

Moree Battery Energy Storage System

Development Assessment Report (DA25/6636)

November 2025





Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and 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.

Published by NSW Department of Planning, Housing and Infrastructure

dphi.nsw.gov.au

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Preface

This report details the Department of Planning, Housing and Infrastructure's (the Department) assessment of the development application for the Moree Battery Energy Storage System (the development).

The Department's assessment considers all documents submitted by The Trustee for AE BESS 2 Unit Trust (the Applicant), including the Statement of Environmental Effects and Additional Information, advice from government authorities, and all legislation and planning instruments relevant to the site and the development.

The report includes:

- a description of the development and the surrounding environment
- an assessment of the development against government policy and statutory requirements, including mandatory considerations
- an explanation of why the development is local development and who the consent authority is
- consideration of matters raised by government stakeholders
- an assessment of the likely environmental, social and economic impacts of the development and recommendations for managing any impacts during construction and operation
- an evaluation which weighs up the likely impacts and benefits of the development, having regard to the proposed mitigation measures and government advice, and provides a view on whether the impacts are, on balance, acceptable
- a recommendation to the decision-maker, along with the reasons for the recommendation, to assist them in making an informed decision about whether development consent for the development should be granted and any conditions that should be imposed.

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1 Introduction

1.1 Development Background

The Trustee for AE BESS 2 Unit Trust (the Applicant) is seeking development consent for the construction and operation of a 120 megawatt (MW) / 480 MW-hour (MWh) battery energy storage system (BESS) (the development) at Bulluss Drive, Moree, in the Moree Special Activation Precinct (SAP) (the site) (refer **Figure 1**). The BESS will be developed and operated by Avenis Energy on behalf of the Applicant. A detailed description of the development is provided in **Section 2**.

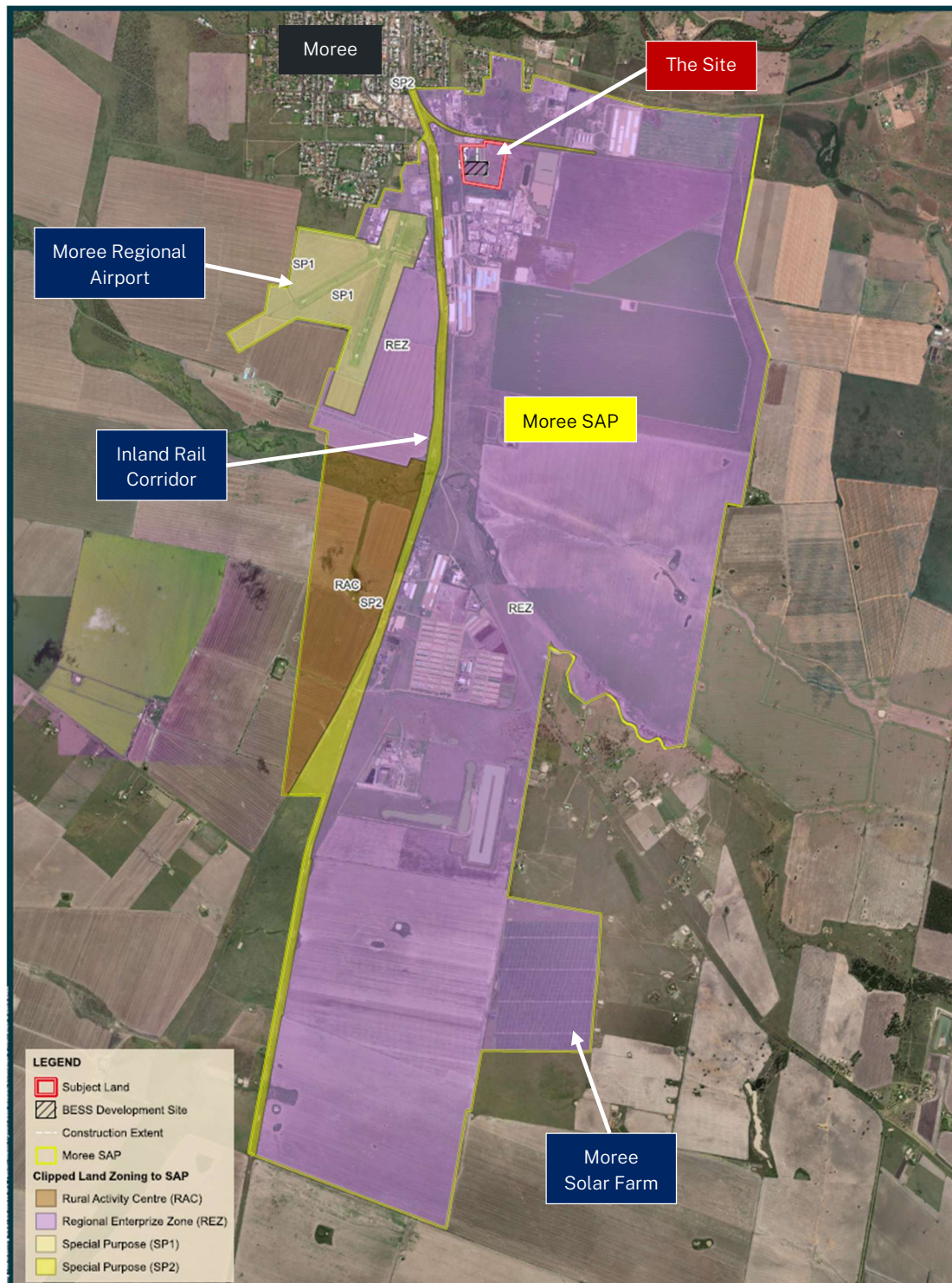


Figure 1 | Regional Context

The Moree SAP is a 4,716 hectare (ha) area, located to the south of the Moree township, incorporating the existing Moree Regional Airport, Moree Solar Farm and Inland Rail corridor. The key goal of the SAPs is to create jobs and fuel economic development across regional NSW. The Moree SAP leverages the region's existing strengths in agriculture, transport connections via the Newell Highway and rail, and aims to create jobs across a range of industries including value-added agriculture, horticulture, freight and logistics. The Moree SAP Master Plan encourages the use of renewable energy storage and creation and aims to support the growth of industrial development and renewable energy generation in line with the desired vision for the Regional Enterprise Zone (REZ) under State Environmental Planning Policy (Regional – Precincts) 2021 (Regional – Precincts SEPP).

The development will connect to the national electricity market (NEM) via an underground transmission cable to Transgrid's 132 kilovolt (kV) Moree Bulk Supply Point substation (the Transgrid substation), immediately to the north of the site (see **Figure 2**). The BESS would contribute to grid stability in the Moree SAP and align with the sustainability goals for the Moree SAP as it would store excess renewable-generated energy in the NEM and support the State's net zero targets.

The long-established Moree Solar Farm located approximately 8.5 km to the south of the site in the southern extent of the SAP, is the only existing renewable energy infrastructure development in Moree. This was approved in 2011, commenced construction in 2015 and was fully operational in early 2016.

1.2 Site Description

The broader site comprises approximately 17.58 hectares (ha) of undeveloped privately owned land within the Regional Enterprise Zone (REZ) of the Moree SAP and is legally described as Lot 82 DP 751780 and part of Lot 144 DP751780 and Lot 1 DP 999486 (see **Figure 2**). The site is accessed via the Newell Highway, a State road managed by Transport for NSW (TfNSW), and Bulluss Drive (Figure 3-10), a local road that runs in a north-south direction parallel to the highway.

The area to be developed comprises approximately 4.06 ha of level land, clear of built form and vegetation, except for a few scattered non-native trees. No Aboriginal or historic heritage sites or objects exist on the site.

A first order waterway crosses the north-east corner of the broader site, approximately 260 metres from the proposed BESS development footprint. An existing farm dam (former borrow pit) is present in the north-western corner of the development footprint (see **Figure 2**).



Figure 2 | Site Context

As there is no existing stormwater infrastructure within the site, runoff currently discharges as sheet flow into an urban stormwater open channel to the north, ultimately flowing to the Mehi River approximately 1.5 km further north. Several transmission line easements run through the broader site, connecting to the Transgrid substation (see **Figure 3**).

Adjacent land uses include the Austgrains grain facility and the Australian Rail Track Corporation (ARTC) Inland Rail Corridor approximately 150 metres (m) to the west, the Moree Regional Airport around one kilometre to the south-west, the Industrial Drive Estate to the south and general industrial development and to the north. Vacant land surrounds the development site to the south and east. The closest sensitive receivers are the Gwydir Thermal Pools Motel and Caravan Park 400 m to the west and residential areas approximately 800 m further west (see **Figure 3**).



Figure 3 | Surrounding Land Uses

1.3 Energy Policy Context

As NSW transitions away from coal fired power, there is an increasing need for battery storage to firm renewable energy sources. The NSW Electrical Strategy (2019) notes that all coal fired power plants in NSW are scheduled for closure within the next fifteen years and that firmed renewables are the lowest cost option to replace aging coal power stations. The Australian Energy Market Operator's (AEMO) 2024 Integrated System Plan (ISP) states that battery storage is required to provide firming capacity and to support intra-day energy shifting.

With a capacity of 120 MW / 480 MWh, the BESS would increase grid stability and energy security. Accordingly, the project aligns with several national and State policies, including *Australia's Long Term Emissions Reduction Plan* and the *NSW Net Zero Plan Stage 1: 2020-2030* and associated *Implementation Update*. These policies identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid while providing energy security and reliability.

2 Development

2.1 Description of the Development

The major aspects of the development are summarised in **Table 1** and shown in **Figure 4, 5** and **Figure 7** below, and described in full in the SEE and Additional Information included in **0**.

