Department of Planning, Housing and Infrastructure

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Calala Battery Energy Storage System

State Significant Development Assessment Report (SSD-52786213)

June 2024

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 and present 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.

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Preface

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of the State significant development (SSD 52786213) application for the Calala Battery Energy Storage System located at Calala Lane, Calala, lodged by The Trustee for Equis Energy (Australia) Ngumi 4 Asset Trust. The report includes:

- an explanation of why the project is considered SSD and who the consent authority is;
- an assessment of the project against government policy and statutory requirements, including mandatory considerations;
- a demonstration of how matters raised by the community and other stakeholders have been considered;
- an explanation of any changes made to the project during the assessment process;
- an assessment of the likely environmental, social and economic impacts of the project;
- an evaluation which weighs up the likely impacts and benefits of the project, having regard to the proposed mitigations, offsets, community views and expert advice; and provides a view on whether the impacts are on balance, acceptable; and
- 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 project should be granted and any conditions that should be imposed.

Executive Summary

The Trustee for Equis Energy (Australia) Ngumi 4 Asset Trust (Equis) proposes to develop a 300-megawatt (MW) / 600 MW-hour (MWh) battery energy storage system (BESS), in the Tamworth Regional local government area.

The Department exhibited the Environmental Impact Statement and received 27 submissions, including 24 objections from the general public and three submissions from special interest groups (2 objections and 1 comment). Twelve government agencies and Tamworth Regional Council (Council) provided advice.

The project is located on largely cleared rural land that is currently primarily utilised for horse grazing. The land in the surrounding areas is mainly occupied by rural residential properties, with some areas being used for extensive agriculture and public use, and some irrigated crop farming on the Peel River flats. The proposed BESS would connect to TransGrid's existing Tamworth 330 kilovolt (kV) substation via a transmission corridor. Overall, the Department considers the site to be suitable for the project as it is located adjacent to the existing electricity network and would store and distribute energy to support reliable supply to NSW.

The Department has undertaken a comprehensive assessment of the full range of potential environmental impacts, including traffic, noise and vibration, landscape character and visual, land use, biodiversity, hazards and safety, heritage, water, waste, and cumulative impacts. The Department has also considered the socio-economic impacts and benefits associated with the project.

The Department considers the project would not result in any significant impacts on the local community or the environment, and any residual impacts would be minor and could be managed through conditions.

The project would provide flow-on benefits to the local community, including up to 170 construction jobs and contributions offered to Council of approximately $1.6 million through a Voluntary Planning Agreement, and an additional $600,000 for community benefits. There would be broader benefits to the State through an injection of $518 million in capital investment into the NSW economy.

The Department considers the project would not result in any significant impacts on the local community or the environment, and any residual impacts can be managed through the implementation of the conditions.

The Department considers that the project would result in benefits to the State of NSW and the local community and is therefore in the public interest and approvable.

Contents

1 Project

The Trustee for Equis Energy (Australia) Ngumi 4 Asset Trust (Equis), proposes to develop a new State significant development (SSD) battery energy storage system (BESS) approximately 6 km south-east of Tamworth, in the Tamworth Regional local government area (LGA) (see **Figure 1**).

