

Prepared for EE Australia

Modification Report

Mulwala Solar Farm

Federation LGA, Mulwala, NSW

February 2026

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We acknowledge the Traditional Owners of this land and pay our respect to Elders past, present and emerging. We recognise that the First Nations peoples of Australia have traditionally managed the resources of this land in a sustainable way, and that they are the original custodians of the Australian environment.

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Acronyms and Abbreviations

AC	Alternating Current
BESS	Battery Energy Storage System
DC	Direct Current
DP	Deposited Plan
DPHI	Department of Planning, Housing and Infrastructure
ENA	Environmental Noise Assessment
EP&A Act	<i>Environment Planning and Assessment Act 1979</i>
ha	hectares
km	kilometres
LGA	Local Government Area
MW	Megawatt
NSW	New South Wales
PCUs	Power Conversion Units
PV	Photovoltaic
RAPs	Registered Aboriginal Parties
SSD	State Significant Development
TIA	Traffic Impact Assessment
VIA	Visual Impact Assessment

Executive summary

The Mulwala Solar Farm received New South Wales (NSW) planning approval on 18 December 2018. In July 2025, the Department of Planning, Housing and Infrastructure (DPHI) approved the staging of the Project (SSD-9039PA-12), with a Modification Application (Mod 1) approved in October 2025 to relocate the approved location of the switchyard, site office, maintenance shed and access road, still within the approved Development Footprint. Road upgrades at the intersection of Lambruck Lane and Savernake Road and site access points are now complete. Construction of the solar arrays along with the ancillary infrastructure is underway. The Project is located approximately two kilometres (km) north of the Mulwala township, within the Federation Council Local Government Area (LGA)

This report has been prepared by NGH (A Fyfe Company) on behalf of EE Australia (the Applicant). It is submitted to the NSW DPHI in support of a Modification Application under Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to a State Significant Development (SSD) approval, SSD-9093. Section 4.55(1A) is relevant to Modifications involving minimal environmental impact.

This modification application to SSD-9093 proposes to modify the Mulwala Solar Farm to change the following:

1. Relocation of the approved BESS south of Lambruck Lane to north of Lambruck Lane
2. Change to the approved BESS technology (from Tesla Powerpack to CATL EnerX technology)
3. Adjustment to the solar array layout in Stage 1b, to accommodate the BESS

Importantly, all changes remain within the consented Development footprint and the Project's PV generation capacity remains unchanged.

The key environmental impacts that result from the modification are related to visual amenity, noise, traffic, hydrology and hazards. Additional investigations were undertaken on visual amenity, noise, traffic, hydrology and hazards and identified minor-level impact.

No additional mitigation measures were required as a result of the changes. As such, a consolidated mitigation measures table is not warranted. The measures outlined in Section 9 - Table 28 of the EIS remain valid.

This report includes:

- Updated consolidated Project description (Appendix A)
- Statutory compliance table (Appendix B)
- Consultation evidence (Appendix C)

As well as the following supporting assessments:

- Appendix D – Technical reports
 - D.1 – Visual Impact Assessment (VIA)
 - D.2 – Environmental Noise Assessment (ENA)
 - D.3 – Traffic Impact Assessment (TIA)
 - D.4 – Hydrology Memorandum

Overall, the environmental impacts of the Mulwala Solar Farm Modification are assessed to be minor and manageable. The updated Project justification concludes that the Modified Project would result in numerous benefits, local and regional, and has been developed to ensure the benefits are spread into the longer term, reflecting community expectations specific to this Project. It provides a balance between technological,

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energy and environmental aspects, while retaining the flexibility required in the final design stage of the Project.

1. Introduction

NGH (A Fyfe Company) (NGH) on behalf on behalf of EE Australia (the Applicant) has prepared this modification application under Section 4.55 1A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It seeks to facilitate the following changes to the Project.

1. Relocation of the approved Battery Energy Storage System (BESS)
2. Change to the approved BESS technology
3. Adjustment to the solar array layout

This report demonstrates the additional impacts of the changes would have minimal environmental impacts. The modified Project is substantially the same as the approved development, allowing assessment under Section 4.55 1A.

1.1. The Applicant

The Applicant details are summarised below.

Company Name	EE Australia Pty Ltd
ABN	79 656 465 959
Address	Level 3, 33 Stewart Street, Richmond VIC 3121

The Applicant is part of a global renewable energy company founded in Denmark in 2004 operating in over 25 markets with a diverse team of more than 900 employees and an installed capacity of 4.8 gigawatts (GW) since 2004 and, in 2024 alone, with projects that saved nearly half a million tonnes of CO₂ and generated enough energy to power over half a million European households. The Applicant's mission is to accelerate the green transition by replacing fossil fuels and focusing on delivering clean energy solutions through collaboration with industry, communities, and government to deliver long-term benefits to local communities and achieve supply chain decarbonisation.

The Applicant's work portfolio spans the entire project lifecycle—from securing land and permits to construction, grid connection, and long-term asset management. Beyond solar and wind projects, the Applicant is investing in Power-to-X technologies to produce green e-methanol and hydrogen from renewable energy and bio-waste CO₂.

The Applicant is committed to supporting Australia's energy transition through tailored renewable solutions with a strong local team and a pipeline development capability exceeding 6GW, complementing EE's global pipeline of 30GW+. It owns and operates the 58MWp Mokoan solar project in Victoria and owns the 106MWp Lancaster solar project in Victoria and the 31MWp Mulwala Solar project in New South Wales, both of which are in construction.

1.2. Approved Project overview

The Mulwala Solar Farm is a State Significant Development (SSD-9093) which received New South Wales (NSW) planning approval on 18 December 2018. The Project, as *approved*, includes the construction, operation and decommissioning of a ground-mounted photovoltaic (PV) solar array which would generate approximately 80 megawatts (MW) alternating current (AC) clean electricity.

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The Project is located approximately two kilometres (km) north of the Mulwala township, within the Federation Council Local Government Area (LGA); refer to Figure 1-1 and Figure 1-2 for regional setting and key features.

The Project Area is bounded to the east by Savernake Road and to the south and west by Tocumwal Road. The nearest major roads are the Murray Valley Highway located approximately 6km to the south in Victoria, and the Riverina Highway approximately 25km to the north in NSW.

The Project Area intersects the properties of one landholder that utilises the land for agricultural and grazing activities. The Project Area comprises flat-lying open paddocks. The southern section of the Project is irrigated with water pumped from a bore. As a result of historic agriculture and grazing, the Project Area has been highly modified.

The Project, as approved, includes the following key components, set out in Table 1-1.

Table 1-1 Key components of the Mulwala Solar Farm, **as approved**

Project component	Summary
Solar array	Installation of up to 300,000 solar panels in regular arrays. Each solar panel would be fixed to a metal mounting structure secured with ground piles
Cabling	Above ground and underground Direct Current (DC) cabling. Underground AC cabling would run from the Power Conversion Units (PCUs) to the solar substation
Inverters	Central inverters, step up transformers, and switchgear
Transformer	A main step-up transformer and associated equipment
Ancillary infrastructure	Switchyard, site office and staff amenities and maintenance shed A permanent staff and contractor car parking area.
Access tracks	Internal vehicle access tracks A permanent all-weather access and access road
Temporary facilities	Site compound, lay-down area, and equipment storage areas during construction
Battery	A battery storage area (approximately 20MW/40MWh)

In July 2025, the Department of Planning, Housing and Infrastructure (DPHI) approved the staging of the Project (SSD-9093-PA-12), as follows:

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- Stage 1a road upgrades at the intersection of Lambruck Lane and Savernake Road and site access points
- Stage 1b construction and operation of the solar arrays within the approved Development Footprint, north of Lambruck Lane
- Stage 2 construction and operation of the solar arrays within the approved Development Footprint, south of Lambruck Lane
- Stage 3 decommissioning of the Mulwala Solar Farm.

Since approval, Modification Application 1 (Mod 1) was lodged in October 2025 (Urbis , 2025) and approved in October 2025 to relocate the approved location of the switchyard, site office, maintenance shed and access road (switchyard compound) from Lot 103/Deposited Plan (DP)752290 to Lot 11/DP1316892, north of Lambruck Lane, within the approved Development Footprint.