Table 1 | Main Aspects of the Development

Aspect	Description
Development Summary	Construction and operation of a 120 MW / 480 MWh BESS, including supporting ancillary infrastructure and installation of an underground transmission cable from the BESS to the Transgrid 132 kV substation
Physical layout and design	The development includes: • site establishment including earthworks and installation of erosion and sediment control measures • 140 lithium-ion phosphate battery modules, on-site substation, 42 skid-mounted power conversion systems (PCS), a control room and switch room • underground transmission cable from the BESS to the Transgrid substation • operations and maintenance (O&M) building, staff amenities • sewage holding tank, a 200-kilolitre water tank and on-site drainage infrastructure • on-site parking and vehicular access from Bulluss Drive • temporary site access driveway and internal access road off Campion Close • 5 m wide landscape boundary and security fencing
Site area	17.58 ha
Development footprint	4.06 ha
Construction vehicle access route	• Over size over mass (OSOM) heavy vehicles: Port Botany to the site • High-risk OSOM vehicles: Glen Waverley in Victoria to the site, or from Port of Newcastle to the site
Construction	Approximately 12 months, with a peak period of six months
Operation	Expected operational life of 20-25 years (noting infrastructure upgrades may extend the operational life) The BESS would operate 24 hours, 7 days per week
Decommissioning and rehabilitation	Progressive rehabilitation during and following construction, including removal of the temporary construction facilities At the end of the operational life, aboveground components would be removed and the land rehabilitated to pre-development conditions
Employment	Up to 80 jobs during construction and five jobs during operation
Estimated Development Cost	\$202,789,365
Planning Agreement	Contribution of \$100,000 per annum plus CPI (assuming a CPI of 2.5% over the operations period of 20 years results in total cash payments of \$2,554,465.76 approximately equivalent to 1% of the proposed development's EDC)

