Transport for NSW

13 December 2024

TfNSW reference: WST24/0047/005
DPHI reference: SSD-67478479

Department of Planning, Housing & Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Megan Ramsdale

SSD-67478479 – Yanco BESS – Lot 516, 512, DP 751745, 120 Houghton Road, Yanco – Respnse to EIS

Transport for NSW (TfNSW) is responding to the Yanco Battery Energy Storage System (BESS), exhibited from 15 November to 13 December 2024 and referred via the Major Projects Portal.

TfNSW has reviewed the Environmental Impact Statement prepared by ACENERGY PTY LTD dated 8 November 2024 and Traffic Impact Assessment prepared by Traffic Works dated 7 November 2024 as key documents for preparing this response.

The information provided in the EIS does not demonstrate that the Yanco BESS has mitigated the traffic safety, efficiency and risks to TfNSW assets on the State road network. TfNSW therefore requests additional information relating to the key issues identified below and as detailed in **Attachment 1**, to form part of a revised TIA and EIS (where applicable), to be submitted with the Response to Submissions (RtS). The additional information will assist the Department of Planning, Housing and Infrastructures' (DPHI) assessment in respect to section 4.42(1)(f) of the *Environmental Planning and Assessment Act 1979.*

Key issues:

1. Land ownership details, queuing of the intersection and scope of intersections and/or scope of ancillary works requires clarification and updating to demonstrate compliance with Austroads, TfNSW Supplements and applicable technical guidelines and standards. Refer to Point 1.
2. Further information on the use of specific intersections relating to traffic assessment and swept paths need to be provided. Refer to Points 2 and 3.
3. The provided route assessment from the Port to the site requires further information. This is necessary to ensure the high-risk oversize and overmass (OSOM) vehicles needed to deliver from port to site identify any traffic mitigation measures and road upgrades required to undertake the high-risk OSOM movement for the project. This is to ensure compliance with Austroads and TfNSW requirements for high-risk OSOM vehicles. Refer to 4.
4. Impacts to the rail network are required to be considered. Refer to Point 5.

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On request, TfNSW can meet with DPHI and the Applicant to discuss the information in **Attachment 1**. If you have any questions, please contact Glen Hanchard, Development Services Case Officer, at 1300 019 680 or email development.renewables@transport.nsw.gov.au

Yours sincerely,

Sarah Anderson

Manager Development Services West
Transport Planning
Planning, Integration and Passenger

Attachment 1

SSD-67478479 – Yanco BESS – Lot 516, 512, DP 751745, 120 Houghton Road, Yanco – Respnse to EIS

This attachment relates to TfNSW's response dated 13 December 2024 reference WST24/0047/005.

Additional required information | TfNSW comments

TfNSW requests the additional information of the key issues identified and as detailed below to be included in a revised TIA and EIS (where applicable) and submitted with the Response to Submissions (RtS). It must be clear where changes have been made in the revised TIA, which can be in the form of a document with tracked changes or a table provided in the updated TIA detailing where and what changes have been made.

1. Land ownership detail and access arrangements

Section 2.2.2 provides a complicated land ownership of Houghton Road. Evidence of consultation with permission from landowners including Transport Asset Holding Entity (TAHE) must be provided. Consultation with other stakeholders with right of access on this land should also be undertaken and a final agreement for the use of this road provided to DPHI.

2. Update strategic concept designs for intersection road upgrades

Strategic concept design for the proposed intersections with Irrigation Way will need to be updated in line with the following requirements:

a) Houghton Road/Irrigation Way rural basic right turn (BAR) A values appear to have been designed for the posted speed of 60 km/h. It is TfNSW practice to design for 10km/h above posted speed limit. This would increase the A value to 22.5m.

b) Houghton Road is a gazetted B-Double route to enable B-Doubles access to the GrainCorp Silos. The BAR S values should be rectified to allow for a 26m D Double not a 19m semi trailer.

c) B-Double tracks on the chevroned median to complete the left turn out manoeuvre. A driver is likely to align their movement to the edge of the median and track further into the shoulder. This has the potential for heavy vehicles to track over the shoulder / verge interface and may result in edge break. TfNSW requests the shoulder be widened to accommodate this.

d) Considering point 2(c), updated swept paths are required for the design vehicle demonstrating concurrent turn movements in all directions.

e) Applicant is to consider the potential risks of installing a rural basic right turn (BAR) treatment at Houghton Road close to the access to Yanco rural Fire Station driveway and the railway line.