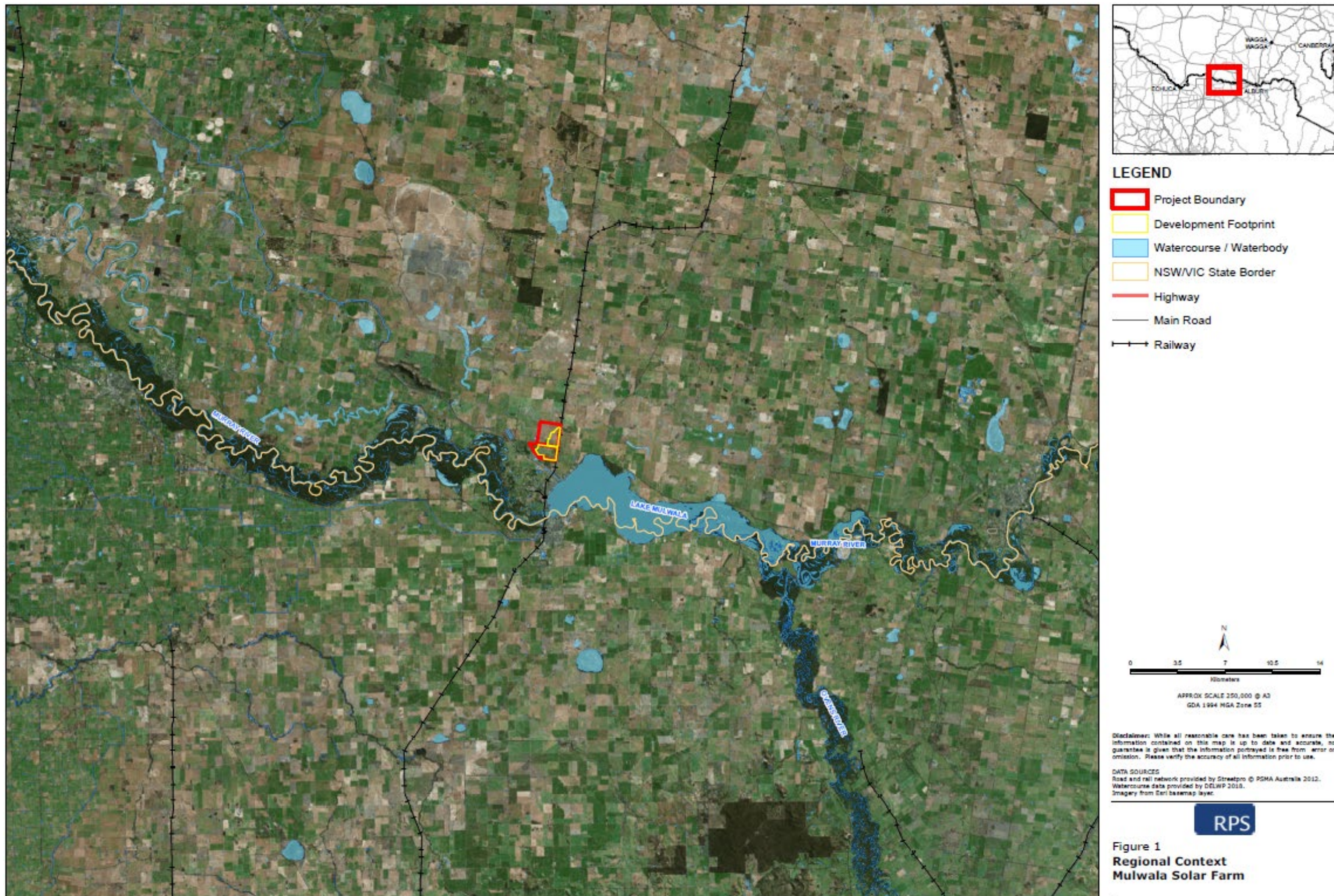
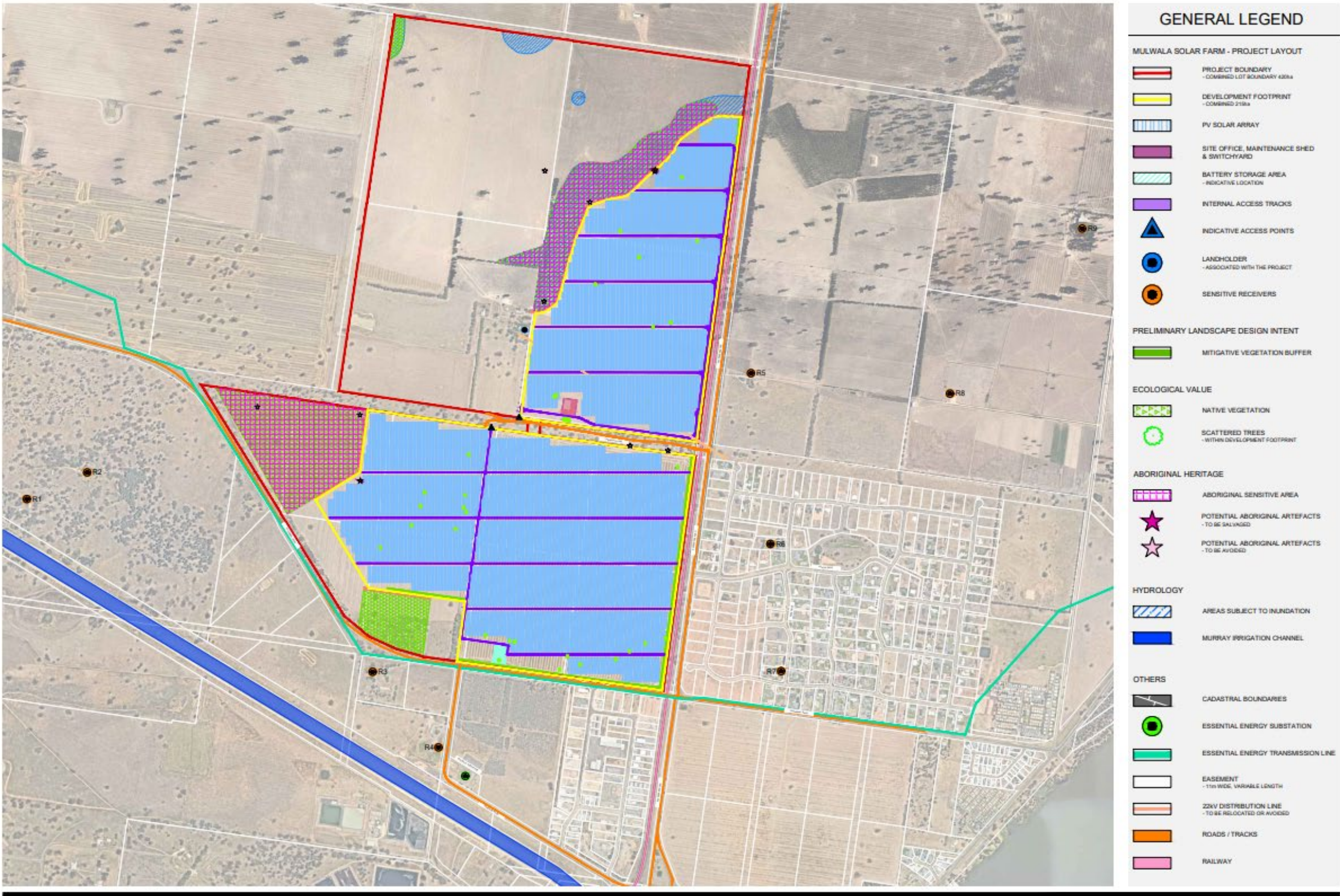


Figure 1-1 Regional context of the Mulwala Solar Farm (RPS Group, 2018a)



**MULWALA SOLAR FARM
PROJECT LAYOUT**

Olderfleet, Level 10, 477 Collins Street | Melbourne VIC 3000 AUSTRALIA | +61 3 9663 4888 | URBIS Ltd | ABN 50 105 256 228



A	PROJECT LAYOUT	REV	DESCRIPTION	DATE
1				14.10.2025

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PROJECT NO. P0055075
DRAWING NO. 207-FI
DATE 14.10.2025
REVISION A

Figure 1-2 Key features of the approved Project (Source: Mulwala Solar Farm Mod 1 (Urbis, 2025a))

1.3. Proposed modification overview

The Applicant has been progressing the Project since acquiring it in 2024. The Project itself was approved in 2018. Stage 1a – road upgrades at the intersection of Lambruck Lane and Savernake Road and site access points – is now complete. Stage 1b is underway with the construction of the solar arrays along with the ancillary infrastructure.

To facilitate the continuation of Stage 1b and the next stages of the Project, three changes are now required:

1. Relocation of the approved BESS south of Lambruck Lane to north of Lambruck Lane
2. Change to the approved BESS technology (from Tesla Powerpack to CATL EnerX technology)
3. Adjustment to the solar array layout in Stage 1b to accommodate the BESS

Importantly, all changes remain within the consented Development footprint and the Project's PV generation capacity remains unchanged.

The Applicant has identified the requirement to modify the location and technology of the BESS to reflect technological advancements in grid-scale energy storage, providing improved energy density, enhanced lifecycle performance, and better safety characteristics.

The specific changes that are now proposed, their justification, relevant consultation and assessment considerations are summarised in Table 1-2 below. Figure 1-3 shows the location of the three changes.

Each change is described in more detail in Section 3 and where additional assessment is required, the assessment, and the need for any additional mitigation, is summarised in Section 6.

Supporting documentation also provided with this Modification includes:

- Appendix A – Updated consolidated Project description
- Appendix B – Statutory compliance table
- Appendix C – Consultation
- Appendix D – Technical reports
 - D.1 – Visual Impact Assessment (VIA)
 - D.2 – Environmental Noise Assessment (ENA)
 - D.3 – Traffic Impact Assessment (TIA)
 - D.4 – Hydrology Memorandum

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Table 1-2 Proposed modification overview (changes are located on Figure 1-3.

Change proposed	Background and justification	Consultation and assessment findings
1. Relocation of the approved BESS siting to Stage 1b	The Project sought and received approval to stage construction. This was required due to capacity constraints of the nearby substation. Stage 1b (solar arrays north of Lambruck Lane - Lots 11 & 14/DP1316892) will be developed ahead of Stage 2 (solar arrays south of Lambruck Lane – Lots 1-9/DP1316892). Mod 1 relocated the switching station to Stage 1b to facilitate staging the Project. Similarly, Mod 2 now seeks to relocate the BESS to Stage 1b. The BESS will be relocated from Lot 4/DP1316892 to Lot 11/DP1316892, adjacent to the approved switchyard compound.	- A consistency review identified several assumptions underpinning specialist assessments may not hold regarding the relocated BESS. - Hence further specialist assessment was sought and is detailed in Section 6. This included visual, noise, traffic, hydrology, hazards and Aboriginal heritage. - Additional impacts are minimal and no additional mitigation measures are required as a result of the change.
2. Change to the approved BESS technology	The EIS (RPS Group, 2018a) included a BESS, listing Tesla Powerpack 2 as the desired technology to be used. With BESS technology rapidly advancing, the Applicant has indicated that the preferred technology of the BESS is now the CATL EnerX lithium iron phosphate (LFP) technology.	- An updated preliminary risk screening was undertaken against the new BESS technology proposed. - No thresholds were exceeded. No additional mitigation measures are required as a result of the change.
3. Adjustment to the solar array layout in Stage 1b	To facilitate the relocation of the BESS, the layout of the approved solar arrays has been adjusted in Stage 1b.	The adjusted layout does not create any additional impacts.