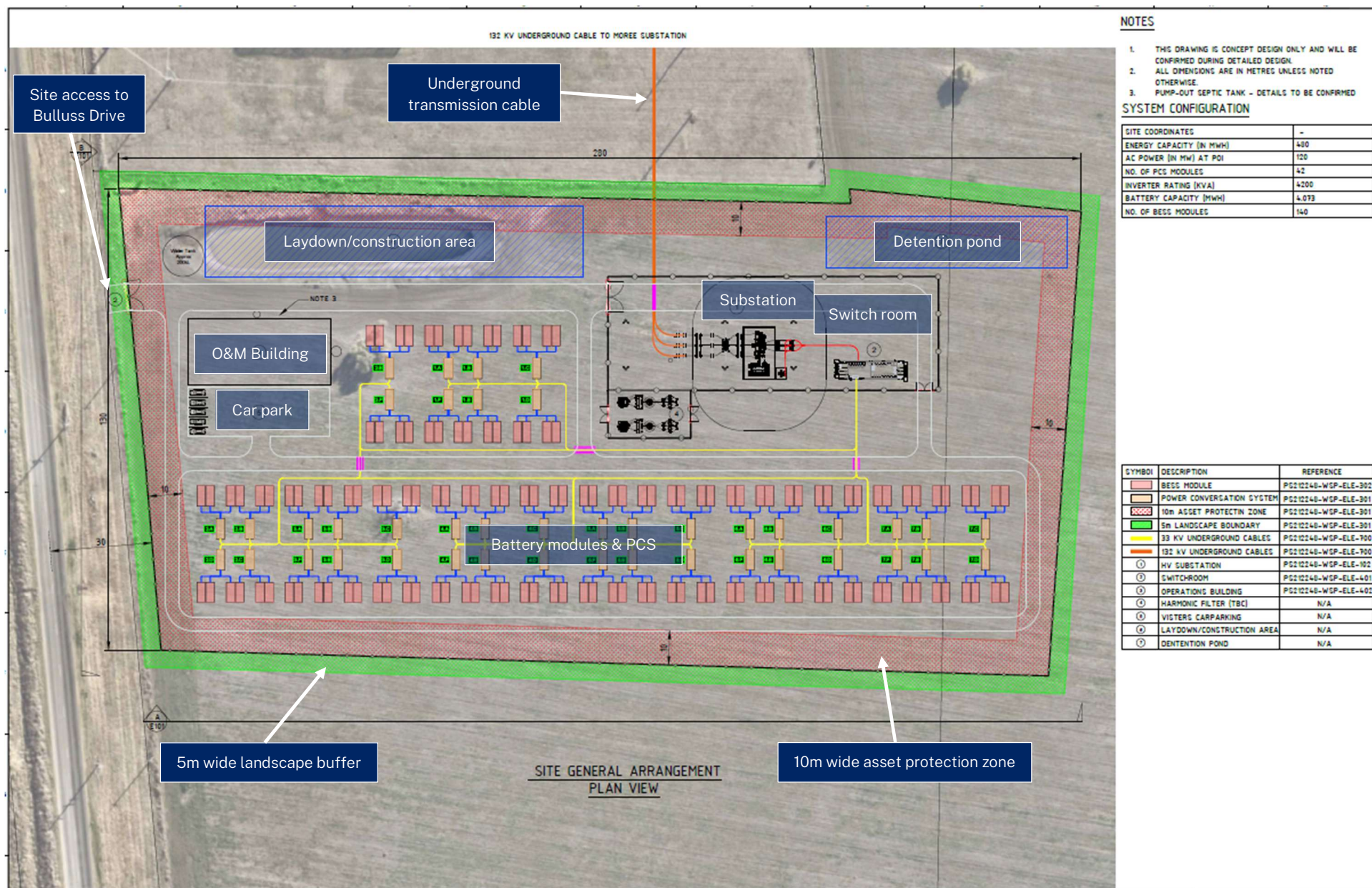


Figure 4 | Site Layout

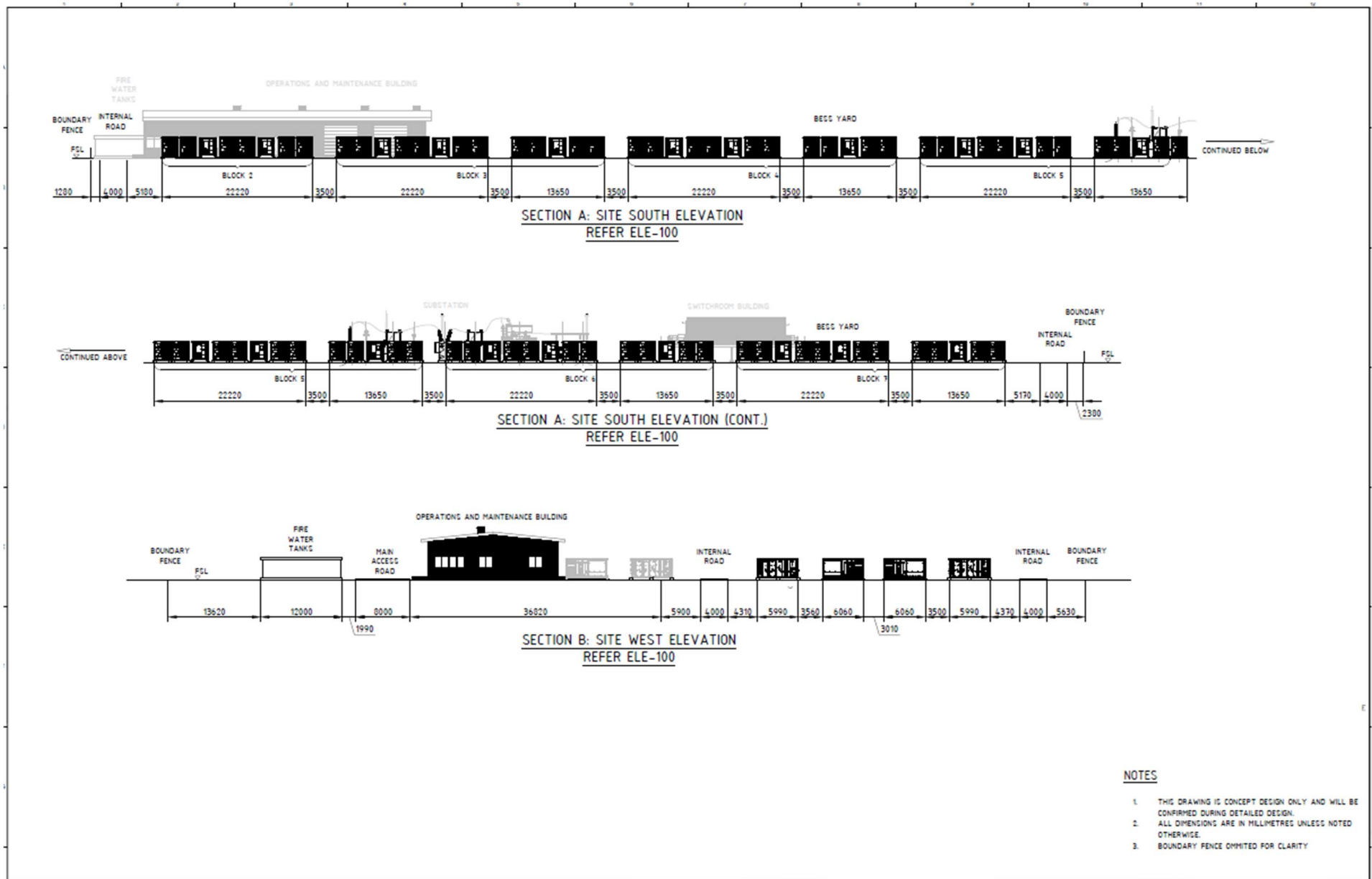


Figure 5 | Site Elevations



Figure 6 | Typical BESS module

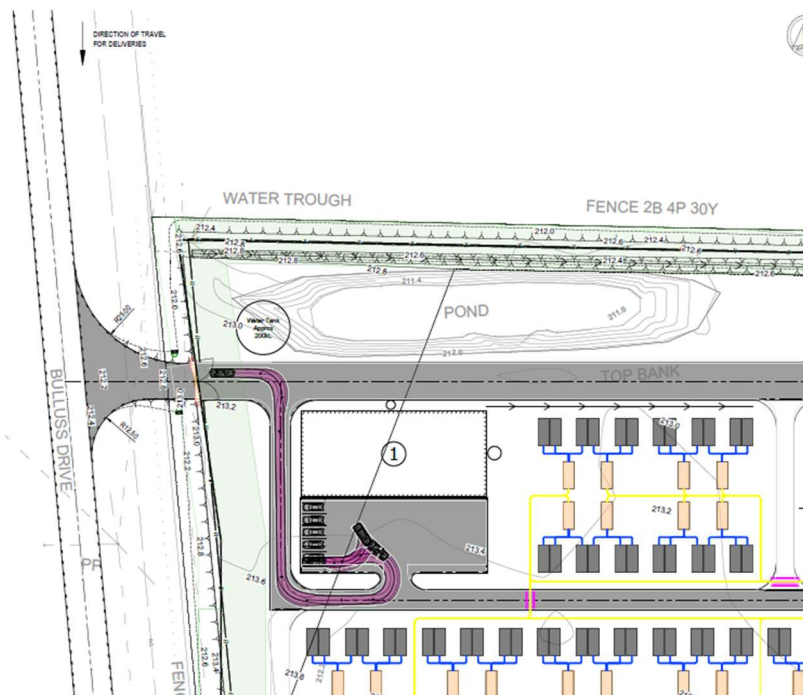


Figure 7 | Site Access to Bulluss Drive

2.2 Transgrid Substation Connection and Access

To facilitate the connection to the Transgrid substation, Transgrid would carry out the following works within their land:

- construction of either an 132kV bay or preparation of an existing 132kV bay to facilitate the integration of the BESS within the substation infrastructure
- installation of associated secondary high-voltage equipment required for the selected connection option
- execution of any necessary civil works to support the bay construction or modification, including foundation works, trenching, and structural reinforcements, as required.

To enable access to the substation for Transgrid to carry out the above works, the Applicant will construct a new temporary internal access road off Campion Close through the Transgrid substation

lot, to the east of the substation (refer **Figure 8**). This will include an upgrade of the existing site access driveway to the substation off Campion Close (see **Figure 9**).



Figure 8 | Transgrid Works and Access Arrangements



Figure 9 | Site Access to Campion Close

2.3 Applicant's Justification for the Development

The Applicant has justified the development on the basis that it will:

- be well aligned with the sustainability goals for the Moree SAP as it would more effectively use daytime excess solar-generated energy in the NEM
- enable storage of energy and release during peak consumption times, contributing to grid stability
- provide increased energy storage capacity for the State, supporting additional renewable energy projects in NSW and helping achieve net zero targets
- provide a notable support function to industrial development and renewable energy generators that are envisioned for the SAP
- increase employment opportunities in the SAP by employing up to 80 construction workers and five operational staff
- inject a monetary contribution of \$100,000 per annum, plus CPI, for a period of 20 years to Council via an agreed Planning Agreement.

3 Strategic Context

3.1 Key Strategic Issues

The Moree SAP was established under the Precincts – Regional SEPP in March 2022. The SAP master planning process was informed by a suite of environmental assessments carried out on behalf of the NSW Government. This work guided the development of the Moree SAP Master Plan and the subsequent Moree SAP Delivery Plan. Regional Growth Development Corporation (RGDC) finalised the Moree SAP Delivery Plan in 2022, and the precinct is currently in the delivery phase.

Key relevant strategies, plans and policies relevant to the assessment of the development are outlined in **Table 2** below.

Table 2 | Summary of Key Government Strategies, Plans and Policies

Strategy, Plan or Policy	Comments
Moree SAP Master Plan	Provides the vision and principles for the Precinct, a Structure Plan and provisions to ensure that the vision is achieved. It also describes particular matters that should be addressed in more detail as part of the Delivery Plan. The development is consistent with the Master Plan vision and principles in relation to infrastructure as it will provide renewable energy storage and support the State's transition to renewable energy.
Moree SAP Delivery Plan	Sets out the performance criteria for development in the SAP to ensure consistency with the Moree SAP Master Plan. The development has been assessed against the performance criteria as part of the Department's assessment and is consistent with the Delivery Plan subject to the implementation of the Applicant's proposed management and mitigation measures and the Department's recommended conditions of consent.

4 Statutory Context

4.1 Permissibility and Assessment Pathway

Details of the permissibility of the development and the assessment pathway under which consent is sought are provided in **Table 3** below.

Table 3 | Permissibility and Assessment pathway

Consideration	Description
Permissibility	Permissible with consent Electricity generating works (which includes a building or place used for the purpose of electricity storage) are permissible with consent in the Regional Enterprise Zone of State Environmental Planning Policy (Precincts – Regional) 2021 (Precincts – Regional SEPP) (as an innominate land use).
Assessment pathway	Part 4 Development The development is in the Moree SAP, as identified in Schedule 1B of the Precincts – Regional SEPP and: - is permissible with development consent - requires approval from Moree Plains Shire Council under section 138 of the <i>Roads Act 1993</i> for the two driveway cross-overs - is not designated development under Schedule 3 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation). As such, the development is classified as a Part 4 integrated development under the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act).
Consent authority	Planning Secretary The Planning Secretary is the consent authority under Schedule 1B, Clause 3, of the Precincts – Regional SEPP
Decision-maker	Director On 11 May 2022, the Planning Secretary delegated the functions to determine Part 4 development applications to the Director, Industry Assessments where: - there are less than 15 unique public submissions in the nature of objections and - a political disclosure statement has not been made by the Applicant. The Department received no public submissions. No reportable political donations were made by the Applicant in the last two years. Accordingly, the application can be determined by the A/Director, Industry Assessments, under delegation.

4.2 Other Approvals and Authorisations

The development requires an Activation Precinct Certificate (APC) under the Precincts-Regional SEPP issued by RGDC. On 2 October 2024, the Regional Growth and Development Corporation (RGDC)

issued APC 285 for the development. APC 285 was issued on the basis that the development is consistent with the Moree SAP Master Plan and Delivery Plan.

Should development consent be granted, the development will also require consent under the *Roads Act 1993* issued by Council. As such the development is classified as integrated development under section 4.46 of the EP&A Act. In accordance with legislative requirements, the Department gave written notice to Council requesting General Terms of Approval (GTAs). The Department has consulted with and considered the advice of Council in its assessment of the development (see **Section 5** and **Section 1**) and has incorporated the Council's GTAs in the recommended conditions of consent (see **Appendix D**).

4.3 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act sets out matters to be considered by a consent authority when determining a development application (DA). The Department's consideration of these matters is shown in **Appendix C**.

4.4 Public Exhibition and Notification

In accordance with section 2.22 and Schedule 1 to the EP&A Act, the DA and any accompanying information of an SSD application are required to be publicly exhibited for at least 14 days. The application was on public exhibition from 21 May 2025 until 3 June 2025. Details of the exhibition process and notifications are provided in **Section 5**.

4.5 Objects of the EP&A Act

In determining the application, the consent authority should consider whether the development is consistent with the relevant objects of the EP&A Act (section 1.3), including the principles of ecologically sustainable development (ESD). The Department has fully considered these matters in **Appendix C**. The Department is satisfied that the development is consistent with the objects of the EP&A Act and the principles of ESD.

4.6 Biodiversity Development Assessment Report

Section 7.7 of the *Biodiversity Conservation Act 2016* (BC Act) requires Part 4 DAs to be accompanied by a Biodiversity Development Assessment Report (BDAR) if it is likely to significantly affect threatened species.

The Biodiversity Report prepared as part of the Moree SAP Master Plan did not identify any areas of high biodiversity value on the site. The Moree SAP Master Plan 'high value biodiversity areas to be retained' mapping confirms there is no area of high biodiversity value on the site.

The Department notes the Moree SAP Delivery Plan states that the majority of the Moree SAP is on land that has been disturbed for broad acre farming. Generally, remnant vegetation in higher condition is limited to Travelling Stock Reserves (TSRs), which provide wildlife corridors and habitat for

threatened biodiversity. There is no TSRs on the site. As such, the Department does not consider that the proposal will significantly impact threatened species, and consequently, a BDAR is not required.

5 Engagement

The Applicant undertook consultation with relevant local and State authorities prior to lodgement of the SEE. The Department undertook further consultation with these stakeholders, the community and affected landowners during the exhibition of the DA and throughout the assessment of the application. These consultation activities are described in detail in the following sections.

5.1 Consultation by the Applicant

As the authority responsible for delivery of development in the SAP, RGDC carried out a range of engagement activities with the community and government stakeholders during development of the Moree SAP Master Plan and Delivery Plan. The Applicant also consulted directly with Council and TfNSW prior to lodgement of the DA.

5.2 Consultation by the Department

5.2.1 Public Exhibition of the EIS

After accepting the DA, the Department:

- publicly exhibited the DA and SEE from 21 May 2025 until 3 June 2025 on the NSW planning portal
- notified occupiers and landowners in the vicinity of the site about the public exhibition
- notified and invited comment from relevant government agencies and Council.

The Department notified and sought comment from Transgrid and Transport for NSW in accordance with State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP).