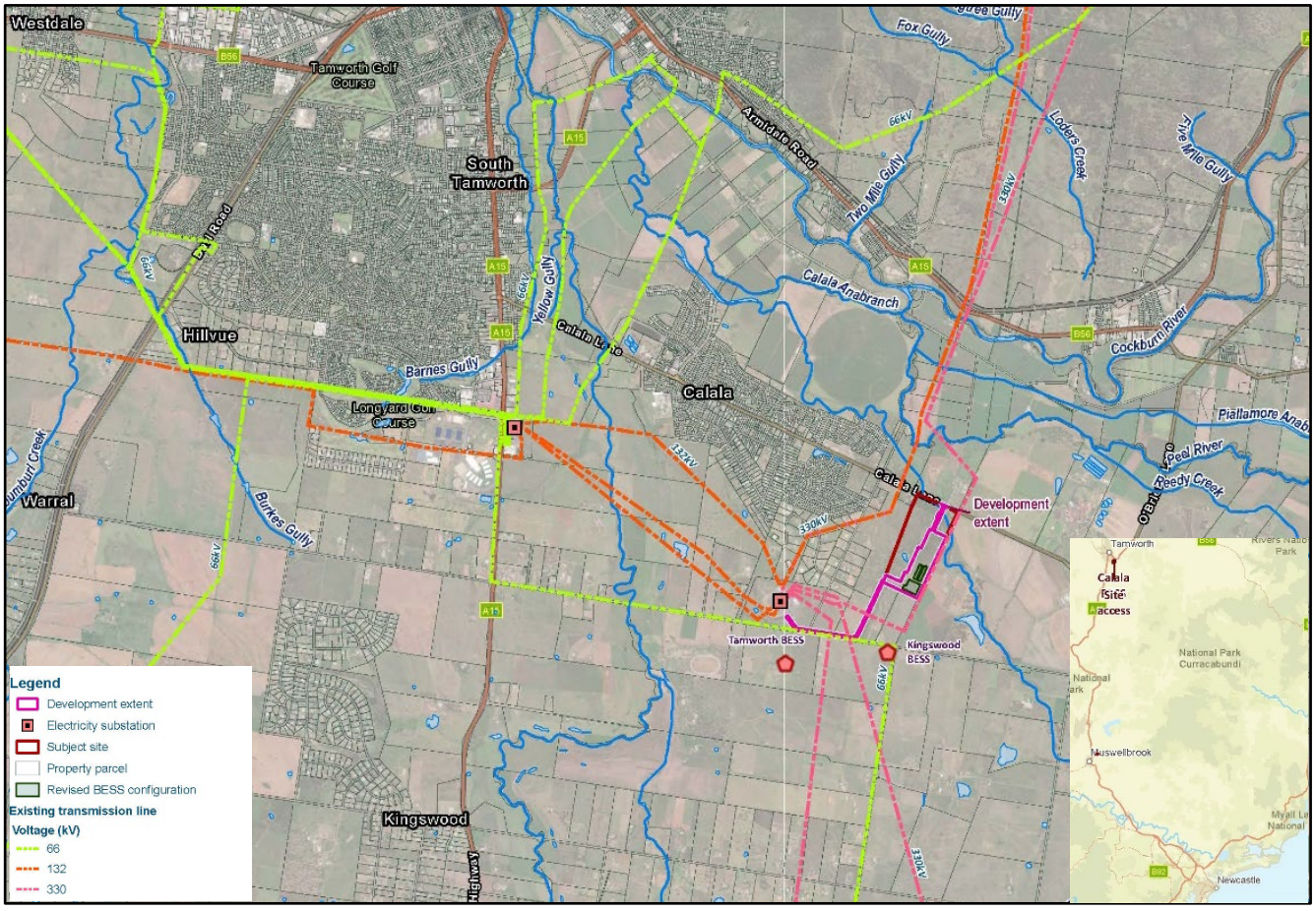

Figure 1 | Regional context map

The project involves the construction of a new BESS, with a storage capacity of up to 300 megawatts (MW) and discharge capacity of 600 MW-hour (MWh), connection to the existing Tamworth substation via underground transmission cable, and ancillary works.

Construction of the BESS would occur over approximately 18 months. Construction works would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm. The site would be accessed via a newly constructed driveway off Calala Lane.

The project also allows for the upgrading and decommissioning of equipment over time. The expected operational life of the project is 25 years with the possibility to extend. The key components of the project are summarised in **Table 1**, shown in **Figure 2**, and described in detail in the Environmental Impact Statement (EIS) and supporting documentation (see **Appendix A** and **Appendix B**).

Table 1 | Main Components of the Project

Aspect	Description
Project summary	The project includes: • site establishment including earthworks and installation of erosion and sediment control measures; • construction of a BESS with storage capacity up to 300 MW and 600 MWh discharge capacity comprising battery modules, a substation, inverter stations, distribution kiosks, a control room and switch room, and a warehouse; • installation of an underground transmission cable from the BESS to the Transgrid 330 kV Tamworth substation; • vehicular access from Calala Lane; • tree removal and landscaping works; and • installation of a noise barrier on the western side and security fencing.
Project location	Development footprint: 474 Calala Lane, Calala (Lot 17 DP629969) Transmission connection: 57 Burgess Lane, Calala (Lot 16 DP629969), Burgmanns Lane, Calala (Lot 3 DP244399), Burgess Lane, Calala (Lot 4 DP244399) and 707 Burgmanns Lane, Calala (Lot 6 DP219993)
Site Area	57.04 hectares (ha)
Development footprint	11.4 ha
Access route	• Heavy vehicles would travel to the site via the New England Highway, Nundle Road, O'Briens Lane and Calala Lane. • Light vehicles and heavy vehicles requiring escort would travel to the site via the New England Highway and Calala Lane.
Site access	The site would be accessed via a newly constructed driveway off Calala Lane.
Construction	Construction of approximately 18 months, with a peak period of 2 months. Hours would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.
Operation	The expected operational life of the project is 25 years (noting infrastructure upgrades may extend the operational life).
Decommissioning and rehabilitation	The site would be progressively rehabilitated during and following the construction period, including removal of the temporary construction facilities. At the end of operational life, aboveground components would be removed and the land rehabilitated to pre-development conditions.
Hours of operation	24 hours, 7 days per week.
Employment	Up to 170 jobs during construction and 7 jobs during operation.
Capital Investment Value	$518 million
Voluntary Planning Agreement (VPA)	Contribution of 0.31% of finalised Capital Investment Value (approximately $1.6 m), to be paid as a lump sum prior to commencement of construction and $200,000 for the first three years of operation of the project for community benefits, if agreed with Council.