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f) Drainage detail must be provided on the strategic concept designs for intersections proposed to be widened. This includes a typical cross section. An example can be provided to understand the required detail if required. See attached fact sheet for more information:

Strategic-Design-requirements-for-DA-Factsheet.pdf

3. Traffic Impacts

a) The updated TIA must demonstrate the full staging/timing of the traffic volumes and works required, including any pre-construction minor works/enabling works. It must also identify any mitigation measures (e.g., TTM) and the flow-on impacts of this work. Separate turn warrant assessments are also to be completed for peaks of any pre-construction minor works.

b) The peak traffic distribution provided in Section 3.3 has made assumptions about the directional split for construction traffic, however, the TIA does not detail the basis for the distribution assumption. Additional information regarding the origin and destination and routes for construction traffic is required to be provided within the revised TIA.

c) The intersection with Houghton Road and Irrigation Way is close to a GrainCorp Silo. Evidence of consultation with GrainCorp must be provided regarding their traffic volumes and peak seasons in the form of a letter from GrainCorp. The TIA is to be revised to either:

   i. The turn warrants assessment is to be revised in accordance with Austroads Guide to Traffic Management and Road Design to include the turning and background traffic volumes associated with the peak harvest traffic volumes for the Houghton Road/Irrigation Way intersection or

   ii. Alternatively, identify enforceable mitigation measures that will restrict the construction traffic volumes for the project during the harvest season to ensure that the project traffic will conform with the proposed intersection treatments, during this period.

d) Include within the revised turn warrant assessment any cumulative construction overlaps with the nearby Yanco Solar Farm in the background and turning traffic volumes, where the projects have overlapping timeframes, and include overlap of other nearby developments. There does not appear to have been full consideration of possible cumulative traffic volumes for the affected state roads. If the BESS roads are not to be used by the solar farm, details on how this will occur should be provided.

e) The TIA is to be updated to assess the impacts caused by traffic during the peak hour and potential short stacking between railway lines prior to entering the Houghton Road intersection. There following is to be considered:

   i. Minimal storage is available between the railway lines on the approach to Houghton Road. A diagram is to be provided that demonstrate how large project vehicles will safely navigate the crossing and avoid queuing.

   ii. SIDRA modelling is to be provided regarding queuing volumes,

   iii. Detail on how mitigation measures including intersection upgrades will be implemented.

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f) Clarification is required if Houghton Road is to be the only road used for departure access from the state road network for the project and no other roads (i.e., intersection of Euoley Road). If other intersections with the state road network are to be used, detailed assessment of the traffic impacts as outlined in the SEARs for this project will be required.

g) Identify mitigation measures to avoid construction traffic during Yanco Sporting Field game days.

4. Update high-risk OSOM route assessment for all routes

The following section provides overall considerations for the identified route from the Port Kembla in the assessment provided, which need to be resolved and included within the revised TIA.

a. Traffic of heavy mass vehicles and vehicles with very large axle group loadings are proposed, which may be an issue for older short span bridges. The OSOM route requires bridge and culvert assessments to be undertaken. Contact spu@transport.nsw.gov.au to apply for the bridge and culvert assessment review for the state road network assets.

   Note: Results of the bridge assessments may result in a change to the route which must be provided in an updated route assessment. TfNSW encourages the Applicant to consult on bridge assessments.

b. The RJA route assessment does not include all relevant TfNSW projects or other third-party projects that are currently under construction, or will be completed, on the State road network for either route. The route assessment must be updated to include mitigation measures or modifications required to navigate any identified road or rail project along the routes (i.e., upgrades to the Princes Highway entrance at Wollongong / University of Wollongong).

c. An extensive review of the height obstructions along the high-risk OSOM route (e.g., powerlines and gantry heights) is required, and mitigation measures to navigate them must be clearly identified.

d. Any pavement widening or other road modifications identified within swept path review of pinch points along the state road network must be accommodated by strategic concept designs, prepared in accordance with TfNSW strategic concept design fact sheet (2D section) and must include typical sections for any changes to the roadside drainage.

e. Updated swept paths are also required for the check high risk OSOM vehicle to demonstrate they can access the intersection of Houghton Road any other relevant intersections on the state road network without requiring further road widening or modifications to the state road network formation.

f. Swept paths and parking plans must be provided for each pullover, layby, and rest area on OSOM routes, demonstrating applicable high-risk OSOMs can physically be accommodated and mitigate impacts to other road users.

   Note: Locations (including GPS Coordinates) and identification of the OSOM design vehicle used to access each pullover, including rest areas must be included.

g. The route assessment needs to include temporary safety mitigation measures and remediation treatments. I.e., where raised concrete medians are required to be removed, please state how this will be remediated post construction.