5.3 Submissions and Advice

During the public exhibition period, the Department did not receive any submissions from the public. Council provided comment but did not make a formal submission. Advice was received from six government authorities (two Commonwealth, four State agencies) and two utility providers. A link to the full copy of the advice is provided in **Appendix B**. A summary of the government authority advice is provided in **Table 4**.

Table 4 | Summary of Government Authority & Utility Provider Advice

Agency	Advice summary
AirServices Australia	Advised the development does not infringe the Obstacle Limitation Surface (OLS) of the Moree Regional Airport
Civil Aviation Safety Authority (CASA)	Confirmed the development would not present a hazard to aircraft operations.

Agency	Advice summary
Environment Protection Authority (EPA)	Advised the storage of waste batteries presents a fire safety risk Recommended the proposal identify fire risks and proposed measures to minimise the likelihood and severity of any fire event, having regard to the Victorian EPA guideline <i>Storage and Management of Waste Batteries</i> (2018). Advised the transport of waste batteries may require an environment protection licence and compliance with relevant dangerous goods (DG) transport legislation is required.
Fire and Rescue NSW (FRNSW)	Recommended conditions requiring a Fire Safety Study (FSS), Emergency Plan and Emergency Services Information Package (ESIP) in accordance with relevant Department and FRNSW guidelines.
Rural Fire Service RFS)	Recommended conditions requiring asset protection zones (APZ), construction standards, property access, water and utility services, and emergency and evacuation planning to address bush fire risk and provide protection for emergency services personnel, residents and others assisting fire fighting activities.
TfNSW	Advised the information provided does not demonstrate that traffic safety, efficiency and risks to TfNSW assets has been mitigated. Requested additional information regarding the high risk OSOM route assessment, including a bridge assessment, construction traffic impacts during harvest season and an assessment of impacts on the Newell Highway / Bulluss Drive intersection.
Essential Energy	Confirmed it had no concerns regarding safety risks, recommended compliance with any existing encumbrances in favour of Essential Energy on the development lots, and made general comments regarding relevant guidance for undertaking activities in proximity to electrical infrastructure
Transgrid	Advised it was actively working with the Applicant regarding the grid connection and the Applicant will need to advise how the requirements of Transgrid's <i>Easement Guidelines – Living and working with electricity transmission lines</i> (2024) will be met.

Council provided comments on access, parking requirements, drainage, cut and fill and imported fill.

5.4 Additional Information

Following the public exhibition period, the Department requested the Applicant respond to the matters raised by the government authorities and utility providers, and provide additional information regarding the site access driveway, the assessment pathway for the grid connection works, battery replacement process and timeframes, noise, earthworks and geotechnical reporting and stormwater.

On 7 August 2025, the Department met with the Applicant to discuss the Department's request for information and clarify the assessment approach for the geotechnical assessment and reporting.

On 22 August 2025, the Department met with the Applicant and Council to discuss Council's comments on the proposal.

On 12 September 2025, the Applicant responded to the Department's requests (see **0**) in a Submissions Report. The Department published the Submissions Report on the NSW planning portal and forwarded it to Council and TfNSW for comment.

The Submissions Report included a revised traffic impact assessment, updated OSOM route assessment and noise and vibration assessment, and additional information in relation to the matters raised by the Department, including an Interim Geotechnical Design Advice (IGDA) letter. The Submissions Report clarified the Department's queries regarding all matters raised and confirmed the following minor changes to the proposal:

- a new temporary internal access road off Campion Close to enable access for Transgrid to carry out the relevant upgrade works for the transmission connection
- high-risk OSOM vehicle movements to occur from the Port of Newcastle or Glen Waverley, instead of from Port Botany or Glen Waverley.

On 28 October 2025, Council advised it had no further concerns regarding the development.

TfNSW advised the additional information adequately addressed potential impacts on the state road network, subject to the requirement for a Traffic Management Plan to be prepared in consultation with TfNSW post consent.

The Department has considered the issues raised in the government advice and the Submissions Report in its assessment of the development.

6 Assessment

The Department has considered the SEE and the Applicant’s Additional Information in its assessment of the development. A summary of the Department’s consideration and assessment of issues related to the development are provided in **Table 5** below.

Table 5 | Assessment of Issues

Findings and conclusions	Recommended conditions
Energy Security	
- The development aligns with a range of Commonwealth and State policies (see Section 1.3), which identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid while providing energy security and reliability. - The development would support the State’s continued transition away from traditional power generation derived from fossil fuels, which is largely dispatchable, to renewable energy generation such as wind and solar, which is inherently variable. - The AEMO’s 2024 Integrated System Plan (ISP) forecasts that there will be a demand for 36 gigawatt (GW) / 522 GWh of energy storage capacity in the National Electricity Market by 2034-35, and 56 GW / 660 GWh by 2049-50. The ISP highlights the need for different forms of storage to support this growth, by providing storage of varied depths and technologies to time-shift electricity supply and smooth out peaks and troughs in renewable generation. - The development’s location within the Moree SAP would mean it contributes to achieving the SAP’s goal of providing precinct businesses with best-practice net-zero emissions initiatives and supporting energy infrastructure. - Battery storage, such as this one, provide ‘firming capacity’ by contributing to dispatchable energy availability during peak energy demands or when renewable production is low. - Importantly, the project would also contribute to energy security and reliability by providing frequency control ancillary services, meaning the project would contribute to energy supply.	No conditions required
Hazard and Risk	
- Risks associated with BESS developments include fires or explosions associated with a lithium-ion battery fault/malfunction resulting in thermal runaway (overheating of chemicals in the battery) and toxic gas dispersion. This may result in off-site risks to surrounding land and people. - Performance Criteria PC60 of the Moree SAP Delivery Plan states potentially hazardous industries must be appropriately managed to protect human health, property and the biophysical environment.	Require the Applicant to: - limit the scale of the development to 120 MW / 480 MWh - prepare and implement a FSS, Emergency Plan and ESIP

Findings and conclusions

Recommended conditions

- The Applicant's Preliminary Hazard Analysis (PHA) identified the potential hazardous events and considered the above risks. The PHA concluded all risks were minimal given there is adequate separation distances between the battery modules (to prevent fire propagation between battery cells) and the development is well separated from sensitive receivers.
 - FRNSW recommended conditions requiring the applicant to prepare a FSS, a comprehensive Emergency Plan, and an ESIP in accordance with relevant Department and FRNSW guidelines.
 - EPA recommended the Applicant identify potential fire risks and proposed measures to minimise the likelihood and severity of fire events. EPA also suggested the Applicant consider the Victorian EPA guideline for the *Storage and Management of Waste Batteries* to assist with the assessment of fire risk.
 - The Department is satisfied the PHA has been prepared in accordance with State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP), and the relevant Hazardous Industry Planning Advisory Papers. The PHA has demonstrated the volume of DG on the site would be unlikely to exceed the threshold limits in the Department's Hazardous and Offensive Development Guidelines 'Applying SEPP 33' and the development is not 'potentially hazardous'.
 - The PHA has demonstrated the 4.06 ha area allocated for the BESS is sufficient for the 140 BESS modules and other associated equipment, allowing for conservative separation distances which exceed the minimum requirements specified in the National Fire Protection Association (NPFA) standard – *NPFA 855: Standard for the Installation of Stationary Energy Storage Systems*, to minimise risk. Fire testing in accordance with national standards has demonstrated the fire propagation risk is unlikely.
 - The Department considers the BESS is sufficiently separated (400 m) from residential receivers, therefore off-site risks are expected to be minimal.
 - The Department notes the PHA has not considered electromagnetic field (EMF) as a risk, however, as the strength of an EMF attenuates rapidly with distance, the Department considers off-site impacts will be negligible.
 - To ensure residual risks are managed, a range of conditions have been recommended requiring the scale of the BESS be limited to align with the risks assessments undertaken, the studies and plans recommended by FRNSW, and unauthorised access be restricted to minimise potential damage to assets through installing security fencing and security lighting.
 - The Department's assessment concludes that with these conditions, the hazards and risks associated with the development can be managed.
- limit the quantities of DG stored and handled at the site to below the threshold quantities in Applying SEPP 33
 - store and handle DG in accordance with Australian Standards and relevant EPA guidelines.

Traffic and Access

- During peak construction of the BESS, the development will generate up to 80 light and 82 heavy vehicle (HV) trips (two-way movement) per day, including up to four OSOM vehicle trips. This has the potential to impact on
- Require the Applicant to:
- prepare and implement a CTMP and TMPs for

Findings and conclusions	Recommended conditions
the safety and efficiency of the broader road network. If works carried out by Transgrid to upgrade the Transgrid substation occur at the same time, the cumulative traffic generation is predicted to be up to 96 light vehicles and 98 HV trips per day. • In addition, three high-risk OSOM vehicles (exceed Class 1 OSOM mass/dimension requirements) would be required to access the site during construction for the transport of the transformer from either Port Botany or Glen Waverley in Victoria. • Operational traffic would be negligible and comprise approximately eight light vehicle trips per day. During decommissioning traffic generation would be similar to the construction phase. • TfNSW requested additional information regarding OSOM movements, including a bridge assessment and strategic designs for intersection upgrades required for the proposed high-risk OSOM vehicle movements and the dimensions, weight and length of vehicles. Council recommended the TIA consider traffic impacts during harvest season. • A revised TIA was provided in response to the concerns raised by Council and TfNSW. Traffic modelling in the Applicant's revised TIA found the road network can accommodate development traffic during construction, operation and decommissioning periods, in both the non-harvest and harvest seasons. To avoid the need for any road or bridge upgrades, an alternate route from the Port of Newcastle to the site was proposed for high-risk OSOM vehicle movements. The revised TIA confirmed that construction vehicles will access the site via the following routes: ○ light vehicles and rigid trucks are expected to travel from the north or south along the Newell Highway to Bulluss Drive ○ semi-trailers, B-doubles and Class 1 OSOM vehicles (non-high risk) will transport construction plant and equipment from Port Botany ○ high-risk OSOM vehicles requiring escort to the site would travel from the Port of Newcastle or Glen Waverley and via the Newell Highway from the south. • However, the revised TIA noted Bulluss Drive is currently an unrated road, the Newell Highway is only approved for Class 1 OSOM vehicles (non high-risk) with travel conditions, and Australian Rail Track Corporation (ARTC) approval would be required for several rail crossings. • To mitigate potential road safety and network efficiency impacts during construction, the Applicant proposes to carry out a pre-condition survey of the relevant sections of the existing road network, avoid peak bus operating times to limit conflicts, time OSOM vehicle trips outside of peak periods and to avoid other OSOM vehicles in the surrounding area, and prepare and implement a Construction Traffic Management Plan (CTMP) that documents all construction traffic management measures. • Additionally, Transport Management Plans (TMPs) will be prepared for each high-risk OSOM vehicle to ensure these vehicles can safely access the site	high-risk OSOM movements • restrict the number of HV and OSOM vehicles to the predicted traffic volumes and access routes in the Applicant's revised TIA • design and construct the site access driveway to the satisfaction of Council • prepare a dilapidation report prior to the commencement of construction and repair any damage done to any road infrastructure.