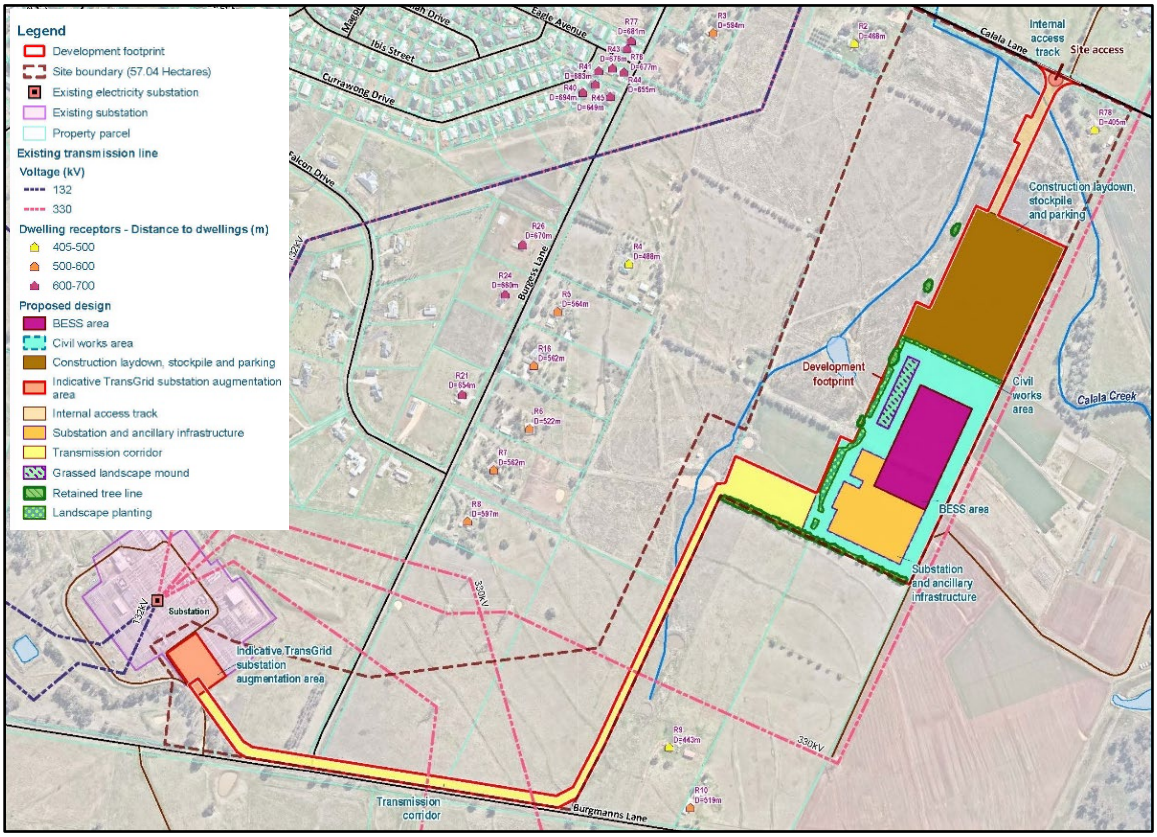

Figure 2 | Indicative development plan

2 Strategic context

The project aligns with the current strategic direction of the NSW Government which supports investment in transmission, generation, storage, and firming infrastructure in order to ensure secure and reliable energy in NSW. The dispatchable electricity from the project would assist with improving the stability and reliability of the electrical grid within the Tamworth Region and reducing greenhouse gas emissions.

2.1 Local Context

The project is located on a 36-hectare (ha) lot which is largely cleared rural land that is currently primarily utilised for horse grazing. The land in the surrounding areas is mainly occupied by rural residential properties, with some areas being used for extensive agriculture and public use, and some irrigated crop farming on the Peel River flats. Calala village is situated 500 metres (m) to the west along Calala Lane.

There are two other proposed BESS projects in the vicinity of the site, Kingswood BESS (SEARs issued) and Tamworth BESS (EIS lodged), which are located approximately 550 m south and 1 km southwest of the Calala BESS respectively, and Lambruk Solar Farm 8 km south (SEARs issued).

2.2 Energy Policy Context

With a capacity of 300 MW / 600 MWh, the BESS could power around 120,000 homes during peak demand, increasing 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.

3 Statutory context

3.1 State Significant Development

The project is classified as SSD under Section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021*, as it is development for the purpose of electricity generating works with a capital investment value of more than $30 million.

Consequently, the Minister for Planning and Public Spaces is the consent authority. However, under the Minister's delegation of 9 March 2022, the Executive Director Energy, Resources and Industry Assessments may determine the development application as Tamworth Regional Council (Council) did not object, there were less than 50 unique objections from the general public, and Equis has not made any political donations.

3.2 Permissibility

The proposed BESS site and transmission cable route is located within land that is zoned RU4 – Primary Production Small Lots under *Tamworth Regional Local Environmental Plan 2010* (LEP).

The project is permissible because electricity generating works are permissible with consent on RU4 land, under the LEP and under clause 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP).

3.3 Integrated and Other Approvals

Under Section 4.41 of the EP&A Act, the number of other approvals are integrated into the SSD approval process, and therefore are not required to be separately obtained for the proposal. Under Section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal.

The Department consulted with the relevant government agencies responsible for the integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent to address these matters (see **Appendix C** and **Appendix F**).

3.4 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. The Department has considered all of these matters in its assessment of the project, as well as Equis' consideration of environmental planning instruments in its EIS. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix H**.