Applicable to all changes:

- Consultation with the associated landholder and Federation Council have been undertaken, and landowner consents to lodge this Modification have been obtained.
- A letter detailing Project updates has been sent out to the Registered Aboriginal Parties (RAPs).
- The changes regarding staging and BESS technology have been included in all consultation and Project updates from October 2025 to now.

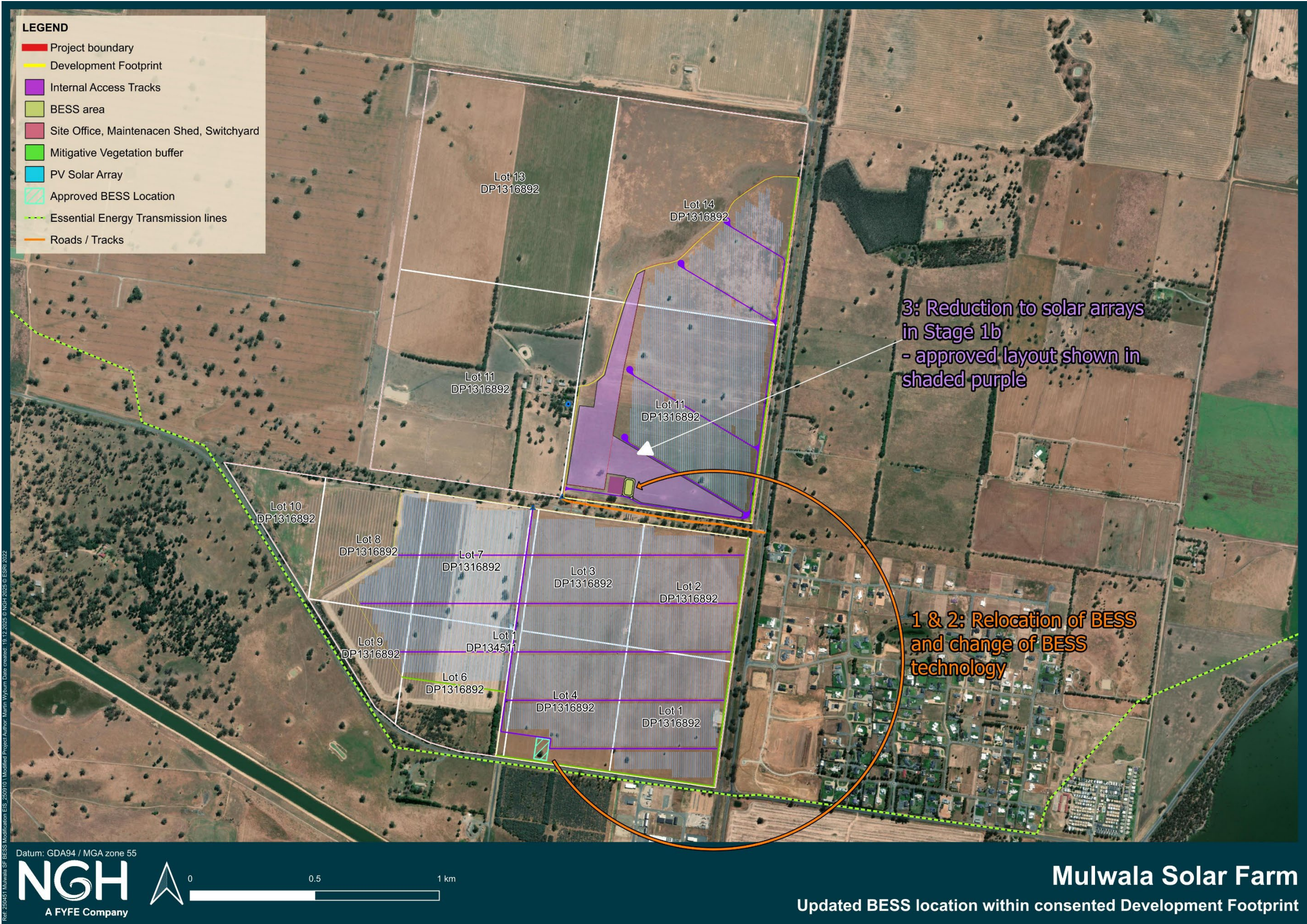


Figure 1-3 Overview of changes and the location

2. Strategic context

2.1. Project objectives

The objectives of the Mulwala Solar Farm, as Modified by this application, remain consistent with the EIS (RPS Group, 2018a). They are to select and develop a site which is not only suitable for commercial scale solar electricity generation but one which is appropriate to its site values and can be supported by the community. The Project continues to demonstrate it is:

- Responsive to local matters
- Significant in terms of local economic benefits
- Important in the renewable energy transition.

2.2. Strategic alignment

The strategic context for the Project remains unchanged to that presented in the Mulwala Solar Farm Modification 1 (Urbis, 2025a) and the Mulwala Solar Farm EIS (RPS Group, 2018a). The Project:

1) Aligns with federal, state, regional and local renewable energy policies and is part of an important energy transition, including:

- United Nations Paris Climate Change Agreements
- Commonwealth Climate Change Act 2022
- Australian Government Renewable Energy Target
- Net Zero Plan Implementation Update 2022
- NSW Climate change Policy Framework
- NSW Electricity Strategy
- NSW Renewable Energy Zones
- Corowa Local Environmental Plan 2012
- Riverina Murray Regional Plan 2041

2) Responds to the site's unique environmental and social context, including:

- Nearby Aboriginal cultural heritage sites
- Avoidance of paddock trees and higher class of native vegetation
- Natural topographical low points and water inundation areas

(These features are shown on Figure 1-2)

2.3. Project benefits

The changes proposed by this Modification strengthen the Project's viability, by creating construction and operational efficiencies. They have been informed by specialist investigations to minimise their environmental impacts.

The Project would bring a significant capital investment value to the region. The capital investment value for the Mulwala Solar Farm would be approximately \$119 million. Creation of up to 130 workers during the construction phase and up to four full-time-equivalent jobs during the operational phase are anticipated.

This will diversify and boost the economic activities in the region through the existing service sector i.e., provision of recreation and accommodation services as well directly through onsite employment.

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As an important part of the renewable energy transition, the Project will assist to:

- Drive down the price of electricity for consumers by increasing the amount of solar, currently the cheapest new generation cost.
- Provide electricity generation close to consumption centres including the supply of the equivalent of the annual energy consumption of about 40,500 NSW homes
- Bring broader benefits in addressing climate change and greenhouse gas emissions.

With the addition of the BESS, the Project would also assist to:

- Support government objectives for grid reliability, stability, and resilience
- Increased penetration of renewable energy by reducing renewable curtailment, reducing emissions
- Improves energy security, providing peak demand support
- Aligns with net zero goals

Through the modification, the Project aims to:

- Have a more efficient use of approved land and infrastructure
- Avoid additional greenfield disturbance

3. Description of the modification

The comparison of approved and Modified Project parameters is summarised in Table 3-1. No change to other parameters, including the approved Development Footprint, PV generation capacity or biodiversity offsets is required. No change to traffic or workforce assumptions is relevant to the changes now proposed.

Table 3-1 Summary of proposed modification, comparing the *approved* to the *modified* Project

ID	Project parameter	Approved Project	Modified Project
1	Relocation of approved BESS	Located within the southern section of Lot 4/DP1316892, north of Tocumwal Road	Within the southern section of Lot 1/DP1316892, north of Lambruck Lane. The BESS would be approximately 0.31ha in area.
2	Change in BESS technology	Tesla Powerpack 2	CATL EnerX
3	Adjustment to the solar array layout in Stage 1b	The solar array layout (inclusive of internal access tracks between panels) covered the majority of the northern area of the Project (north of Lambruck Lane), approximately 66 hectares (ha).	The solar array layout (inclusive of internal access tracks between panels) covers approximately 54.8ha.

Due to capacity constraints of the nearby Mulwala Substation, construction and operation of the solar arrays has been approved in Stages for this Project. The first solar panels to be installed would be located on Lots 11 and 14 in DP1316892 (Stage 1b). To support this, and for Project operational efficiency, the approved BESS location is proposed to be relocated from Lot 4/DP1316892 (Stage 2) to Lot 11/DP1316892 (Stage 1b), adjacent to the approved switchyard compound. The relocation would allow for effective operation of Stage 1b until such time as Stage 2 solar panels are constructed. Importantly, the BESS would remain wholly within the approved Development Footprint and has been strategically placed to avoid the existing paddock trees located east of the switchyard compound, and within the highly modified exotic pasture.

The EIS (RPS Group, 2018a) included a BESS, listing the Tesla Powerpack 2 as the desired technology to be used at the time of assessment. With BESS technology rapidly advancing, the Applicant has indicated that the preferred technology of the BESS is now the CATL EnerX technology. This change in technology includes a move from a lithium-ion battery to the newer lithium-iron-phosphate chemistry. The proposed technology would have greater capacity, resulting in fewer BESS containers, equalling a smaller footprint. The decision to change the technology reflects technological advancements in grid-scale energy storage, providing improved energy density, enhanced lifecycle performance, and better safety characteristics. To facilitate the relocation of the BESS, the layout of the solar arrays in Stage 1b has been adjusted. The adjusted layout remains wholly within the approved Development Footprint. The adjusted layout would also include a re-alignment of the internal access tracks from what was approved. The solar array layout would reduce from approximately 66 hectares (ha) to 54.8ha. The adjusted solar array layout would avoid all paddock trees previously identified for avoidance. The PV generation capacity would remain unchanged.