Findings and conclusions

Recommended conditions

and the necessary approvals would be obtained from Council, the National Heavy Vehicle Regulator (NHVR) and Australian RTC.

- TfNSW and Council support the proposed haulage route, subject to the preparation of a CTMP and TMPs for high-risk OSOM movements.
- The Department is satisfied the Applicant's revised TIA, including the OSOM haulage route assessments, provides a robust consideration of predicted traffic impacts, and has been prepared to the satisfaction TfNSW and Council, the relevant road authorities. A suite of appropriate traffic management measures is proposed that will ensure the development is unlikely to result in impacts to road network capacity, efficiency or safety.
- To ensure traffic impacts align with the traffic predictions, conditions restrict the number of HV and OSOM movements and the access routes for these vehicles. As Bulluss Drive and rail level crossing on this road are not rated for OSOM vehicles, the Applicant will need to obtain the relevant approvals from ARTC, the National Heavy Vehicle Regulator and Council for OSOM vehicle movements on the road network and across rail crossings.
- Conditions also require the site access driveway to be designed and constructed to the satisfaction of Council and for a section 138 approval under the *Roads Act 1993* to be obtained for these works. A dilapidation report is required prior to the commencement of construction to ensure any damage to road infrastructure is repaired by the Applicant in consultation with the road authority during construction, upgrading or decommissioning.
- The Department's assessment concludes development traffic is unlikely to cause adverse impacts on the local and broader regional road network subject to implementation of the recommended conditions of the consent.

Noise

- Construction of the BESS will involve a range of noisy plant and equipment. During operation, battery modules, PCS (tonal in nature) and transformers will generate noise that may impact surrounding receivers. The Gwydir Thermal Pools Motel and Caravan Park (receiver R18) is the closest residential receiver, located approximately 400 m to the west of the BESS site. Several industrial properties exist within 400 m of the site to the north and south. Performance Criteria PC64 of the Moree SAP Delivery Plan seeks to minimise impacts on the acoustic amenity of noise-sensitive receivers.
 - The Applicant's Construction and Operational Noise and Vibration Assessment (NVA) predicted construction noise impacts to be below the EPA's *Interim Construction Noise Guideline* (ICNG) noise management level (NML) of 45 dB(A) for residential receivers and below the NML of 75 dB(A) for all other land uses.
 - Operational noise modelling was conducted under worst-case noise-enhancing meteorological conditions. Operational noise levels are predicted to comply with the residential project noise trigger levels (PNTLs) of 40
- Require the Applicant to:
- minimise noise during construction, upgrading and decommissioning activities in accordance with best practice requirements in the ICNG
 - implement reasonable and feasible measures to minimise operational noise and comply with the operational noise limits at receivers

Findings and conclusions

Recommended conditions

dB(A), 35dB(A) and 35 dB(A), at R18, and the PNTL of 68dB(A) for industrial receivers, during the daytime, evening and night-time periods, respectively.

- The Applicant's sleep disturbance assessment confirmed that predicted operational noise would be well below the nominated sleep disturbance criteria for residential receiver R18.
- Construction road traffic noise was predicted to be 53 dB(A) which complies with the relevant criteria of $L_{Aeq(15 \text{ hour})}$ 60 dB(A) during the day in the EPA's *Road Noise Policy*.
- Given the distance to sensitive receivers, construction vibration impacts are predicted to be minimal and the NVA found there is a very low risk of structural damage at all receiver locations.
- The Department considers the NVA provides an evidence-based prediction of noise impacts from the development and has demonstrated there is unlikely to be any adverse amenity impacts during construction and operation. Given the distance to residential receivers (400 m), noise impacts will be minimal.
- Furthermore, it is unlikely the traffic noise contribution from construction vehicles would result in an increase of the existing traffic noise levels by more than 2dB(A), consistent with the RNP.
- To ensure sensitive receivers are protected during construction and manage any residual noise impacts, conditions require the Applicant to ensure noise is minimised and appropriately managed in accordance with the best practice measures outlined in the ICNG. Conditions also require the Applicant to take all reasonable and feasible measure to ensure compliance with operational noise limits at sensitive receivers.
- Subject to the implementation of the recommended conditions, including the adoption of all reasonable and feasible measures to minimise noise, the Department's assessment concludes the development is unlikely to cause adverse noise impacts and is unlikely to impact the amenity of the locality.

Airport Safeguarding

- The Moree SAP Master Plan aims to protect the operation of Moree Regional Airport and ensure appropriate development can be located near the airport. The site is within the Moree Regional Airport OLS, and the areas mapped in the Moree SAP Master Plan for windshear assessments, wildlife hazards and lighting restrictions.
- The SEE confirmed the development would not penetrate the OLS and would not be subject to wildlife hazard restrictions due to the nature of the development, as outlined in the Moree SAP Master Plan and *National Airport Safeguarding Framework (NASF) Guideline C – Managing the Risk of Wildlife Strikes in the Vicinity of Airports*.
- A Windshear Assessment was prepared in accordance with the *NASF Guideline B – Managing the Risk of Building Generated Windshear and Turbulence at Airports*. The assessment concluded the proposed maximum

Require the Applicant to:

- ensure lighting complies with Australian Standards to control the obtrusive effects of lighting
- meets the design requirements of *NASF Guideline E – Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports*

Findings and conclusions

Recommended conditions

height (8.5 m) would not exceed the windshear height limit of 11.4 m above natural ground level at this location.

- In accordance with the Moree Regional Airport Lighting Restrictions map in the Moree SAP Master Plan and *NASF Guideline E - Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports*, lights within Zone B are restricted to an intensity of 50 candela (cd). As the BESS will require security lighting around the perimeter of the site and four light poles within the substation compound, the Applicant committed to providing evidence prior to the commencement of works that lighting would not exceed the relevant intensity threshold.
- AirServices Australia confirmed the development does not infringe the OLS of the Moree Regional Airport and CASA confirmed the development would not present a hazard to aircraft operations.
- Moree Shire Council, as the Airport Manager, did not raise any airport safeguarding concerns associated with the development.
- The Department has considered the advice from CASA and AirServices and reviewed the NASF Guidelines and Moree Regional Airport Master Plan 2014 and consulted with Moree Plains Shire Council as the Airport Manager. The Department considers the Applicant has appropriately considered the relevant airport safeguarding requirements for the safe and efficient operation of the Moree Regional Airport.
- The Applicant's conclusions regarding the OLS, wildlife and windshear are sufficiently evidence-based and the commitment to address potential lighting impacts is acceptable. Conditions are recommended requiring lighting to be designed and installed in accordance with the NASF Guideline requirements and Australian Standards.
- The Department considers the development can be constructed and operated in line with the NASF requirements and guidelines. The development will protect ongoing airport operations, subject to the implementation of the recommended conditions regarding lighting, wildlife risk management and mobile cranes.
- The Department's assessment concludes the development is unlikely to have an adverse impact on airspace operations and will not compromise the effective and ongoing operation of the Moree Regional Airport.

Bush Fire

- The site is mapped as Category 3 (grasslands) Bushfire Prone land and contains medium bush fire risk vegetation (Vegetation Category 3). Performance Criteria PC57 in the Moree SAP Delivery Plan states development on grassland requires an APZ from the grass fire hazard and must comply with the requirements of *Planning for Bush Fire Protection* (PBP).
 - A Bush Fire Assessment (BFA) was submitted with the SEE addressing the requirements of PBP and the requirements of the Moree SAP Delivery Plan.
- Require the Applicant to:
- establish a 10 m wide APZ around the development and maintain the APZ as an IPA
 - construct all habitable buildings in accordance

Findings and conclusions	Recommended conditions
• To actively manage bush fire risk, the Applicant proposes to implement a suite of management measures, including (but not limited to) a minimum 10 metre APZ around the development infrastructure, maintaining the APZ as an inner protection area (IPA) as required by PBP, designing internal roads to meet property access requirements in line with PBP, and the provision of a static water source (one water tank with a capacity of 200 kilolitres (kL)). • To ensure construction and operational staff know how to respond in the event of a bush fire, the Applicant also proposes to prepare a Bush Fire Emergency Management and Operations Plan (BFEMP). • The RFS made several recommendations to address the risk of bush fire in line with the Applicant's proposed mitigation measures, and additionally a requirement for the design of habitable buildings to comply with Australian Standards construction requirements for buildings in bush fire prone areas, and the preparation of a fire management plan that outlines emergency contact details and the methods to extinguish a lithium-ion battery fire. • The Department is satisfied the conditions recommended by the RFS will minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting with fire-fighting activities. As such, these requirements have been adopted in the Department's recommended conditions. • To address RFS' recommendation regarding a fire management plan, conditions require the Applicant to prepare a FSS which includes identification of measures to eliminate the expansion of any fire incident including, adequate fire safety systems and appropriate water supply, separation and/or compartmentalisation of battery modules, and strategies and incident control measures specific to the battery storage design. • The Applicant's proposed BFEMP will ensure suitable emergency and evacuation arrangements are in place for staff at the development. The BFEMP can be incorporated into the overarching Emergency Plan for the development, to address the recommendations of the RFS and FRNSW. • The Department's assessment concludes the risk of bush fire can be managed and in the event of a bush fire, an appropriate evacuation plan will be in place to ensure the safety of staff.	with AS3959-2018 <i>Construction of buildings in bush fire prone areas</i> or relevant national standards • ensure access roads comply with the requirements of PBP • provide fire-fighting water supply and utilities infrastructure in line with PBP requirements • prepare and implement a BFEMP as part of the site Emergency Plan • prepare and implement a FSS.