4 Engagement

4.1 Department's Engagement

The Department exhibited the EIS from 16 November 2023 until 13 December 2023, notified surrounding landowners and advertised the exhibition in the *Northern Daily Leader*. The Department also consulted with Council and government agencies throughout the assessment, inspected the site in May 2024, and notified and sought comment from Transgrid and Transport for NSW (TfNSW) in accordance with the Transport and Infrastructure SEPP.

4.2 Submissions and Submissions Report

During the exhibition the Department received 27 submissions, including 24 objections from the general public and three submissions from special interest groups (2 objections and 1 comment).

The key issue raised in objections was concern regarding the merits of renewable energy and BESSs. Other concerns included environmental impacts, loss of agricultural land, fire safety and firefighting risk, contamination risk, health risk, amenity impacts and the ethics of the source of the imported components of the BESS.

Twelve government agencies provided advice and Council provided comments. Copies of all submissions and agency advice are attached in **Appendix C**.

Equis provided a response to all matters raised in submissions and agency advice in a Submissions Report (see **Appendix D**) and provided additional information during the Department's assessment (see **Appendix B**).

4.3 Summary of advice from Government Agencies and Council

A summary of the key matters raised in the government agency advice is provided in **Table 2**. The Department's consideration of the matters raised is provided in **Section 5** of this report.

Table 2 | Summary of Advice Received

Aspect	Key matters raised
Tamworth Regional Council	• Requested further information on traffic, water resources, stormwater management, erosion and sediment controls, waste, VPA, decommissioning and cumulative impacts (including worker accommodation). • Confirmed that all matters were resolved as part of the Submissions Report, additional information and recommended conditions.
NSW DCCEEW Biodiversity Conservation and Science Directorate (BCS)	• Requested further information be provided in a revised Biodiversity Development Assessment Report (BDAR) to align with the requirements of the Biodiversity Assessment Method (BAM). • Requested further information regarding impacts to Box Gum Woodland, targeted surveys and to confirm land categorisation.
Transport for NSW (TfNSW)	• Requested further information on road upgrades required for heavy vehicles requiring escort and proposed parking provisions.
DPI – Agriculture	• Requested further information on the potential impacts on the activities of DPI's Tamworth Agricultural Institute.
NSW DCCEEW – Heritage NSW	• Requested further information regarding consultation with Registered Aboriginal Parties (RAPs).
Fire and Rescue NSW	• Recommended preparation of a Fire Safety Study, Emergency Plan, Emergency Services Information Pack and Induction Package.
NSW DCCEEW Water	• Provided recommendations on water supply, controlled activities on waterfront land, and groundwater interception (licensing and exemption).
Rural Fire Service (RFS)	• Recommended mitigation measures, including a Fire Management Plan, Asset Protection Zones and water supply for firefighting.

DPI Fisheries, Siding Spring Observatory, Department of Regional NSW – Mining, Exploration & Geoscience (MEG), Crown Lands and Transgrid did not raise any concerns.

5 Assessment

The Department has assessed the merits of the project in accordance with the requirements of the EP&A Act and applicable NSW policies and guidelines. A summary of the Department's consideration and assessment of issues related to the project is provided in **Table 3.**

Table 3 | Assessment of Impacts

Energy Security
• The project aligns with a range of Commonwealth and State policies (see **Section 2**), 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 project 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 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. • 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.
Biodiversity
• The project would result in the loss of 1.79 ha of native vegetation (1.6 ha of derived native grassland and 0.19 ha of woodland), comprising: – 1.63 ha of PCT 599 – *Blakely's Red Gum-Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion*. This PCT is associated with the Threatened Ecological Community (TEC) *White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (Box Gum Woodland). This TEC is listed as a Critically Endangered Ecological Community (CEEC) under the *Biodiversity Conservation Act 2016* (BC Act) and 1.31 ha of this vegetation meets the condition threshold to be listed as a CEEC under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). – 0.16 ha of PCT 84 – *Rough-barked Apple-red gum-box riparian tall woodland (wetland) of the Brigalow Belt South Bioregion and Nandewar Bioregion*. This PCT is not associated with a TEC under the BC Act or EPBC Act. • Equis' assessment concluded that the project was not likely to result in significant impacts to species or communities listed under the EPBC Act and as such determined that referral to the Commonwealth Minister is not necessary. • The impact on native vegetation would generate 35 ecosystem credits under the BC Act and would be retired in accordance with the NSW Biodiversity Offset Scheme (BOS).