As such, the above proposed modifications are considered justified.

3.1. Conditions to be modified

The Project Conditions of Consent were previously amended to facilitate the relocation the switchyard compound (Mod 1). Mod 1 was approved in October 2025, with a Consolidated Consent provided for the Project.

This modification application will require an update to the General Layout for the Project, as included as Appendix 1 of the Consolidated Approval, dated October 2025. An updated General Layout of Development is attached as Appendix A.1 of this report.

The following Conditions of Consent and definitions have been proposed to be updated in relation to transport, to better align with current practice and the original intent of the Development Consent.

Importantly, no increase in vehicle number is proposed due to the changes sought in this Modification.

Table 3-2 overleaf provides a comparison from the current Conditions of Consent and definitions and the proposed changes.

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Table 3-2 Conditions and definitions to be modified

Current Conditions of Consent and definitions	Proposed Conditions of Consent and definitions
Condition 1 and 2 Schedule 3: Over-Dimensional and Heavy Vehicle Restrictions 1. The Applicant must ensure that the: a. development does not generate more than: • 20 heavy vehicle movements a day during construction, upgrading and decommissioning. • 10 over-dimensional vehicle movements during construction, upgrading and decommissioning; and • 2 heavy vehicle movements a day during operations. on the public road network. b. length of any vehicles (excluding over-dimensional vehicles) used for the development does not exceed 26 metres, unless the Secretary agrees otherwise. 2. The Applicant must keep accurate records of the number of over-dimensional and heavy vehicles entering or leaving the site each day	Condition 1 and 2 of Schedule 3: Heavy Vehicle and Heavy Vehicles Requiring Escort Restrictions 1. The Applicant must ensure that the: a. development does not generate more than: • 20 heavy vehicle and heavy vehicles requiring escort movements a day during construction, upgrading and decommissioning. • 10 high-risk heavy vehicles requiring escort vehicle movements during construction, upgrading and decommissioning; and • 2 heavy vehicle movements a day during operations. on the public road network. b. length of any vehicles (excluding heavy vehicles requiring escort and high-risk heavy vehicles requiring escort vehicles) used for the development does not exceed 26 metres, unless the Secretary agrees otherwise. 2. The Applicant must keep accurate records of the number of heavy vehicles, heavy vehicles requiring escort and high-risk heavy vehicles requiring escort entering or leaving the site each day for the duration of the project.
<u>Heavy Vehicle:</u> A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes	<u>Heavy vehicle:</u> As defined by the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks and buses no more than 8 tonnes and with no more than 2 axels

Current Conditions of Consent and definitions	Proposed Conditions of Consent and definitions
<u>Over-dimensional vehicle:</u> Over-mass and/or over-size/length [OSOM]vehicles	<u>Heavy vehicle requiring escort:</u> Any vehicle that requires a pilot vehicle and/or escort vehicle, as defined by the National Heavy Vehicle Regulator's NSW Class 1 Load Carrying Vehicle Operator's Guide
<u>Additional definition proposed</u> 	<u>High-risk heavy vehicle requiring escort:</u> A vehicle under escort identified "High Risk" as defined in Table 1 of TfNSW's Fact Sheet for Transport Management Plan (as amended).

3.2. Modification category

Section 4.55, 1A of the NSW Environmental Planning and Assessment Act 1979 is relevant to Modifications involving minimal environmental impact.

Section 4.55 Modification of consents - generally

1A Modifications involving minimal environmental impact:

A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—

- (a) it is satisfied that the proposed modification is of minimal environmental impact, and*
- (b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and*
- (c) it has notified the application in accordance with—*
 - i. the regulations, if the regulations so require, or*
 - ii. a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*
- (d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.*

The impact of the changes, as detailed in Section 6, demonstrates they are of minimal environmental impact

There would be no change to the type or capacity, with only a minor change to the general configuration of operational infrastructure. As such, the Modified Project is considered substantially the same development and assessment under Section 4.55, 1A is considered appropriate.

4. Relevant statutory context

The statutory requirements relevant to the modifications are identified in Table 4-1 below. An updated statutory compliance table for the Modified Project is attached as Appendix B.

Table 4-1 Statutory context relevant to the modifications

Statutory reference	Mandatory consideration	Relevance to Modification
Consideration under the State Environmental Planning Policy (Planning Systems) 2021		
Section 20 of Schedule 1	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: (a) has an estimated development cost of more than \$30 million, or (b) has an estimated development cost of more than \$10 million and is located in an environmentally sensitive area of State significance.	The Project as modified is electricity generating works with an estimated development cost of more than \$30 million.
Consideration under the EP&A Act and EP&A Regulation		

Statutory reference	Mandatory consideration	Relevance to Modification
Section 4.55	(1A) Modifications involving minimal environmental impact A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if— (a) it is satisfied that the proposed modification is of minimal environmental impact, and (b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all).	This report demonstrates that the Project is of generally low environmental impact and substantially the same development as approved.
Section 1.3	Relevant objects of the Act • To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources • To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment • To promote the orderly and economic use and development of land • To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats.	The Project as modified does not alter the economic aspects of the Project. Relevant environmental impacts have been assessed as manageable and justified.
Considerations under other legislation		

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Statutory reference	Mandatory consideration	Relevance to Modification
BC Act – section 7.14	The likely impact of the proposed development on biodiversity values as assessed in the biodiversity development assessment report. The Minister for Planning may (but is not required to) further consider under that Act the likely impact of the proposed development on biodiversity values.	There is no change to biodiversity impacts and as such an updated BDAR is not required.
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> (EPBC Act)	Under the EPBC Act, if the Minister determines that an action 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 a Commonwealth approval.	The Project was considered unlikely to be determined as a ‘controlled action’ prior to the Modification. The changes now proposed do not affect any MNES. The Modified project is not expected to generate a significant impact, and referral is not being undertaken at this time. A self-assessment was completed by RPS for the EIS, determining a non-requirement for referral.
Legal instrument and approving authority		Approval or licence
Environmental Planning and Assessment Act 1979 (NSW) (Part 4) DPHI approved the Project.		DPHI remain the approving authority for this Modification.

5. Engagement

Targeted consultation undertaken to support this Modification and is summarised below

Table 5-1 Summary of stakeholder engagement

Stakeholder	Scope of engagement	Details	Outcome / status
Federation Council	- Email on the 7 December 2025 between Applicant and Federation Council, introducing the Modification - Follow up email from NGH to Federation Council, providing additional information and seeking landowner consent as part of the Modification - Applicant continued consultation with Council on 21 January 2026.	- Introduced the modification to the Council, discussing identified impacts - Applicant discussed requirement for Council landowner consent for the site access off Savernake Road and Lambruck Lane	Council approved the request for landowner consent on 22 January.
Involved host landowner	Email on the 8 December 2025. introducing the modification and seeking landowner consent	- Introduced the modification to the associated landowner, discussing identified impacts - Applicant discussed requirement for landowner consent for the modified project	The associated landowner approved the request on 12 December 2025.
Registered Aboriginal Parties	Updated letter of consultation regarding proposed modification to RAPs. Letter was issued to the RAPs on 14 January 2026.	Letter included the modification scope and identified impacts in regard to cultural heritage.	RAPs were given the 14-day notification period to respond to the modification. As of 28 January 2026, no responses were received.

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Stakeholder	Scope of engagement	Details	Outcome / status
			Letter is attached in Appendix C

6. Assessment of impacts

The Mulwala Solar Farm is a State Significant Development (SSD) as it is a private electricity generating works with a capital investment value greater than \$30 million. The State Environmental Planning Policy (Planning Systems) 2021 (SEPP Planning Systems) dictates the environmental assessment must be undertaken in accordance with:

- Part 4 of the *NSW Environmental Planning and Assessment Act 1979*
- Schedule 2 of the *NSW Environmental Planning and Assessment Regulation 2021*
- The Project – specific Secretary’s Environmental Assessment Requirements (SEARs).

Table 6-1 summarises the key considerations for the proposed Modification. The sections that follow set out the risk-based impact assessment undertaken for each of the changes proposed by the Modification and summarise the conclusions of the technical assessments supporting this Modification. These are appended in Appendix D of this report. They compare the impacts of the Modified Project with those assessed in support of the Project’s approval in 2018 and the subsequent Mod 1 approved in 2025. They include:

- Appendix D – Technical reports
 - D.1 Visual Impact Assessment (VIA) prepared by Moir Studio
 - D.2 Environmental Noise Assessment (ENA) prepared by Harwood Acoustics
 - D.3 Traffic Impact Assessment (TIA) prepared by Amber Organisation
 - D.4 Hydrology Memo prepared by Fyfe Group

6.1. Summary outcomes of the assessment of impacts

The table below provides an overview of the outcomes of the impact assessment in relation to each change proposed by the modifications. The assessments are discussed in detail in Section 6.2.