Landscape Character and Visual Amenity

- | | |
|---|---|
| <ul style="list-style-type: none"> • The BESS will change the character of the landscape, noting the site is currently vacant land. The Moree SAP Delivery Plan states landscaping should maintain the character of the precinct and enhance the surrounding environment and provides performance criteria to achieve this relation to landscape design (PC30), fencing (PC31) and lighting (PC32). • The SEE reported the BESS would generally be low scale (< 4 m in height). Views from the Gwydir Thermal Pools Motel and Caravan Park to the site are obscured by the existing Austgrains infrastructure and vegetation | <p>Require the Applicant to:</p> <ul style="list-style-type: none"> • establish the vegetation in the Landscape Plan prior to the commencement of operation of the development and maintain the landscaped |
|---|---|

Findings and conclusions

screening. Furthermore, the proposed development is considered consistent with the industrial character of the surrounding land.

- To mitigate residual visual impacts, the Applicant prepared a Landscape Plan and proposes to establish a 5 m vegetated buffer around the site perimeter, outside of the proposed 2 m high security fence. Proposed species have been selected from the planting palette in the Moree SAP Delivery Plan.
- Consideration is to also be given to the colours, type and height of the facility to ensure minimal contrast and to help blend into the surrounding landscape. External lighting is to be installed to comply with Australian Standard AS/NZS 4282:2023 – *Control of obtrusive effects of outdoor lighting*.
- Council did not raise any concerns regarding visual impacts.
- The Department considers the SEE and Landscape Plan demonstrate consistency with Performance Criteria PC30, PC31 and PC32. The Department is satisfied the Applicant has developed a landscape plan to provide screening and landscaping improvements to minimise the visual impact of the proposed development, in accordance with the Moree SAP Delivery Plan.
- To ensure the Applicant's mitigation measures are implemented to manage residual impacts, conditions require implementation of the Landscape Plan and maintenance of the landscaped areas for the life of the development. Conditions also require the Applicant to select colours and finishes to blend with the surrounding landscape and to minimise off-site lighting impacts, including compliance with AS/NZS 4282:2019.
- The Department's assessment concludes the visual impacts of the development will be minimal and the development would not fundamentally change the broader landscape characteristics of the area or result in any significant visual impacts on surrounding public spaces or sensitive receivers.

Recommended conditions

areas for the life of the development

- minimise the visual impact of infrastructure, including the selection of colours and finishes
- minimise off-site lighting impacts, including compliance with AS/NZS 4282:2023.

Stormwater

- Hardstand for the development will increase the area of impervious surfaces at the site which has the potential to result in an increase in polluted runoff discharged from the site. Polluted runoff may adversely impact the downstream receiving environment and cause off-site flooding. PC23 of the Moree SAP Delivery Plan requires stormwater to be appropriately managed to ensure minimal nuisance, danger and damage to people, property and the environment.
- Construction of the development has the potential to alter surface water drainage patterns and soil disturbance may cause sedimentation. The Applicant has committed to managing construction water quality impacts through the implementation of erosion and sediment control measures.

Require the Applicant to:

- finalise the detailed design of the stormwater management system
- install the stormwater management system in accordance with the finalised detailed design prior to the commencement of operation of the BESS

Findings and conclusions

Recommended conditions

- The proposed operational stormwater quality treatment train incorporates the use of a piped network, cut-off drains, a 1,294.5 cubic metre (m³) detention basin and grassed swales.
 - The Applicant's assessment of water quality impacts in the submitted Stormwater Management Plan (SMP) was revised in response to concerns raised by the Department and Council in relation to how the required pollutant reduction target of 45% for total nitrogen (TN) would be met.
 - The revised water quality MUSIC modelling demonstrated the required pollutant reduction targets for suspended solids (80%), TN (45%), total phosphorous (60%) and gross pollutants (90%) (as defined in the Moree SAP Delivery Plan) can be met. DRAINs hydraulic modelling demonstrated the proposed stormwater infrastructure would ensure there was no increase in runoff volume or flow because of the development for all events up to and including a 1% Annual Exceedance Probability (AEP) event.
 - The Applicant proposes a suite of mitigation measures to minimise stormwater impacts, including ESC measures during construction, on-site stormwater detention to capture runoff and maintain pre-development flow rates, grassed swales to convey flows to the lawful point of discharge at the north-eastern corner of the site. The Applicant's SMP concluded the measures are sufficient to meet the requirements of the SAP Master Plan and Delivery Plan.
 - The Department considers the Applicant's revised SMP demonstrates the proposed stormwater infrastructure can adequately manage the increase in stormwater runoff and will ensure pre-development flows can be maintained and pollutant reduction targets can be met. Conditions require the Applicant to install and maintain the stormwater infrastructure as described in the SMP.
 - The Department's assessment concludes the development is unlikely to cause off-site water quality or surface water flooding impacts.
- maintain the stormwater management system for the life of the development.

Flooding

- The SAP technical flood study carried out to support the Moree SAP Master Plan indicates the far north-eastern corner of the broader site is affected by the 1% AEP flood event and probable maximum flood (PMF) event from the 1st order tributary of the Mehi River that crosses the site at that location. The existing farm dam on the site is also predicted to flood during these flood events due to isolated ponding.
 - The Moree SAP Delivery Plan sets several performance criteria to ensure the protection of properties, people and the environment from flooding.
 - The Applicant's Flood Statement considered the requirements of the Moree SAP Master Plan and Delivery Plan and carried out a desktop assessment of the relevant flood studies to determine flood behaviour and the potential impacts to and from the development on flooding on and around the site.
- No conditions are required.

Findings and conclusions

Recommended conditions

- The Flood Statement concluded the footprint of the proposed BESS is flood-free with the exception of the existing farm dam. As the dam is to be infilled as part of the development, the Flood Statement confirmed the proposed detention basin would provide an appropriate volume of storage during a PMF rainfall event to offset the loss of the existing farm dam. The Flood Statement also confirmed that safe access and egress is available for the site for events up to and including the PMF.
- Council did not raise any concerns regarding flood impacts or evacuation.
- The Department considers the Applicant's desktop assessment has sufficiently demonstrated that the development is unlikely to cause additional flood impacts and the BESS will be outside the flood affected area for all flood events up to and including the PMF event.
- The Department's assessment concludes the BESS development footprint is outside the flood affected areas of the broader site, and as such any filling during earthworks at the site is unlikely to cause off-site flooding impacts.

Soils and Geotechnical

- A large quantity of imported fill is required to create a level hardstand area for the development (41,800 m³) and to backfill the existing farm dam following dewatering.
 - Council recommended the Applicant demonstrate the imported fill will be clean fill and suitable for commercial/industrial purposes and the earthworks will be geotechnically sound.
 - The Moree SAP Delivery Plan requires appropriate geotechnical investigations to inform design and construction.
 - In response to a request from the Department and to address Council's recommendations, the Applicant obtained an Interim Geotechnical Design Advice (IGDA) letter from a qualified geotechnical engineer. The IGDA made several recommendations regarding the approach to bulk earthworks and site filling activities having regard to the geotechnical constraints and characteristics of the site, including technical parameters for imported fill materials to address Council's recommendations.
 - The IGDA also reported groundwater depths range from 12.4 m to 15.7 m below ground level and therefore development works are unlikely to encounter groundwater, although perched water may be encountered near the existing farm dam.
 - The Applicant has committed to undertaking geotechnical investigations and preparing a geotechnical report prior to the commencement of earthworks. Furthermore, a geotechnical inspection and testing authority (GITA) would inspect and test all engineered and imported fill prior to use to ensure it is appropriate for use at the development.
 - To ensure imported fill will be clean fill and suitable for the development, and the earthworks will be geotechnically sound, the Department has recommended several conditions. This includes requiring the Applicant to
- Require the Applicant to:
- ensure that only VENM, ENM, or other material approved in writing by EPA is brought onto the site for use as fill
 - keep accurate records of the volume and type of fill to be used
 - ensure bulk earthworks and site filling activities have regard to the recommendations made in the IGDA and are carried out in accordance with Australian Standards
 - prepare and submit a Geotechnical Engineering Report to the Certifier for approval prior to works detailing any special building practices required for construction of the development.

Findings and conclusions

Recommended conditions

ensure that only virgin excavated natural material (VENM), ENM or other material approved in writing by the EPA is brought onto the site for use as fill, keeping accurate records of the volume and type of fill to be used, and carrying out bulk earthworks and filling activities having regard to the IGDA recommendations and in accordance with Australian Standards.