- The 1.63 ha of Box Gum Woodland CEEC is a serious and irreversible impact (SAII) candidate entity, based on Principles 1 and 2. The Department has considered the principles for determining serious and irreversible impacts in its assessment as set out in clause 6.7 of the *Biodiversity Conservation Regulation 2017*, including the *Guidance to assist a decision-maker to determine a serious and irreversible impact*.
- The project was designed to avoid impacts to this CEEC and Equis has committed to underground cabling using trenchless methods to avoid impacts. BCS considers the applicant has taken reasonable steps to avoid this SAII entity within the development footprint. Given that the removal of 1.63 ha of Box Gum Woodland would constitute 0.0006% of the current geographic extent of the community, the Department considers that the project would not contribute to further decline of the ecological community (Principle 1) and would not materially reduce the population size (Principle 2).
- BCS advice concluded that serious and irreversible impacts are unlikely. The Department considers there is unlikely to be a serious and irreversible impact on this SAII entity. Notwithstanding, the Department has included strict clearing limits on the clearing of Box Gum Woodland in the recommended conditions of consent.
- Targeted survey confirmed that there were no threatened species present within the development footprint.
- The Department has recommended conditions to prepare and implement a Biodiversity Management Plan in consultation with BCS to ensure the remaining biodiversity values onsite are appropriately managed and maintained.
- Noting the above, the Department and BCS consider the project is unlikely to result in a significant impact on biodiversity values.

Transport

- The site would be accessed via a new site access point off Calala Lane that would be constructed in accordance with *Austroads Guidelines*.
- Project related vehicles would access the site via:
  - Light vehicles: New England Highway, Goonoo Goonoo Road and Calala Lane.
  - Heavy vehicles: New England Highway (from the east or west), Nundle Road, O'Briens Lane and Calala Lane.
  - Heavy vehicles requiring escort (HVRE): New England Highway, Goonoo Goonoo Road and Calala Lane.
- Heavy vehicles delivering large plant and equipment during construction would travel from the Port of Newcastle, via the State Road network (Hunter Expressway and New England Highway via Singleton, Muswellbrook and Scone).
- During peak construction, the project would generate approximately 100 light vehicle and 120 heavy vehicle movements per day, and up to seven heavy vehicles requiring escort during the 18-month construction period. Operational traffic would be negligible.
- Traffic modelling indicates that the proposed transport route would have sufficient capacity to accommodate project related traffic for heavy and light vehicles. No road upgrades (other than for the site access within the road reserve) are required.

- Equis undertook a high-level assessment of the proposed transport route for HVRE, which demonstrated that proposed route could accommodate over-size over-mass vehicles. Equis proposes to provide final details on the proposed HVRE route in the traffic management plan, and apply to the National Heavy Vehicle Regulator for formal assessment and approval of the route. Consequently, the Department has recommended a condition requiring all relevant approvals to be obtained and implemented prior to the use of HVRE on the public road network (including approvals for any additional road upgrades required).
- Subject to the recommended conditions, the Department considers that the project would not result in significant impacts to the road network capacity, efficiency or safety.

Noise

- Twenty non-associated residences are located within 700 m of the site, with the closest (R9) approximately 400 m southwest from the BESS.
- Noise generated by construction activities is predicted to be below the 'highly noise affected' criterion of 75 dB(A) in the EPA's *Interim Construction Noise Guideline* (ICNG) at all surrounding residences. However, construction noise levels are predicted to exceed the 'noise affected' criterion of 45 dB(A) by up to 20 dB(A) at non-associated residential receivers R1 and R9. To mitigate these impacts, Equis has committed to undertaking consultation with these residences and preparing a Construction Noise and Vibration Management Plan to implement measures such us work scheduling, on-site controls and selection of plant and equipment.
- Road traffic noise during construction and operation would comply with the relevant criteria in the EPA's *Road Noise Policy*.
- Noting the above and that construction would be limited to daytime hours, the Department considers that construction noise impacts at all surrounding receivers would be acceptable.
- Without mitigation, noise generated by operational activities may exceed project trigger levels at some properties surrounding the proposed site, primarily limited to during adverse meteorological conditions and high operating temperatures.
- Equis has proposed a number of design measures in order to mitigate operational noise, including the implementation of 5 m noise walls, selection of BESS technology that minimises noise and locating BESS units away from receivers.
- With these proposed mitigation measures, exceedances are only predicted to occur on a small number of occasions under a combination of adverse meteorology and extremely high operating temperatures that would be expected to be present for no more than 10% of a season.
- Under these rare meteorological and temperature conditions, exceedances of project trigger levels would be limited to no more than 5 dB during daytime periods and 1 dB at night. Given the rarity of these events, and that levels would always remain below recommended rural amenity noise level objectives, the Department considers the operational noise impacts to be acceptable. Notwithstanding the rarity of extremely high operating temperatures, the Department has developed criteria that differentiates between typical and non-typical operating conditions to minimise potential noise impacts.

- No vibration impacts are predicted at any vibration sensitive receivers based on separation distances exceeding 200 m.
- With implementation of the proposed mitigation measures, including compliance with the NSW *Noise Policy for Industry* and a Noise Monitoring Report, the Department considers that noise can be appropriately managed and would not impact the amenity of the locality.

Heritage

- An assessment comprising background research and site surveys in consultation with Registered Aboriginal Parties (RAPs) identified no Aboriginal cultural heritage items on site, and no areas of archaeological sensitivity.
- The Department has recommended a condition requiring Equis to prepare a Chance Finds Protocol in consultation with RAPs and to the satisfaction of Heritage NSW to prevent unintentional harm to unexpected finds and Aboriginal sites outside the development footprint.
- The site and surrounds do not contain any items of historical heritage significance. If an item of potential archaeological significance is unexpectedly discovered, Equis has committed to ceasing work in the vicinity, contacting an archaeologist to make a preliminary assessment, and notifying Heritage NSW.
- Noting the above, the Department and Heritage NSW consider the project would not significantly impact the heritage values of the locality.