Table 6-1 Outcomes of the impact assessments

Changes proposed by the Modification	Relevant impacts	Additional impacts	Additional mitigation required?	Change to consent required?
Relocation of approved BESS	Visual	No additional impacts	No.	No
	Noise	Minor – Compliant with EPA and NPfI guidelines and standards	No	No
	Traffic	No additional impacts	No	Yes, modifying definitions of heavy vehicles in line with current practice
	Hydrology	Minor, lesser impact compared to approved BESS location	No	No
	Biodiversity	No additional impacts	No	No
	Heritage	No additional impacts	No	No
Change in BESS technology	Hazards	No additional impacts	No	No
	Noise	Minor	No	No
	Traffic	No additional impacts	No	Yes, modifying definitions of heavy vehicles in line with current practice
Adjustment to the solar array layout in Stage 1b	Visual	No additional impact	No	No
	Noise	Minor	No	No

6.2. Detailed assessment of impacts

6.2.1. Visual amenity

Approach

Moir Studio undertook a review of the Visual Impact Assessment (VIA) prepared by RPS Australia Asia Pacific in 2018 as part of the EIS. The review included the EIS (RPS Group, 2018a), the approved Mod 1 report (Urbis, 2025a) and the landscape plan provided as part of the approved Environmental Management Strategy (Urbis, 2025b).

An analysis of the potential visual impacts associated with the proposed relocation of the BESS against the original assumptions was undertaken. The VIA prepared by Moir Studio is attached as Appendix D.1.

The assessment was undertaken using DPHI's Large Scale Solar Guideline Technical Supplement (DPHI, 2022).

Assessment of impacts

The original VIA determined the visual impact of the Project was minor with no nearby non-associated receivers adversely affected. Due to the flat topography of the Project Area and existing vegetation, the visibility of the Project from sensitive receivers is limited. The approved landscape plan proposed a 5m vegetation screening along the eastern boundary of the Project Area to further minimise views from Savernake Road and non-associated dwellings.

As discussed above, Mod 1 included the relocation of the switchyard compound to Lot 11/DP1316892, north of Lambruck Lane, which the BESS would be relocated adjacent to. The infrastructure associated with the BESS has no additional contrast with the switchyard compound and would not increase visual impacts of the Project.

The proposed BESS containers have a maximum height of 3.1m (2.9m container height with a maximum foundation height of 0.2m). The visual assessment for the EIS assessed a maximum solar array configuration of 4.0m above ground level. The approved Development Footprint remains unchanged, with no receivers now closer to the Project. The inclusion of the BESS does not invalidate the original assessment assumptions, regarding the scale and contrast of infrastructure proposed in this location.

Cumulative visual impacts were also assessed. Since the Project's approval in 2018, two small scale solar farms have been approved within 4km of the Project, and are as follows:

- Mulwala Energy Park – 2.5km west
- Mulwala Waters Solar Farm – 3.8km west

Additionally, a number of SSD projects are currently in the planning stage. The closest of these developments is approximately 8.2km north-northeast of the Project. Considering the existing vegetation, proposed landscape screening and distance of the developments to the Project, there are no cumulative visual impacts arising from the Modification.

The realignment of the solar farm arrays and internal access tracks to facilitate the switchyard compound and BESS have resulted in the layout being consolidated within Lots 11 & 14/DP1316892, further away from the Project Area boundary. This results in an overall lower visual impact due to the increased distance of receivers to Project infrastructure.

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, and with no additional visual impacts identified, the current mitigation measures remain applicable. No additional mitigations measures are warranted.

6.2.2. Noise (operation)

Approach

Harwood Acoustics prepared an Environmental Noise Assessment (ENA) for the proposed modifications, assessing the potential operational noise impacts arising from the inclusion of the BESS. The ENA compared the original noise assessment assumptions and measures as part of the EIS, prepared by Ray Walsh Acoustics in association with Harwood Acoustics (Ray Walsh Acoustics & Harwood Acoustics, 2018) against the modification. The review also included the Operational Noise Assessment undertaken by WSP (WSP, 2025) for Mod 1. The ENA prepared by Harwood Acoustics is attached as Appendix D.2.

The ENA was prepared in accordance with the noise guidelines in the NSW EPA's Noise Policy for Industry 2017 (NSW EPA, 2017).

It is important to note that the ENA assessed only the potential operational noise impacts arising from the relocation and change in technology of the BESS. The approved Development Footprint has not increased, and as such, the construction noise assessment and mitigation measures remain valid. No change to construction or operational vehicle movements are proposed, therefore the road traffic noise assumptions remain valid.

Assessment of impacts

The original ENA determined that the potential noise and vibration impacts during the construction and operational phases of the Project would be below the identified project trigger levels and noise management levels set by the Environment Protection Authority (EPA). Road traffic noise impacts from Project vehicle movements were also within the noise limits set by the EPA. The Operational Noise Assessment prepared by WSP (WSP, 2025) assessed the relocation of the switchyard compound (Mod 1). The assessment determined that the predicted operational noise levels would comply with project noise criteria. Furthermore, no cumulative impacts resulting from the solar array and switchyard were predicted.

Noise data for the inverters and BESS was provided by the Applicant to establish sound power levels, shown in Table 6-2 below. A noise model was then developed using *SoundPLAN* Essential version 6.0 utilising the below data.

Table 6-2 $L_{eq, 15\text{minute}}$ Sound Power Levels - Plant and Equipment (Source: Harwood Acoustics, 2026)

Equipment Description	Individual Sound Power Level $L_{eq, 15\text{ minute}}$ (dBA)
PV Inverters (Ingecon Sun Power B Series) x 6	95
BESS Inverters (Ingecon Sun 3Power) x 7	95
CATL EnerX BESS Container (with cooling fans)	87
NEXTracker motors	49

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Table 6-3 below details the predicted noise levels at each identified receiver for the operation of the Project, compared to the findings of the original ENA and the WSP Operational Noise Assessment.

Table 6-3 Predicted $L_{eq, 15\text{minute}}$ Operational Noise Levels at Receiver Locations (Source: Harwood Acoustics, 2026)

Details	Predicted $L_{eq, 15\text{ minute}}$ Sound Pressure Level (dBA)							
	R1	R2	R3	R4	R5	R6	R7	R9
PNTL – Day time period	40	40	40	40	40	40	40	40
Operation – Day time	31	29	<20	<20	<20	<20	<10	<20
Complies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PNTL – Evening time period	35	35	35	35	35	35	35	35
Operation – Evening time	28	28	<20	<20	<20	<20	<10	<20
Complies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PNTL – Night time period	35	35	35	35	35	35	35	35
Operation – Night time	<25	27	<20	<20	<20	<20	<10	<20
Complies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

The assessment also modelled for modifying factor adjustments. It modelled the predicted noise levels with the inclusion of a + 5dB(A) penalty to account for potential tonal characteristics. The results concluded that the Project would be compliant at all receiver locations for day, evening and nighttime periods.

The predicted noise levels for the operation of the Project are well below the EPA's project noise trigger levels at all receivers. No cumulative noise impacts are predicted as a result of the modification, as the solar arrays have been realigned, and are now further from the switchyard compound and BESS, reducing the compounding noise levels from all Project infrastructure. As identified in Section 6.2.1 above, the closest project is approximately 2.5km west. Due to the distance, operational noise generated by this Project would not influence other projects own noise output.

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, with negligible increases in noise impacts identified, the current mitigation measures remain applicable. No additional mitigations measures are warranted.

6.2.3. Traffic

Approach

Amber Organisation (Amber) prepared a Traffic Impact Assessment (TIA) assessing the traffic and transport aspects for the proposed modifications. The assessment reviewed the assumptions and outcomes of the original TIA prepared for the EIS (Peter Meredith Consulting, 2018) and the approved Traffic Management Plan (Urbis, 2025c). An analysis of the potential traffic impacts associated with the proposed BESS

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technology against the original assumptions was undertaken. The TIA prepared by Amber is attached as Appendix D.3.

The assessment was prepared with consideration of the following:

- *Austroads Guide to Traffic Management Part 12 and TfNSW supplement*
- *Austroads Guide to Road Design and TfNSW supplements*
- *TfNSW Guide to Traffic Generating Developments*
- *Unsealed Roads Manual: Guidelines to Good Practice (2009).*

Assessment of impacts

The original TIA concluded that the additional peak construction traffic movements required for the Project would have minimal impact on the proposed haulage routes, and on the intersections of Savernake Road/Lambruck Lane and site access off Lambruck Lane. Furthermore, all sight distance criteria would be satisfied. Additional signage is warranted for the railway line crossing on Savernake Road to improve rail crossing awareness. The approved Traffic Management Plan detailed all measures to be implemented to minimise the identified traffic impacts.

Due to advancements in BESS technology, the proposed BESS technology for the Project has changed from the EIS. In relation to traffic, advancements in technology have meant that the preferred BESS container units are larger than originally considered as part of the EIS. The BESS container dimensions are as follows:

- 6058 mm in length
- 2896 mm in height
- 2438 mm in width
- ~45T in transport weight

To accommodate the BESS container, specialist Class 1 Oversize Overmass (OSOM) vehicle combinations would be required. The proposed vehicle combination is approximately 26m in length, 2.5m to 3.6m wide and approximately 4m high incorporating a dolly between the prime mover and main four axel trailer. An example of a suitable vehicle combination is shown in Figure 6-1. The vehicle combination is comparable in size to a 26m B-Double truck.