- The Applicant must also prepare and submit a Geotechnical Engineering Report to the Certifier for approval prior to works detailing any special building practices required for construction of the proposed development.
- Subject to the implementation of the Department's recommended conditions, the Department's assessment concludes that bulk earthworks and filling of the site can be carried out without impacting groundwater, will utilise clean fill suitable for industrial purposes and will be geotechnically sound to cater for the BESS development.

Water Supply

- During construction, water will be required, primarily for dust suppression. During operation, the development would require approximately 50 kL per annum of potable water for the proposed O&M building. Approximately 30 kL of non-potable water would be needed for landscape establishment activities in the initial stages.
- The Moree SAP Delivery Plan Performance Criteria PC21 requires adequate services, including water supply to be available to facilitate development. PC26 states development must not detrimentally impact groundwater resources, including the town's drinking water supply.
- The SEE confirmed a 200 kL water tank is proposed on-site to cater for potable water supply to the O&M building, landscape screening establishment and firefighting static supply. The development does not propose groundwater extraction from the site as water would be transported to the site by tankers.
- Council did not raise any concerns regarding water supply.
- Noting the above, the Department has recommended a condition requiring the applicant to ensure there is sufficient water for all stages of the development.
- The Department's assessment concludes the development would have negligible impacts on water resources and will not impact on the town's drinking water supply.

Require the Applicant to:

- ensure there is sufficient water (potable and non-potable) for all stages of the development.

Waste Management

- Construction, operation and decommissioning of the development will generate various types of waste. Appropriate management and disposal of waste is required, especially for end-of-life lithium-ion batteries, which would be classified as hazardous waste under the EPA's *Waste Classification Guidelines*.

Require the Applicant to:

- implement the WMP for the life of the development

Findings and conclusions	Recommended conditions
• The Applicant prepared a Waste Management Plan (WMP) that included classification of the various development waste streams, approximately quantities, storage and treatment onsite, sampling and testing requirements, proposed re-use/recycling/disposal methods and re-use/recycle targets. • The WMP included a suite of mitigation and management measures to ensure the re-use/recycle targets are met, waste disposal is appropriately managed, tracking of waste and the appropriate permits/approvals are obtained for the transport and disposal of hazardous waste. • The EPA advised an environment protection licence (EPL) is required to transport higher risk wastes, waste tracking requirements will apply, and compliance with relevant DG transport legislation is required when transporting batteries considered DG. • The Department is satisfied the WMP provides an appropriate approach to waste management in line with the waste hierarchy and consistent with relevant EPA guidance on waste classification and management. Conditions require implementation of the WMP for the life of the development. • The Department has also recommended conditions requiring the applicant to minimise waste generated by the development, remove all waste as soon as practicable, and to dispose of unrecyclable waste at a licenced facility. This includes the requirement to consult with Council should Council's waste facilities be used. • Accordingly, the Department's assessment concludes the waste generated by the development would be appropriately managed.	• minimise waste generated by the development • classify waste in accordance with the EPA's Waste Classification Guidelines • not receive or dispose of any waste on site • remove all waste from the site as soon as practicable and ensure it is reused, recycled or sent to an appropriately licensed facility for disposal (in consultation with Council for use of Council's waste facilities).

Change in Land Use

- | | |
|--|------------------------------------|
| <ul style="list-style-type: none"> • The majority of the development site is mapped as a Biophysical Strategic Agricultural Land (BSAL) under State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (the Mining SEPP). The development would result in the temporary loss of approximately 4.06 ha of agricultural land for the life of the BESS (approximately 20-25 years). • The SEE confirmed the site is currently used for cropping and has historically been used for cropping and livestock grazing. While the proposed development would prevent the continued agricultural use of the land, the intended use of the site is no longer agricultural, according to the adopted Moree SAP Master Plan and site zoning under the Precincts – Regional SEPP as Regional Enterprise Zone. • The SEE concluded carrying out the development would be in line with the objectives of the REZ and would not impact other agricultural land uses surrounding the site. • To minimise impacts to the existing agricultural land being used for the BESS, the Applicant proposes to establish landscaping in accordance with the Landscape Plan submitted with the SEE and rehabilitate the land as part | <p>No conditions are required.</p> |
|--|------------------------------------|

Findings and conclusions

Recommended conditions

of a Decommissioning Plan having regard to relevant Department of Primary Industry guidance.

- The Department notes the entire area has been zoned for industrial purposes since 2011 under the Moree Plains Local Environmental Plan 2011 before it was rezoned to Regional Enterprise Zone (REZ) as part of the Moree SAP strategic framework.
- Furthermore, the Department is satisfied the impacts are acceptable given the small area of agricultural land and does not significantly reduce the availability of land for primary production in the region. Ultimately when the BESS is decommissioned it can be returned to an agricultural use, if deemed appropriate, at that time.
- The Department considers the proposed change in land use is suitable within the land use context of the locality, noting its location within the Moree SAP.

Social and Economic

- The development would generate direct and indirect benefits to the local and broader community, including around \$203 million capital investment into the NSW economy and up to 80 construction jobs and five operational jobs.
- The Applicant and Council have agreed to enter into a Planning Agreement with an estimated value of approximately \$2,554,465.76 comprising an annual payment of \$100,000 (CPI adjusted) for 20 years from the commencement of operations. This is equivalent to approximately 1% of the development cost. A portion of this contribution will go toward training and education services for the local government area.
- The development is unlikely to result in increased demand on community services and infrastructure, and the facility would only require infrequent maintenance visits during operations.
- To ensure the legislation requirements regarding developer contributions are met and the benefits of the Planning Agreement are realised, a condition is recommended requiring the Applicant to enter into the Planning Agreement in accordance with the Applicant's letter of offer.
- Overall, the Department considers the development would have positive economic and temporary, minor social impacts on the community.

Require the Applicant to:

- enter into the Planning Agreement with Council in accordance with the Applicant's letter of offer and Division 7.1 of part 7 of the EP&A Act.

Decommissioning and Rehabilitation

- The Department has developed standard conditions for battery projects to cover this stage of the project life cycle, including clear decommissioning triggers and rehabilitation objectives.
- The rehabilitation objectives include achieving a safe, stable and non-polluting site, restoring the land capability to pre-existing productive capacity, and ensuring public safety at all times.
- With the implementation of these measures, the Department considers that the battery would be suitably decommissioned at the end of the project life,

Require the Applicant to:

- rehabilitate the site within 18 months of the cessation of operations.

Findings and conclusions**Recommended conditions**

or within 18 months if operations cease unexpectedly, and that the site would be appropriately rehabilitated.

7 Evaluation

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ESD.

The Department has considered the development on its merits, taking into consideration the Moree SAP Master Plan and Delivery Plan that guide development in the area, the EPIs that apply to the development, and advice received from the relevant public authorities, including Council.

No submissions were received from the community and none of the State government authorities or Council have objected to the proposal. The Department has sought to address any issues raised through consultation with both the government authorities and the Applicant.

The development has been designed to largely avoid key constraints and minimise environmental and amenity impacts, including hazards and safety risks, road network efficiency and safety, noise and visual impacts to nearby receivers, watercourses, and land use conflicts.

Overall, the Department's assessment has found it is unlikely there would be any amenity impacts during operation of the development and risks associated with the construction and operation of the BESS and associated infrastructure. However, to ensure the potential for residual impacts and risks is minimised, the Department has recommended several conditions, including:

- for hazards and risks - limiting the scale of the development to 120 MW / 480 MWh, the preparation of a FSS, comprehensive Emergency Plan and detailed emergency procedures for the development, limit the quantities of DG stored and handled at the site to below the threshold quantities in Applying SEPP 33, requirements to store and handle all DGs in accordance with Australian Standards and EPA guidance
- for traffic and access – a CTMP and TMPs for high-risk OSOM movements, a restriction on the number of HV and OSOM vehicles to no greater than the predicted traffic volumes in the TIA, a requirement for HV and OSOM vehicles to use designated access routes, obtain the relevant approvals from Council and ARTC for OSOM movements along Bulluss Drive, design and construct the site access driveway to the satisfaction of Council, and prepare a dilapidation report prior to the commencement of construction and repair any damage done to any road infrastructure
- for visual amenity - install and maintain a five-metre-wide landscaped buffer and ensure lighting complies with Australian Standards and is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network
- for bush fire risk - establish a 10 m wide APZ around the development and maintain the APZ as an IPA, construct all habitable buildings in accordance with relevant standards, ensure access roads comply with the requirements of PBP, provide fire-fighting water supply and utilities

infrastructure in line with PBP requirements, prepare and implement a BFEMP as part of the site Emergency Plan, and prepare and implement a FSS

- for airport safeguarding – lighting design to meet the requirements of the NASF Guidelines to prevent distraction to pilots.

The Department is satisfied the impacts of the development can be appropriately managed through implementation of the recommended conditions of consent. The Department has also recommended conditions for the payment of developer contributions through a Planning Agreement between the Applicant and Council to contribute to infrastructure upgrades within the Moree LGA and for local training and education. This would equate to a total monetary contribution of approximately \$2,554,465.76 to Council over a period of 20 years.

On balance, the Department considers the site to be appropriate for a BESS, as it has ready access to major electricity transmission network infrastructure and is suitably zoned for the development. The development aligns with the objectives of the Moree SAP Master Plan and the requirements and performance criteria of the Moree SAP Delivery Plan. Benefits to the local community would include up to 80 jobs during construction and five operational jobs. Further, the development would provide additional and substantial investment towards improving the reliability of the energy network, storage and firming capacity to the National Energy Market, and additional services to assist grid stability.

