level 1/35 Miles Platting Rd, Eight Mile Plains QLD 4113,
Australia



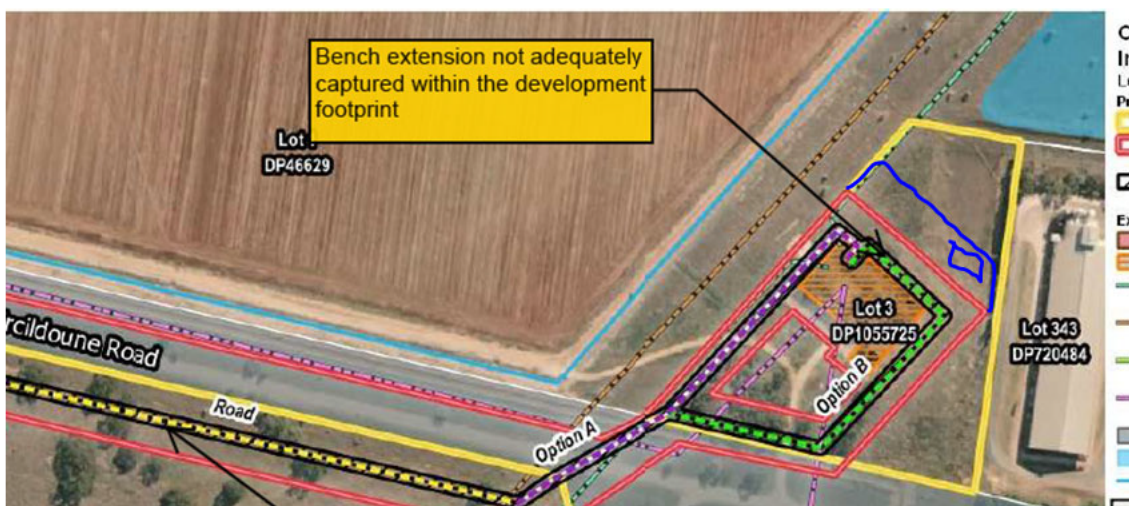
From: Elissa-Jane Bowden [REDACTED]
Sent: Monday, February 13, 2023 2:36 PM
To: Lena Li [REDACTED]
Cc: Bonan Shan [REDACTED]
Subject: FW: Coleambally BESS EIS - TG Due Diligence [Sensitive]

Hi Lena, as discussed,

Can you please increase the Project Development/Disturbance area on the Northern edge of the Coleambally substation to a total of 20m from the edge of the existing substation, to allow for the installation of the underground cable, the bench extension of 13m as well as the new Control Room Building.

I have roughly sketched (not to scale) the additional 10m on the Northern side of the Coleambally substation, I have also shown the location of the new Control room building, also to be located on the Northern end within the 20m area outside the existing edge of the Coleambally substation. The building is nominally sized at 13m long x 3m wide. The intention is to remain within the Yellow Boundary/Essential Energy land area, so I hope my sketch is ok. In Section 3.2.3 of the EIS, please include the detail of the works required at Coleambally substation to include the extension of the substation bench to accommodate the connection bay, and underground cable as well as a new Control room building.

Regards, EJ



Elissa-Jane Bowden
Program Manager

[REDACTED]

lumea.com.au





Data Classification: *Sensitive*

From: Elissa-Jane Bowden

Sent: Friday, 10 February 2023 5:08 PM

To: Lena Li [REDACTED]; Michael Forder [REDACTED]

Cc: David Lin [REDACTED]; Bonan Shan [REDACTED]

Subject: Coleambally BESS EIS - TG Due Diligence [Sensitive]

Hi Lena,

Transgrid has conducted a review of the publicly available Coleambally BESS EIS, to ensure the Transgrid proposed works are consistent with the approval and associated assessment.