Land Use

- The site is largely cleared rural land that is currently primarily used for horse grazing. The remaining area surrounding the site includes agricultural land, electricity infrastructure and low-density residential lots.
- Land within the development footprint is mapped as Class 4 (moderate agricultural capability) under the *Land and Soil Capability Mapping for NSW* (OEH, 2017), and does not contain Biophysical Strategic Agricultural Land.
- Following receipt of additional information in the Submissions Report, DPI Agriculture confirmed they had no concerns regarding the project.
- The Department considers the project is suitable within the land use context of the locality, that it aligns with the objectives of the *New England North West Regional Plan 2041*, and it would not detract from the character of the area.
- The Department further considers the project is suitable within the land use context of the locality, and subject to the implementation of Equis' proposed acoustic and visual mitigation measures and the Department's recommended conditions of consent, would not detract from the character of the area or result in any land use conflicts.

Landscape Character and Visual Assessment

- Equis assessed the visual impacts of the development from representative viewpoints surrounding the site, including five public viewpoints and seven non-associated residential or representative residential viewpoints.

- The nearest non-associated residence (R9) is located approximately 400 m southwest from the BESS. The residence may have views of the project due to its elevated position, however the Department considers that visual impacts would be low due to existing intervening vegetation along the southern boundary of the site, which Equis proposes to retain and enhance.
- The Department considers that visual impacts would also be low at R1, R8 and R12, due to distance and intervening vegetation. While the site would only be partially visible from these residences, Equis has proposed landscaping to further screen views from these and other residences to the west and north, and will establish a grassed soil mound along the western portion of the site to mitigate visual impacts.
- Visual impacts at all other residences would be nil to negligible due to intervening vegetation, topography, existing buildings and due to the presence of existing transmission line infrastructure.
- Equis' assessment considered public viewpoints from surrounding roads, facilities and Flagstaff Mountain, concluded that impacts would be low. Views of the site from Calala Lane, Burgess Lane, and Burgmanns Lane would only be fleeting for motorists in transit.
- Subject to the proposed mitigation measures and recommended conditions, the Department considers the visual impacts are acceptable and the project would not fundamentally change the broader landscape characteristics of the area or result in any significant visual impacts on the surrounding non-associated receivers.

Water

- The site contains three dams (two of which would be impacted by the project) and two watercourses - Calala Creek, a second-order ephemeral creek to the north of the BESS site, and a first order non-perennial tributary. A culvert crossing is proposed where the site's internal access track intersects with Calala Creek, to accommodate the maximum probable flood level.
- Equis provided additional information and assessment regarding the proposed impacts to waterfront land in the Submissions Report (**Appendix D**), to the satisfaction of the Water Group.
- Noting that the maximum depth of infrastructure required for the project would be up to 2 m, the project is unlikely to intercept groundwater levels (reported to be at a depth greater than 4 m).
- While the site is not on flood prone land, it is situated south of the Peel River floodplain and partially affected by the Calala Creek floodplain.
- The site would not be inundated during the 1% Annual Exceedance Probability (AEP) flood event or the probable maximum flood event, and the development footprint will be raised by an earthworks pad. While a flooding event is highly unlikely to impact the site itself, O'Brien's Lane (the access road) may be impacted by flooding from Peel River and Calala Creek. To mitigate this risk, Equis have committed to postponing heavy vehicle access during flood events and monitoring forecasts and river levels to appropriately manage deliveries.
- The project would require up to 22.1 megalitres (ML) of non-potable water and 0.26 ML of potable water during construction.

- Approximately 4.33 ML of water would be required in the first year of operation for dust suppression and irrigation while the site is established. Ongoing operational water demand is estimated to be 10 kL per year, mainly for firefighting reserves.
- About 74% of water required would be sourced from Council supply, nearby farm dams and/or licensed groundwater bores. For the remaining water supply, the Department has recommended a condition requiring identification and confirmation of suitable water supply prior to commencement of water taking works.
- Council initially provided comments and requested additional information regarding hydrology, water resources, stormwater management and erosion and sediment controls, but confirmed that all matters were adequately addressed in the Submissions Report (**Appendix D**), and subject to the recommended conditions, including a requirement for measures to intercept and remove contaminants in the wet basin.
- Water quality impacts during construction would be managed by erosion and sediment control measures.
- Subject to the recommended conditions, the Water Group had no further concerns regarding water supply.
- Noting the above, the Department considers that the project would have negligible impacts on water resources and any potential impacts can be managed under the recommended conditions of consent.