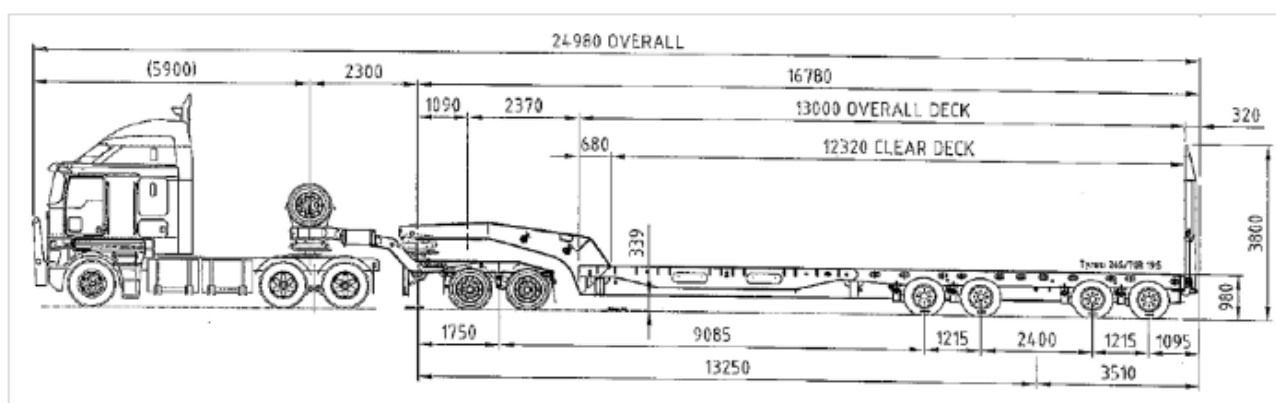


Figure 6-1 Proposed battery container vehicle combination (Source: European Energy, 2025)

Amber have undertaken swept path assessments at the key pinch points on the route to site. The assessment was based on the vehicle combination detailed in Figure 6-1 above, and the road upgrade plans for the intersections of Savernake Road/Lambruck Lane and at the site access, as shown in Appendix A of the TIA (Appendix D.3). The assessment showed that the proposed vehicle combination is able to:

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- Navigate the intersection of Savernake Road/Lambruck Lane with sufficient storage area to store clear of the rail crossing and through traffic on Savernake Road
- Enter and depart the main site access well within the sealed road.

Amber also reviewed the Conditions of Consent and definitions with consideration against similar renewable energy projects and the original intent of these conditions and definitions. They consider that the definitions for heavy vehicles and over-dimensional vehicles provided in the Conditions of Consent are vague as they:

- Overlap (i.e. many heavy vehicles could be described as falling into both categories).
- Do not provide a clear definition as to what is 'over-mass' or 'over-size/length'.
- Do not provide a clear distinction between standard heavy vehicles or vehicle combinations that are low risk and low impact, and those that a higher risk and more impactful

Conditions of Consent for more recent SSD renewable projects, heavy vehicles are defined based on risk, as detailed in Table 6-4..

Table 6-4 Definitions for Heavy Vehicles – NSW Renewable Energy Projects – Risk/Impact Level (Source: Amber, 2025)

Term	Definition	Risk
Heavy Vehicle	As defined by the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks and buses no more than 8 tonnes and with not more than 2 axels	Low
Heavy vehicle requiring escort	Any vehicle that requires a pilot vehicle and/or escort vehicle, as defined by the National Heavy Vehicle Regulator's NSW Class 1 Load Carrying Vehicle Operator's Guide	Moderate
High-risk heavy vehicle requiring escort	A vehicle under escort identified "High Risk" as defined in Table 1 of TfNSW's Fact Sheet for Transport Management Plan (as amended).	High

Given the size of the proposed BESS container transport combinations (which may require pilots during travel to site only) and the modest impacts to the State and local road networks, the BESS container vehicle combinations are considered best described as low or moderate risk, under the definition of 'heavy vehicle' or 'heavy vehicle requiring escort' (Class 1 OSOM Exempt combinations depending on the exact configuration used).

Given this classification, a modification to Condition 1 and 2 of Schedule 3, along with heavy vehicle definitions is proposed, to allow for more appropriate limits on the movement of heavy vehicles that reflect the risk profile and impact of the vehicles, in-line with current practice. The proposed Conditions of Consent and definitions to replace the current Conditions of Consent are below. A comparison of the current conditions and proposed is provide in Table 3-2.

TRANSPORT

Heavy Vehicle and Heavy Vehicles Requiring Escort Restrictions

1. The Applicant must ensure that the:
 - a. development does not generate more than:
 - 20 heavy vehicle and heavy vehicles requiring escort movements a day during construction, upgrading and decommissioning.
 - 10 high-risk heavy vehicles requiring escort vehicle movements during construction, upgrading and decommissioning; and
 - 2 heavy vehicle movements a day during operations.

on the public road network

- b. length of any vehicles (excluding heavy vehicle requiring escort and high-risk heavy vehicles requiring escort vehicles) used for the development does not exceed 26 metres, unless the Secretary agrees otherwise
2. The Applicant must keep accurate records of the number of heavy vehicles, heavy vehicles requiring escort and high-risk heavy vehicles requiring escort entering or leaving the site each day for the duration of the project.

Development Consent Conditions

- Heavy vehicle: As defined by the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks and buses no more than 8 tonnes and with no more than 2 axels
- Heavy vehicle requiring escort: Any vehicle that requires a pilot vehicle and/or escort vehicle, as defined by the National Heavy Vehicle Regulator's NSW Class 1 Load Carrying Vehicle Operator's Guide
- High-risk heavy vehicle requiring escort: A vehicle under escort identified "High Risk" as defined in Table 1 of TfNSW's Fact Sheet for Transport Management Plan (as amended).

The TIA prepared by Amber concluded that:

- The battery container vehicle combinations are low to moderate-risk and considered as heavy vehicles or heavy vehicles requiring escort.
- Swept path assessments confirm that the upgraded local roads and intersection can readily accommodate the vehicle combinations.
- Measures in the approved TMP are suitable to safely manage the delivery of the battery containers.
- The recommended changes to the conditions and definitions would align with current practice and the original intent of the Development Consent
- With the new definitions, the heavy vehicle requirements for the BESS and solar farm would remain within the consented daily limit of heavy vehicles per of Condition 1 (a) of the Development Consent.

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, with negligible increases in traffic impacts identified, the current mitigation measures remain applicable. No additional mitigations measures are warranted.

6.2.4. Hydrology

Approach

Fyfe prepared a hydrology memorandum (the memo), to determine whether the conclusions of the original assessment remain valid in relation to the proposed relocation of the BESS, and to identify any additional considerations that may influence surface water behaviour. The memo reviewed the suitability of the existing flood and water assessment prepared by RPS for the EIS (RPS Group, 2018b). The memo is attached as Appendix D.4.

The memo was prepared with consideration of Flood Impact and Risk Assessment – Flood Risk Management Guideline LU01 (DPE, 2023), and utilising the latest available 1 m DEM data from ELVIS – Elevation Data (ICSM, 2025).

Assessment of impacts

The Water Report (RPS Group, 2018b) concluded that flooding from the Murray River is not expected to affect the Project Site. The current ground surface contains several shallow low points across the entire Project Site, with the approved BESS location being within one of these low points, which results in areas of ponding. The inundation mapping prepared for the existing surface reflects these local conditions and indicates that the proposed new BESS location is not affected by this type of flooding.

Fyfe noted that the groundwater assessment within the original report is comprehensive, drawing on multiple bore records across the region. The findings of that section remain applicable to the modifications.

Fyfe concluded that the existing assessment is generally applicable to the new proposed BESS location; however, it provides limited detail on how the BESS location impacts existing flow paths and the surrounding land. A more detailed assessment is provided below.

Both the approved and proposed BESS locations were assessed using the available 1m Digital Elevation Model data from ELVIS – Elevation Data to identify any potential local flooding implications. Indicative flow paths for both locations are provided in Figure 6-2 overleaf.