The Department considers that these benefits can be realised without any significant amenity or environmental impacts and therefore, considers the development is in the public interest and should be approved, subject to conditions.

8 Recommendation

For the purpose of section 4.38 of the EP&A Act, it is recommended that the **A/Director, Industry Assessments**, as delegate of the Planning Secretary:

- **considers** the findings and recommendations of this report
- **accepts and adopts** the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of the Moree BESS (DA25/6636) subject to the conditions in the attached development consent
- **signs** the attached development consent (**Appendix D**).

Recommended by:



30 October 2025

Sally Munk

Principal Planner

Industry Assessments

9 Determination

The recommendation is **adopted** by:



Joanna Bakopanos

A/Director

Industry Assessments

7 November 2025

Glossary

Abbreviation	Definition
Applicant	The Trustee for AE BESS 2 Unit Trust
Council	Moree Plains Shire Council
Department	Department of Planning, Housing and Infrastructure (DPHI)
Development	The development as described in the SEE
DPHI	Department of Planning, Housing and Infrastructure
EDC	Estimated Development Cost
SEE	Statement of Environmental Effects titled ' <i>Statement of Environmental Effects Moree BESS</i> ' prepared by NGH Pty Ltd dated 27 March 2025, Revision Final V1.2
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
LEP	Local Environmental Plan
Planning Secretary	Secretary of the Department
SEPP	State Environmental Planning Policy
Submissions Report	The Applicant's response to issues raised in government authority advice titled 'Submissions Report Moree Battery Energy Storage System', prepared by NGH Pty Ltd and dated 11 September 2025
TfNSW	Transport for NSW

Appendices

Appendix A – List of Referenced Documents

The Department has relied upon the following key documents during its assessment of the development:

Statement of Environmental Effects

- ‘*Statement of Environmental Effects Moree BESS*’ prepared by NGH Pty Ltd dated 27 March 2025, Revision Final V1.2

Government Authority Advice

- All advice received from relevant public authorities

Submissions Report

- ‘*Submissions Report Moree Battery Energy Storage System*’ prepared by NGH Pty Ltd dated 11 September 2025

Statutory Documents

- Relevant considerations under section 4.15 of the EP&A Act (see **Appendix C**)
- Relevant environmental planning instruments, policies and guidelines (see **Appendix C**)

All documents relied upon by the Department during its assessment of the application may be viewed here:

<https://www.planningportal.nsw.gov.au/daex/under-consideration/moree-battery-energy-storage-system-da256636>

Appendix B – Submissions and Government Authority Advice

All submissions and government authority advice can be found here:

<https://www.planningportal.nsw.gov.au/daex/under-consideration/moree-battery-energy-storage-system-da256636>

Appendix C – Statutory Considerations

Table 6 | Mandatory Matters for Consideration

Matter for Consideration	Department's Assessment
Environmental planning instruments, proposed instruments and development control plans	The Department's consideration of the relevant EPIs (including draft instruments subject to public consultation under the EP&A Act) is provided in Appendix C .
Planning agreements	The Applicant and Council have agreed to enter into a Planning Agreement whereby the Applicant will make a contribution of \$100,000 per annum plus CPI (assuming a CPI of 2.5% over the operations period of 20 years results in total cash payments of \$2,554,465.76 approximately equivalent to 1% of the proposed development's EDC). A portion of this contribution will go toward training and education services for the local government area. The Department has considered the Planning Agreement in Section 6 of this report.
EP&A Regulation	The Department has assessed the development in accordance with all relevant matters prescribed by the EP&A Regulation, the findings of which are contained in this report.
Likely impacts	The Department has considered the likely impacts of the development in detail in Section 6 of this report. The Department concludes that all environmental impacts can be appropriately managed and mitigated through the recommended conditions of consent.
Suitability of the site	The site is suitable for the development as it is located close on suitably zoned land adjacent to the Transgrid substation, is permissible with consent, and is consistent with the Moree SAP strategic framework.
Public submissions	No public submissions were received.
Public interest	The development would generate up to 80 jobs during construction, five jobs during operation and direct \$202,789,365 in capital investment in the Moree Plains local government area. The environmental impacts of the development would be appropriately managed via the recommended conditions. The Department considers to the development is in the public interest.

Objects of the EP&A Act

A summary of the Department's consideration of the relevant objects (found in section 1.3 of the EP&A Act) are provided in **Table 7** below.

Table 7 | Objects of the EP&A Act and how they have been considered

Object	Consideration
(a) 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,	The development would generate direct and indirect benefits to the local and broader community, including around \$203 million capital investment into the NSW economy and up to 80 construction jobs and five operational jobs. The Department's assessment has found the development would have negligible impacts on water resources and will not impact on the town's drinking gali-water supply.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The Department's assessment has considered all social, economic and environmental considerations in a single, holistic assessment and is satisfied the development can avoid environmental and amenity impacts while providing tangible social and economic benefits. The Department is satisfied that the development can be carried out in a manner that is consistent with the principles of ESD.
(c) to promote the orderly and economic use and development of land,	The development is permissible use which would promote orderly and economic development of land and would provide employment for five operational employees and promote economic growth in the Moree Plains LGA.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The site does not contain any areas of biodiversity value.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The site does not contain any items or areas of Aboriginal cultural significance.

Object	Consideration
(g) to promote good design and amenity of the built environment,	The development is consistent with the design requirements of the Moree SAP Delivery Plan.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Applicant is required to construct all buildings in accordance with the Building Code of Australia to ensure structural adequacy.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department has consulted with, and given due consideration to, the technical expertise and comments provided by other Government authorities, including Council. This is consistent with the object of sharing the responsibility for environmental planning between the different levels of government in the State.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The application was exhibited in accordance with section 2.22 and Schedule 1 to the EP&A Act to provide public involvement and participation in the environmental planning and assessment of this application.

EP&A Regulation

Part 4, Division 1 of the EP&A Regulation requires the consent authority to consider additional matters for certain developments as part of the matters for consideration under section 4.15 of the EP&A Act. There are no additional matters in Division 1 of the EP&A Regulation that the consent authority must consider.

Environmental Planning Instruments (EPIs)

State Environmental Planning Policy (Precincts - Regional) 2021 (Precincts-Regional SEPP)

Special Activation Precincts are sustainable business hubs with the goal of creating jobs and fuelling economic development across regional NSW. Schedule 1B of the Precincts Regional SEPP applies to land in the Moree SAP. The SEPP sets out the land use zones, zone objectives and land use tables.

The development is in the Regional Enterprise Zone which seeks to encourage regional enterprise and innovation in industry, provide opportunities for regional economic development and employment, attract industries that would contribute to and benefit from being close to major freight transport networks. Development for the purpose of electricity generating works is permissible with consent as an innominate use in the Regional Enterprise Zone. The project is consistent with the REZ – Regional Enterprise Zone under the Precincts – Regional SEPP, particularly by:

- providing opportunities for regional economic development and employment; and
- encouraging the development of industry leading renewable energy generation.

Section 3.8 of the Precincts-Regional SEPP requires the consent authority to have regard to the Moree SAP Master Plan and Delivery Plan when determining an application for development consent on land within the SAP. The Department has had regard to the requirements of the Master Plan and Delivery Plan in its assessment of the application and considers the development is consistent with the Plans.

State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP)

Chapter 3 of the Resilience and Hazards SEPP aims to identify developments with the potential for significant off-site impacts, in terms of risk and/or offence.

The Department is satisfied the PHA has been prepared in accordance with the Resilience and Hazards SEPP and the relevant Hazardous Industry Planning Advisory Papers. The PHA has demonstrated the volume of DG on the site would be unlikely to exceed the threshold limits in the Department's Hazardous and Offensive Development Guidelines 'Applying SEPP 33' and the development is not 'potentially hazardous' and does not pose an unacceptable risk to the community or the environment.

Chapter 4 of the Resilience and Hazards SEPP aims to provide a State-wide approach to the remediation of contaminated land.

The site is not located on contaminated land as identified in the Moree SAP Master Plan.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP)

Chapter 2 of the T&I SEPP aims to facilitate the effective delivery of infrastructure across the State and requires written notice to the electricity supply authority to be given for certain works that are likely to affect an electricity transmission or distribution network.

In accordance with the T&I SEPP, the Department has given written notice of the project to Transgrid. The Department has considered the advice received and, where appropriate, developed conditions of consent to address recommendations and advice from Transgrid.

Moree Plains Local Environmental Plan 2011 (Moree Plains LEP)

Clauses 2.6-2.8, 5.1, 5.8, 5.10 and 7.3-7.5 of the Moree Plains LEP 2011 apply to land in the Moree SAP. Relevant clauses to the development are considered below.

Table 8 | Consideration of relevant clauses of the Moree Plains LEP

Clause	Consideration
7.3 Airspace Protections	The Department has considered airport safeguarding matters in Section 6 of this report. The Department's assessment concludes the development is unlikely to have an adverse impact on airspace operations and will not compromise the effective and ongoing operation of the Moree Airport and the community will be protected from airport operations.
7.4 Development in areas subject to aircraft noise	The site is not within the ANEF contour for the Moree Regional Airport.
7.5 Development in the vicinity of Moree Meteorological Station	The development site is located outside of the Moree Meteorological Station Height Limit Map.

The Applicant has assessed and designed the proposal having regard to the relevant considerations of the Moree Plains LEP. The Department is satisfied the development is consistent with the relevant clauses.

Appendix D – Recommended Instrument of Consent

The Instrument of Consent can be viewed on the Department's project website here - <https://www.planningportal.nsw.gov.au/daex/under-consideration/moree-battery-energy-storage-system-da256636>