Hazards

Hazard Analysis

- Equis' Preliminary Hazard Analysis (PHA) considered risk associated with transport and storage of hazardous materials, as well as the operation of the BESS itself, in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP), and the relevant Hazardous Industry Planning Advisory Papers.
- The PHA identified one medium risk event associated with unauthorised access resulting in asset damage. Recommended mitigation measures include locating the BESS within a secure area with fencing, warning signs and security cameras.
- All other potential risks were concluded to be tolerable with no significant off-site impacts, subject to the implementation of recommendations, including:
  - adequate separation distances both within the BESS (between components) and between the site and surrounding land uses;
  - relevant infrastructure and engineering controls installed and maintained (such as fire-fighting equipment); and
  - appropriate management processes put in place during construction and operations.
- The project would also comply with *the International Commission on Non-Ionizing Radiation Protection* guidelines for electric, magnetic and electromagnetic fields.
- The Department considers that the hazard risk for the project can be managed, subject to the recommendations of the PHA, preparation of a Fire Safety Study prior to commissioning, and the Department's recommended conditions of consent.

Bushfire Risk

- The site is identified as Category 3 bushfire prone land under Council's Bushfire Prone Land Map.
- To actively manage risk, Equis would implement a range of management measures including (but not limited to):
  - establish and maintain a 10 m asset protection zone (APZ) around project infrastructure;
  - establish internal road to meet appropriate property access arrangements;
  - comply with the requirements of RFS's *Planning for Bushfire Protection 2019* and Standard's for APZ's; and
  - provision of a static water source (one water tank with a capacity of approximately 30,000 litres (L) for firefighting purposes.
- The Department considers the fire and hazard risks for the project can be managed, subject to the recommended conditions including preparation of a Fire Safety Study and Emergency Plan, consistent with the recommendations of RFS and FRNSW.

Contamination

- A site investigation found that the risk of contamination at the site is unlikely and no further assessment or remediation is required.
- Equis would manage any residual risks as a part of an Unexpected Finds Protocol in the Construction Environmental Management Plan.

Social and Economic Impact

- The project would generate direct and indirect benefits to the local and broader community, including:
  - around $518 million capital investment into the NSW economy;
  - up to 170 construction jobs and seven operational jobs; and
  - the procurement of goods and services by Equis and their contractors, noting Equis' commitment to adopting a Local Jobs First Program.
- Equis and Council would enter into a VPA with an estimated value of approximately $1.6 million, and Equis would facilitate annual payments of $200,000 (CPI adjusted, either via the VPA or as a separate Community Benefit Fund) for the first three years of the project's operation. The Department has considered sections 7.12 and 7.13 of the EP&A Act and recommended a condition that, in the case that the VPA is not entered into prior to the construction commencing, Equis would instead be required to make a payment of $100,000, plus annual payments of $50,000 (CPI adjusted) for the life of the project.
- The project is unlikely to result in increased demand on community services and infrastructure and the facility would only require infrequent maintenance visits during operations.
- Equis has committed to sourcing workers locally and the Department considers that there is sufficient workers accommodation for this project. However, to manage potential cumulative impacts associated with multiple projects in the region, the Department has recommended a condition of consent requiring Equis to develop an Accommodation and Employment Strategy in consultation with Council.
- Overall, the Department considers that the project would have positive socio-economic impacts on the community.

Waste

- Standard construction waste such as concrete, excavated materials, green waste, metals, and general waste would be generated during the construction of the project. Battery units that fail during commissioning would be returned to the supplier and not directed to local facilities.
- During operation, waste would be avoided where possible, or otherwise removed and recycled where practicable.
- Tamworth Regional Council raised concerns regarding waste management and volumes during the construction and decommissioning phases. These matters were addressed by Equis in the Submissions Report (**Appendix D**) to Council's satisfaction.
- The Department has recommended conditions requiring Equis to reduce waste, recycle where possible, and to dispose of unrecyclable waste at a licenced facility. Accordingly, the Department considers that the waste generated by the project would be appropriately managed.

Cumulative Impacts

- As described in **Section 2.1,** the proposed Tamworth BESS and Kingswood BESS sites are located within 1 km of the project. The Department notes that at the time of lodgement of the EIS, Submissions Report and Amendment Report for the Calala BESS, development applications for the Tamworth BESS or Kingswood BESS had not been lodged. Accordingly, potential cumulative impacts with the Calala BESS project would be considered in the development applications for the Tamworth and Kingswood BESS projects, as per the Department's *Cumulative Impact Assessment Guidelines for State Significant Projects*.
- Equis' assessed the potential cumulative impacts of other approved and proposed projects in the region including the Middlebrook Solar Farm, Bendemeer Solar Farm, Hills of Gold Wind Farm and Thunderbolt Wind Farm, and concluded that impacts would not be significant.
- The Department considers that the proposed impacts to 1.79 ha of native vegetation would make a negligible contribution to cumulative biodiversity impacts in the region, and Equis have committed to avoiding impacts to Box Gum Woodland where possible.
- The Department considers that any residual cumulative impacts associated with the project and surrounding operations, would be adequately managed through the proposed mitigation measures and conditions of consent.

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.
- With the implementation of these measures, the Department considers that the battery would be suitably decommissioned at the end of the project life, or within 18 months if operations cease unexpectedly, and that the site would be appropriately rehabilitated. .

6 Evaluation

The Department has assessed the development application, EIS, Submissions Report and additional information, along with public submissions and agency advice. The Department has also considered the objectives and relevant considerations under Section 4.15 of the EP&A Act.