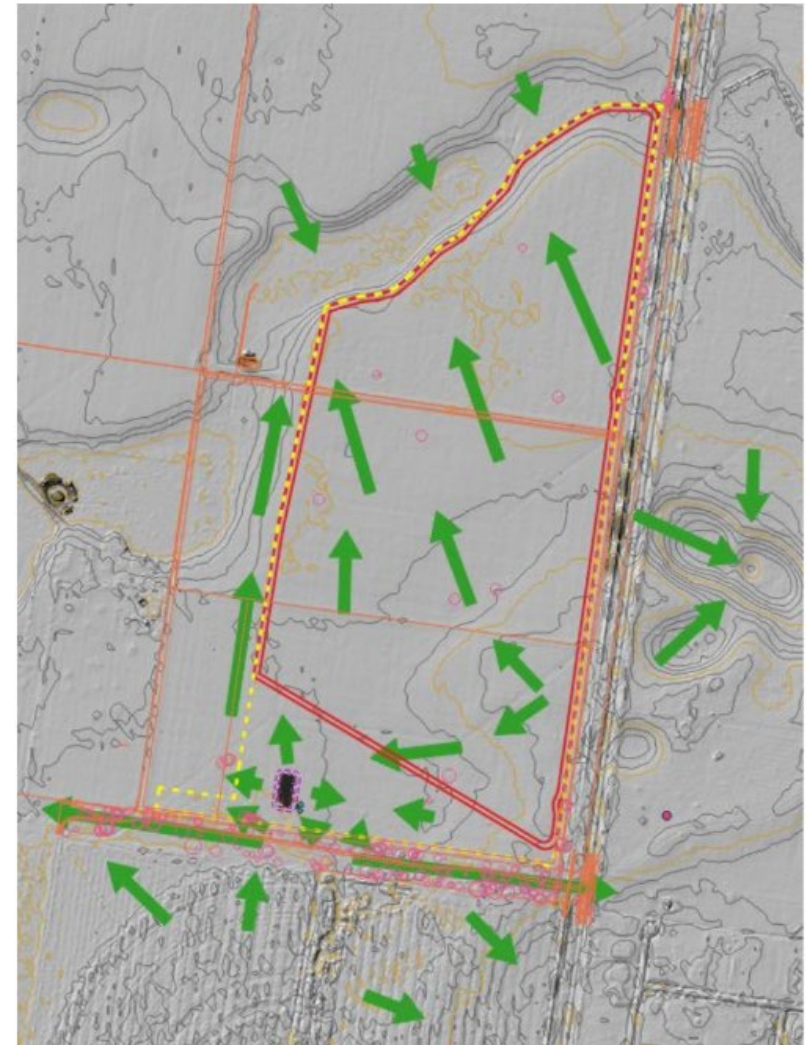
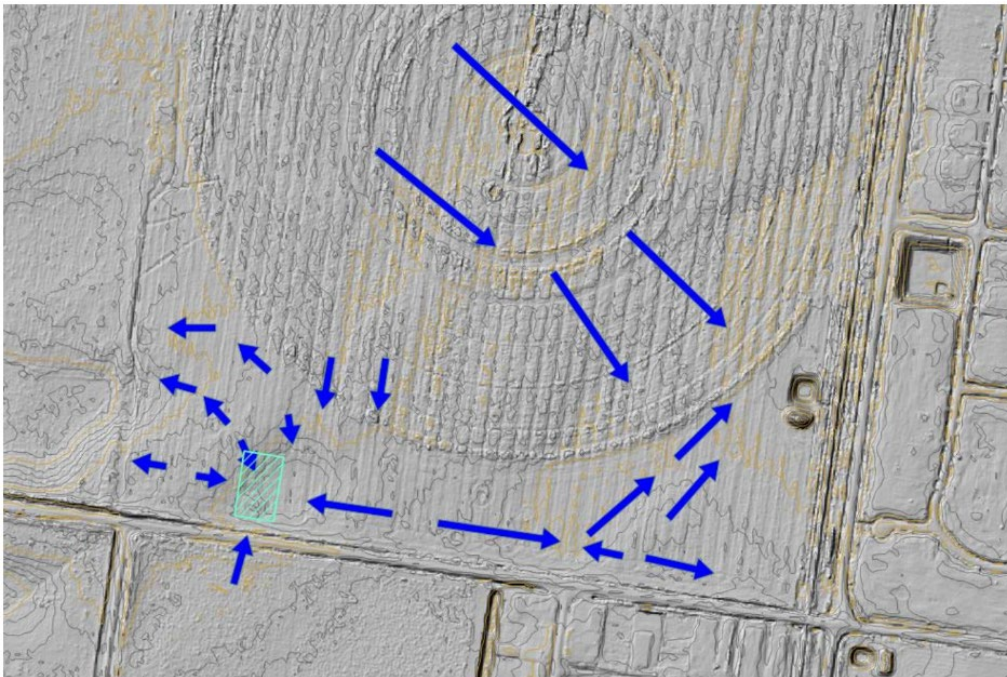


Figure 6-2 Approved BESS location (left) and proposed BESS location (right) with surface water flow arrows

The Digital Elevation Model review identified that the approved BESS location was situated within a localised low point on the Project Site. While this would have resulted in a minor adjustment to the existing flow path across the Project Site, it is unlikely to have generated any broader regional impacts due to the more significant northern low point identified in the earlier water assessment. Some on-site surface storage, however, would likely have been displaced by the raised BESS pad.

In contrast to the approved location, the proposed BESS location is not positioned within any local depressions identified in the Digital Elevation Model. Surface flows are currently conveyed from this area toward the northern low point. Under post-development conditions, surface water would continue to drain in this direction. To support this, appropriate stormwater infrastructure, such as perimeter swales, should be incorporated to ensure flows are safely conveyed around the BESS.

Fyfe concluded that the revised location is preferable, as it reduces the likelihood of altering existing flow paths and improves the Project Site's drainage performance in the post-development scenario. Furthermore, given the reduced flood risk at the revised location, the original recommendation to install critical infrastructure a minimum of 300mm above the natural surface level remains applicable and should be adopted for the BESS to provide adequate freeboard relative to surrounding flow paths.

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, with minor hydrology impacts identified and positive outcomes due to the relocation of the BESS, the current mitigation measures remain applicable. No additional mitigations measures are warranted.

6.2.5. Hazards

Approach

An assessment on the potential hazards and risks from the Project was undertaken as part of the EIS, including a preliminary risk screening in accordance with the State Environmental Planning Policy (SEPP) 33. The EIS identified the following materials as dangerous goods for the Project:

- Lithium-ion batteries – 240 Tesla Powerpack 2 units and 40 inverters (in the event a battery storage facility is developed on-site).
- Fire suppression gas (minor numbers of 2.5kg hand held fire extinguishers).
- Diesel – up to 2500 litres (L) (operation: up to 2000L).
- Machine oils – 100L; and
- Herbicides – 100L

The EIS determined that there were no exceedances for both SEPP 33 storage and transport thresholds for the materials mentioned above.

The EIS noted that the total capacity of the BESS would be 20MW/40MWh. As the capacity was below the 30MW threshold for designated development, defined within the *Hazardous Industry Planning Advisory Paper No 6* (NSW Government, 2011) a preliminary hazard analysis was not required.

Assessment of impacts

Since the original assessment, advancements in battery technology have rapidly increased. The Applicant has moved away from the Tesla Powerpack originally proposed, to a CATL EnerX technology. The proposed capacity of the BESS is now 25MW/100MWh. A further detailed breakdown is provided below:

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- Maximum effective Energy Storage Capacity at the beginning of service life for the BESS: **118.53MWh**
- Maximum Energy Discharge Capacity (MW) (rated output active power) for the BESS: **29.6MW**

As the maximum energy discharge capacity is below the 30MW threshold mentioned above, a preliminary hazard analysis is not required.

Figure 6-3 below details the separation distances for the BESS. The updated separation distances have not decreased from the original proposed distances.

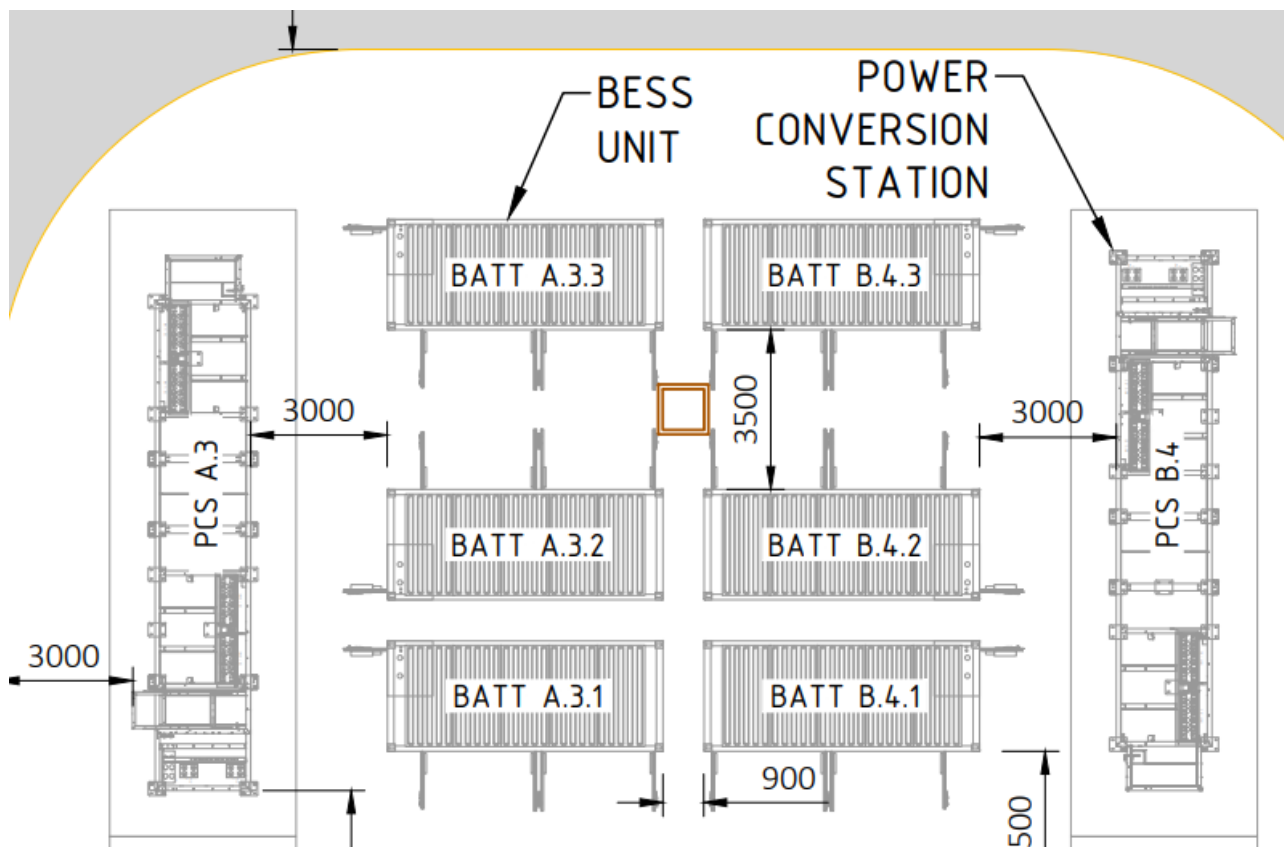


Figure 6-3 BESS separation distances

The below summarises the findings of the updated preliminary risk screening completed by NGH. It was completed to identify the hazards and assess the risks associated with the modification and details measures which, when implemented, would reduce these hazards and risks to acceptable levels.