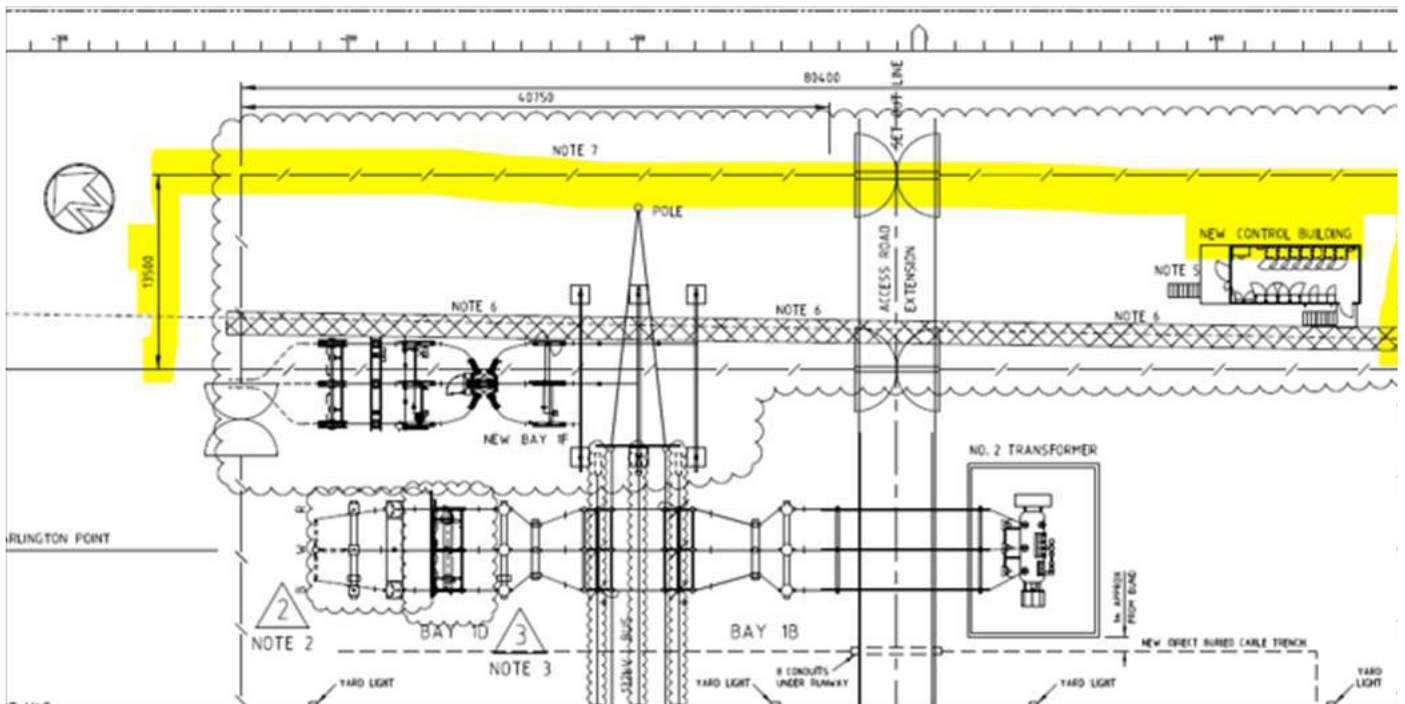
The purpose of this review is to:

- Determine whether Transgrid's scope of works have been identified and assessed in the planning approval documents, and are covered by the approval.
- Identify any key environmental constraints that need to be considered during design, construction and operation.
- Identify any commitments or conditions that:
 - limit Transgrid's ability to construct, operate and maintain its infrastructure.
 - need to be fulfilled prior to Transgrid commencing construction.

The only thing that we have picked up is, as per our proposal presented last week, the Coleambally substation bench requires an extension that has not been sufficiently included, and the new control room building is not identified.

- Section 3.2.3 of the EIS outlines that the CBESS would connect to Coleambally 132 kV substation. Whilst it's inherent that works (such as the construction of a new switchbay) would need to be carried out at the substation to complete the connection works, the required extension of the switchyard bench along the Northern Boundary to accommodate the new switchbay has not completely been included in the proposed disturbance area. There is a disturbance area of 10m in the EIS, but we recommend this be increased to a disturbance area of 20m to include the 13m bench extension and some buffer room for the construction works and the cable trenching. Furthermore, the EIS does not include the requirement for a new control room building. See highlighted GA below. If these works are not required as a result of the additional studies / opportunities identified, then the approval will still accommodate the works. However if they are confirmed to be required at a later date, it will be additional work to amend an approved DA.
- Transgrid recommends that the disturbance footprint of the Coleambally substation is amended to appropriately capture the required bench extension for the new switch bay and the new control room. This amended development footprint should be included in an Amendment Report to be lodged by the Customer with DPE in conjunction with the Submission Report.