The project is permissible with consent in accordance with the Transport and Infrastructure SEPP. The site is situated on largely cleared rural land and is currently used for horse grazing.

The project has been designed to largely avoid key constraints and minimise environmental impacts, including road safety, impact on biodiversity values, noise and visual impacts to nearby receivers, watercourses, hazards and safety and land use conflicts. The Department considers that any residual impacts would be minor and could be managed through the recommended conditions of consent.

The Department considered the submissions made through the exhibition of the project and the issues raised by the community and agencies during consultation, including environmental, potential fire and amenity impacts. These matters have been addressed through changes to the project and the recommended conditions of consent, including strict requirements to manage any biodiversity impacts, fire risk, noise levels and visual impacts.

The project would provide flow-on benefits to the local community, including up to 170 construction jobs during peak construction and a capital investment of $518 million. A Voluntary Planning Agreement involving payments to Council of approximately $1.6 million is also proposed, as well an additional $600,000 for community benefits.

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 aligns with the objectives of the *New England North West Regional Plan 2041*. Further, the project 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, including frequency control ancillary services.

Accordingly, the Department considers that the benefits of the project outweigh its residual costs and that the project is in the public interest and is approvable, subject to conditions.

7 Recommendation

It is recommended that the Executive Director, as delegate of the Minister for Planning and Public Spaces:

- **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 Calala Battery Energy Storage System (SSD-52786213); and
- **signs** the attached development consent (**Appendix F**).

Prepared by:

Pragya Mathema, Environmental Assessment Officer

Recommended by:

28 June 2024

Elisha Dunn
Team Leader
Energy Assessments

Recommended by:

28 June 2024

Iwan Davies
Director
Energy Assessments

8 Determination

The recommendation is **adopted/~~not adopted~~** by:

28 June 2024

Clay Preshaw
Executive Director
Energy, Resource and Industry Assessments

Appendices

Appendix A – Environmental Impact Statement

Appendix B – Additional Information

Appendix C – Submissions and Government Agency Advice

Appendix D – Submissions Report

Appendix E – Amendment Report

Appendix F – Recommended Instrument of Consent

Appendix G – Notice of Decision

Appendices A to G available at: https://www.planningportal.nsw.gov.au/major-projects/projects/calala-battery-energy-storage-system

Appendix H – Statutory Considerations

In line with the requirements of Section 4.15 of the EP&A Act, the Department's assessment of the project has given detailed considerations of a number of statutory requirements. These include:

- the objects found in Section 1.3 of the EP&A Act; and
- the matters listed under Section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all these matters in its assessment of the project and has provided a summary of the assessment below.

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 4**.

Table 4 | Objects of the EP&A Act and how they have been considered

Aspect	Summary
Objects of the EP&A Act	The objects of most relevance to the Minister's decision on whether to approve the project are found in Section 1.3 (a), (b), (c), (e) and (f) of the EP&A Act. The Department considers the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as the project: • is a permissible land use on the subject land; • is located in a logical location for efficient energy storage; • is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; • would contribute to a more diverse local industry, thereby supporting the local economy and community; • would not fragment or alienate resource lands in the LGA; and • is consistent with the goals of *NSW's Climate Change Policy Framework* and *Net Zero Plan Stage 1: 2020 – 2030* and would assist in meeting Australia's renewable energy targets whilst reducing greenhouse gas emissions. The Department has considered the encouragement of ecologically sustainable development (ESD) (Object 1.3 (b)) in its assessment of the project. This assessment integrates all significant socioeconomic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk weighted consequences. In addition, the Department considers that appropriately designed SSD energy storage development, in itself, is consistent with many of the principles of ESD. Equis has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD. Consideration of environmental protection (Object 1.3(e)) is provided in **Section 5** of this report. Following its consideration, the Department considers that the project could be undertaken in a manner that would at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts could be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits. Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is also provided in **Section 5** of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality, and any residual impacts can be managed and/or mitigated by imposing appropriate conditions.

Aspect	Summary
State significant development	Under Section 4.36 of the EP&A Act the project is considered a State Significant Development. The Minister for Planning is the consent authority for the development. Under the Minister's delegation of 9 March 2022, the Executive Director, Energy, Resource and Industry Assessments, may determine the project.
Environmental Planning Instruments (EPIs)	The *Tamworth Regional Local Environmental Plan (LEP)* 2010 applies and is discussed in Section 3 of this report, particularly regarding permissibility and land use zoning. The proposal is permissible with consent under the LEP and under clause 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP). In accordance with the Infrastructure SEPP, the Department has given written notice of the project to Transgrid as the electricity supply authorities and TfNSW. Equis completed a preliminary risk screening in accordance with the Resilience and Hazards SEPP and confirmed the project observed no offsite impacts and that the project does not exceed the acceptable risk criteria. The Department has considered the remediated land provisions of the Resilience and Hazards SEPP. The site is not listed as a contaminated site in the NSW EPA Contaminated Land Record and list of the NSW Contaminated Sites. Given the site has historically been used for agricultural land uses, the Department considers the site would be suitable for the proposed development.