The SEPP 33 screening procedure (used in the absence of a screening process under the new Resilience and Hazards SEPP) is based on the quantity of dangerous goods stored or transported, the frequency of transportation movements and, in some cases, the distance of the materials from the site boundary. The application guidelines for SEPP 33 (DoP, 2011a) require goods to be classified according to the Australian Code for the Transport of Dangerous Goods by Road and Rail Code (ADG Code).

The ADG Code lists the following classes of dangerous goods:

- Class 1 Explosives
- Class 2 Gases
- Class 3 Flammable liquids

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- Class 4 Flammable solids
- Class 5 Oxidising substances and organic peroxides
- Class 6 Toxic and infectious substances
- Class 7 Radioactive material
- Class 8 Corrosive substances
- Class 9 Miscellaneous dangerous substances and articles, including environmentally hazardous substances.

A development which exceeds screening thresholds in the guidelines would be considered potentially hazardous. For quantities below the given thresholds, the SEPP indicates that there is unlikely to be a significant off-site risk, in the absence of other risk factors.

The dangerous goods that would require transportation and storage during construction and operation of the Project are identified in Table 6-5 with ADG Code classification, relevant quantity and transportation thresholds, and storage arrangements threshold and the arrangements of these dangerous goods for the Project against the thresholds. Further details regarding transport quantities for the Project are provided in Section 8.2 of the EIS (RPS Group, 2018a). All other Classes are not required by the Project and therefore are not considered further in this screening.

In terms of the class, transportation and storage of dangerous goods, the Project would not exceed SEPP 33 thresholds and therefore would not be considered potentially hazardous in accordance with the SEPP 33 guidelines. Table 6-5 overleaf details the anticipated dangerous goods and SEPP material thresholds relevant to the Project.

Table 6-5 Dangerous good and SEPP thresholds relevant to the Project

Hazardous material	Storage threshold	Transport threshold		Onsite storage arrangements for Project		Transport arrangements for Project		Exceeds SEPP 33 thresholds?
		Movements	Quantities	Storage location	Quantities	Movements	Quantities	
Class 2.1 Flammable gases								
LPG	10 tonnes or 16m³ (above ground)	>500 cumulative >30/week	100kg	N/A	N/A	N/A	N/A	No
Class 2.2 Non-flammable, non-toxic gases (further detailed in section below table)								
Refrigerant	NA	N/A	N/A	BESS refrigeration/chiller units stored in equipment and packages.	NA - Non-flammable, non-toxic gases not considered to be potentially hazardous with respect to off-site risk.	N/A	N/A	No
Class 3 Flammable liquids								
Miscellaneous flammable liquids in small containers (Packaging Group I)	Applying SEPP33 Figure 8 graph if greater than 2 tonne	>500 cumulative >30/week	1 tonne	Stored in operations building 33m from site boundary	<1000L	<50 annual <3 peak weekly	<1 tonne	No
Class 9 Miscellaneous dangerous substances and articles								
Lithium Iron Phosphate (LFP) batteries	NA	>1000 cumulative >60/week	No limit	Energy Storage Facility buildings in a secure compound.	N/A	Upper limit Heavy Vehicle (HV) 4 vehicles per day (vpd)	N/A	No
Liquid Coolant	N/A	>1000 cumulative >60/week	No limit	BESS coolant stored in equipment and packages	N/A	N/A	N/A	No

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, with no SEPP 33 exceedances, and appropriate separation distances for the battery units implemented, the current mitigation measures for hazard and risk remain applicable. No additional mitigations measures are warranted.

6.2.6. Aboriginal heritage

Approach

The Aboriginal Cultural Heritage Assessment (ACHA) prepared by RPS (RPS Group, 2018c) as part of the EIS determined that three of ten identified sites from field surveys will be directly impacted on by the proposed construction of the Mulwala Solar Farm. The remaining seven sites and two sensitive landforms will not be impacted. The ACHA and EIS put recommendations in places to ensure the identified sites would either be salvaged or protected through appropriate management measures.

Assessment of impacts

As part of the assessment of Aboriginal Heritage considerations in relation to the Modification application, NGH have undertaken the following activity:

- 1) Completed an updated extensive search of the Aboriginal Heritage Information Management System (AHIMS) database.
- 2) Reviewed the relevant sections of the ACHA report completed by RPS in 2018.
- 3) Considered the relocation of the project BESS from the approved location to proposed amended location and potential for impacting Aboriginal heritage values.

Updated AHIMS Search

The updated AHIMS search (Client Service ID: 1077772) undertaken on the 17 December 2025 found that no Aboriginal heritage sites have been registered on the AHIMS database within the Mulwala Solar Farm Project Area beyond those recorded during the 2018 ACHA for the Project. All previously recorded sites are now located outside the Development Footprint for the Project.

Review of RPS ACHA 2018 report

A review of relevant sections of the ACHA report revealed that the proposed amended location for the BESS was assessed during the field inspection as part of Survey Unit 3. Background research undertaken as part of the ACHA identified that the Project Area, including Survey Unit 3, had low archaeological potential and this was confirmed during the field inspection for the ACHA. No cultural material was identified at the proposed amended location for the BESS and the near horizontal plain landforms within Survey Unit 3 were also found to have been highly modified through the previous agricultural land use history reducing any potential for archaeological deposits to be present.

Consideration of impacts on Aboriginal Heritage Values

Based on the findings of the above activities the relocation of the project BESS to the proposed amended location will not impact known Aboriginal heritage values recorded within the Project Area. The relocation of the BESS also has negligible potential to impact previously unidentified Aboriginal heritage values within the Project Area. As such there are no constraints in regard to Aboriginal heritage values associated with proposed BESS relocation.

If suspected Aboriginal cultural heritage materials be identified during the project construction activity, they would be managed in accordance with recommendation 11 of the ACHA report for the Project.

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, with no impacts to Aboriginal Heritage identified, the current mitigation measures and recommendations remain applicable. No additional mitigations measures are warranted.

6.2.7. Biodiversity

Approach

NGH has undertaken a review of the Biodiversity Development Assessment Report (BDAR), prepared by MJD Environmental (MJD Environmental, 2018) as part of the original EIS. The EIS determined that the Project would result in the removal of 34 paddock trees of which 33 require ecosystem credits. In accordance with the BAM (2017), a total of 30.75 ecosystem credits is required to offset the loss. A preliminary assessment under the EPBC Act determined the proposed action is unlikely to have an impact to Matters of National Environmental Significance based on the assessment criteria set out in relevant Commonwealth policies. The totality of the Development Footprint was assessed as part of the BDAR.

Assessment of impacts

The modification does not require a change to the approved Development Footprint as the relocation of the BESS and subsequent changes would occur wholly within the approved Development Footprint. Similarly to Mod 1 for the relocation of the switchyard compound, the BESS would avoid nearby paddocks trees that were originally proposed for removal. The proposed BESS location would occur on highly modified exotic pasture, avoiding native grassland and vegetation.

Conclusion and requirement for additional mitigation/changes to conditions of consent

In consideration of the proposed modification, and with no additional biodiversity impacts identified, the current mitigation measures remain applicable. No additional mitigations measures are warranted.

6.3. Cumulative impacts

Cumulative impacts were assessed for the approved Project and detailed in the Mulwala Solar Farm EIS (RPS Group, 2018a). The assessment of cumulative impacts was focused on the Project's interaction with other projects in the vicinity, and where construction and/or timeframes were concurrent.

It was concluded that the mitigation strategies set out in the EIS were sufficient to address the cumulative impacts identified.

The relevant sections above discussed potential additional cumulative impacts that may arise from the modification. It was concluded that no additional cumulative impacts would occur as a result of the modification.

7. Justification

7.1. Changes to support Project objectives

The objectives of the Mulwala Solar Farm remain consistent with EIS (RPS Group, 2018a). They are to select and develop a site which is not only suitable for commercial scale solar electricity generation but one which is appropriate to its site values and can be supported by the community. The Project continues to demonstrate it is:

- Responsive to local matters
- Significant in terms of local economic benefits
- Important in the renewable energy transition.

The changes set out in this report strengthen Project viability and have been developed to minimise impact on the environment and near neighbours.

7.2. Strategic context

The changes proposed in this Modification align with the Project's strategic renewable energy and environmental context. The Project:

1. Aligns with federal, state, regional and local renewable energy policies and is part of an important energy transition
2. Responds to the site's unique environmental and social context

7.3. Alignment with ecologically sustainable development

The Project has considered and addressed the principles of ecologically sustainable development, which involves the effective integration of social, economic and environmental considerations in decision-making processes. The changes do not affect the ability of the Project to meet these criteria:

- The precautionary principle has been adopted in the assessment of impact; all potential impacts have been considered and mitigated commensurate with risk. Where uncertainty exists, measures have been included to address the uncertainty.
- Potential impacts have been assessed as likely to be localised and reversible and would not diminish the options regarding land and resource uses and nature conservation available to future generations.
- Impacts have been avoided strategically to protect the better soil and biodiversity features identified and mitigation and rehabilitation targets will ensure the site is returned to its existing (or better) land capability for future generations.

The long-term impacts have been considered, and the Project commitments ensure that natural resource use and pollution risks have been fully assessed, and costs would be solely borne by the Applicant.

7.4. Ability to be approved

The Mulwala Solar Farm 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 sustainable future.

Modification Report

Mulwala Solar Farm

The Project meets relevant planning requirements and is consistent with the principles of environmentally sustainable development, 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. Technical assessments have been used in the detailed design stage to support a series of changes now proposed in this Modification that will strengthen Project viability while having minimal impact on the environment and near neighbours.

No additional mitigation measures were required as a result of the changes. As such, a consolidated mitigation measures table is not warranted. The measures outlined in Section 9 - Table 28 of the EIS remain valid.

The Modified Project is shown to be justifiable and approvable.

8. References

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