Environmental Impact St Coleambally Battery Energy Storage Sys



Happy to assist further if required or to have a discussion.
Kind regards, EJ

Elissa-Jane Bowden
Program Manager



Data Classification: Sensitive

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From: [Lena Li](#)
To: [Garry Stoll](#); [John Scarce](#); [Steven Parisotto](#); [David Hill](#)
Subject: Coleambally Battery Storage System SSD-23368211 EIS/ minutes of meeting and follow up
Date: Tuesday, 18 April 2023 11:40:00 AM
Attachments: [image001.png](#)

Hi John, Garry and Steven,

Thank you all for your time to accept our meeting and for the discussion of Coleambally battery storage system SSD-23368211 project.

Here is the key notes of what we discussed and some items for me to follow up with council, please advise me if anything needs be amended for the below notes.

Time of the meeting: April 5 2023, 10:30am to 11:30am local time;

Venue of the meeting: Council office at 21 Carrington Street Darlington Point;

Attendee of Council: John Scarce, Garry Stoll, Steven Parisotto

Attendee of Risen: Lena Li, David Hill

Key points of the discussion:

- key focus of the meeting is about contribution plan that council would have developers to join. Council highlighted that the community based projects are more preferred and council's mission is to make the community thrive.
- there are two projects council introduced for Risen to consider for the contribution fee: a medical center in Jerilderie with budget of \$5 million; two child care centres (each located in Coleambally and Darlington Point respectively); size of Child care center in Coleambally is about 80 place, size in Darlington Point is about 40 place; at the moment there is no child care center in Darlington Point. Parents have to send their children to Griffith that about 30km away; it seems Child care center in Darlington Point is a more urgent need from the information provided by Council in the meeting;
- Child care centre is budgeted by council as \$1.25million plus play ground budgeted in \$300k ~\$ 400k. Council advised that the child care centre overall budget is \$1.5million for each one. The play ground seems under another cash support program.
- Council will provide land and water for the child care center, council will own the asset and contract to third party commercial organization to operate the child care centre;
- council will be 1% of CIV as contribution fee to every developers in this region, and expect this is an one-off payment. If the future agreed amount is expected to be paid through certain number of years, then it is likely council will consider this is a loan arrangement and interests will be topped up on the agreed amount to be paid by the developer;
- Council proposed that if Risen will contribute to the child care centre, Risen's name will be in the Child care centre and they will establish a scholarship plan in the name of Risen. Risen indicated that we are willing to do contribution to the community quietly and Risen's name in the Child care centre does not mount any weight in our decisions of such contribution, but thanks for Council's such considerations.
- Risen highlighted that 1% of CIV is very big amount to such a project that under struggle of profitable, and one-off front payment will bring huge burden to the project esp. when we are trying to bring this project to construction and commercial operation stage; Council responded that 1% of CIV value is pretty ridged, but they would provide the room to developer if they will build the centre by themselves to save cost if they can build in lower cost;
- the site for Darlington point child care centre is yet to be decided that council is

considering several different locations, and will be decided in later stage;

- council will provide to Risen their standard child care centre design plan that already build in another town Jerilderie;
- Darlington Point area and Coleambally area is about 15km from each other, from Darlington point to Griffith is about 30km. all of these areas are agriculture areas. It is understand that child care centre in these area will be helpful facility to workers in this area.
- Risen is honoured to work with council for projects benefit to local communities and is interested to participate the Child care centre but wish to re-exam the contribution fee percentage and payment schedule in later stage.

[@Garry Stoll](#), are you able to send me the standard drawings mentioned in the meeting?

Thanks and Best Regards!

Lena Li

Project Development & Investment Director

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