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h. Strategic concept designs are to be provided to identify the removal and relocation of any TCS or light poles (if identified within the revised route assessment) in relation to the state road network.

i. Timing of high-risk OSOM deliveries within the construction schedule, indicative weekly program(s), and timeframe to complete deliveries from relevant port to the site are required.

j. A vertical typical curve assessment is to be provided for the rail underpass on Sturt Highway at Wagga Wagga before any further consideration of the proposed route is made. This is required as the clearances of the underpass may impact the viability of the transport route for blade components.

k. Consideration of the height constraints along the Hume Highway must be undertaken, including the Fairway Drive overpass which has a 5.2m maximum restriction.

l. Updated route assessment identifying any roundabout intersections to be removed, (this includes those along the Sturt Highway identified on page 13):

   i. Clarification on whether a portion of roundabouts will be removed or if it is proposed to mount existing annulus(es). If mounting is required, assessment of the existing suitability or upgrades required to the roundabouts for the movements must be included.

   ii. Swept paths and road design plans for impacts on the roundabout(s).

   iii. Vegetation trimmed or removed and other infrastructure to be removed or modified.

5. Proximity to Rail Corridor rail impacts

The site is located adjacent to the non-operational rail corridor from Yanco to Willbriggie.

This part of the rail corridor is currently non-operational, however TfNSW is required to ensure that the rail corridor is able to become operational in the future with no significant additional safety risks or costs as a result of new development. Further, the works required for Irrigation Way / Houghton Road intersection on Lot 1 DP 931848 & Lot 1 DP 1072592 is within the CRN operational rail corridor from Narrandera to Yanco and Yanco to Griffith. The following must be considered in relation to the rail corridor in the response to submissions:

a. Access to Rail Corridor – It is noted that that the proposed Irrigation Way/Houghton Road intersection upgrades is within the railway land/ rail corridor. Therefore, prior commencing the intersection upgrade works, the applicant shall submit Licence for access application to UGLRL third party works via thirdpartyworks@uglregionallinx.com.au.

b. Rail Crossing – The applicant shall provide an updated TIA that addresses any short stacking issue over the level crossing near to the proposed intersection upgrade. The updated TIA must investigate this issue and include mitigation measures to any short stacking issues across the level crossing.

c. Potential Contamination – Rail corridors are generally deemed to be contaminated unless otherwise provide by sample testing. In accordance with State Environmental Planning Policy (Resilience and Hazards) 2021 - Section 4.6 'Contamination and remediation to be considered in determining development application' (Previously State Environmental Planning Policy No. 55 – Remediation of Land), the consent authority must consider whether the land is contaminated.

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d. Transport Route Assessment – In the RTS stage, if the proposed construction route (Port Kembla) is crossing any CRN rail corridor/rail infrastructures, the applicant is advised to include identified crossings on CRN rail corridor in the updated EIS documents and TIA. In addition, if any adverse impacts to CRN corridors are identified, the applicant shall seek approvals from UGLRL and TfNSW.

   Note: If the applicant wants to use UGLRL-managed assets or infrastructure for OSOM/heavy vehicles, the applicant must lodge a request for a permit via the National Heavy Vehicle portal or send the request directly to UGLRL via "heavyvehicle@uglregionallinx.com.au". The applicant must submit at least 2 months before passage and include the specifications of their OSOM and heavy vehicles (axial loading and axial spacing as well as dimensions of the heavy vehicles) with the lodgement of the request.

   Note: it is advised that the proposed transport routes would be crossing the rail corridors managed by Agencies other than TfNSW. It is recommended that the DPIE should refer this application to other relevant agencies (e.g., ARTC & Sydney Trains).

e. Cranes and Equipment - In the RTS stage, the applicant should outline whether the construction would involve the use of Equipment in the air space above the rail corridor of the CRN.

   In the event that Cranes are required to be used in air space above the rail corridor, the applicant should provide a safety assessment of the works necessary for the Proposal assessing any potential impact or intrusion on the Danger Zone (as defined in the UGLRL Network Rules and Procedures UGLRL Network Rules and Procedures).

   It is noted that any work must be undertaken by a qualified Protection Officer (as defined in the UGLRL Network Rules and Procedures UGLRL Network Rules and Procedures). Also, the use of mobile cranes must be in accordance with the AS 2550 series of Australian Standards, Cranes, Hoist, and Winches, including AS2550 15-1994 Cranes – Safe Use - Concrete Placing Equipment.

f. Stormwater Management - Excavation In, above, or adjacent to rail corridor - In RTS stage, the applicant should outline whether the proposed BESS and any other activities would involve any excavation more the 2m below ground level within the rail corridor or within 25m of the rail corridor.

   If there is any such excavation activity, the applicant shall undertake further analysis including a geotechnical and structure engineering assessment outlining the risk and mitigation strategies for all phases of the project (construction, operation, and decommissioning) demonstrating that there will be no adverse impact on the stability and integrity of the rail corridor and rail infrastructure contained in the CRN.

g. Survey - The applicant shall provide an accurate survey locating the development with respect to the rail boundary and rail infrastructure. The work is to be undertaken by a registered surveyor, to the satisfaction of UGLRL on behalf of TfNSW.

h. Construction - The applicant shall submit a Risk Assessment/Management Plan and Safe Work Method Statement (SWMS) detailing any impact on the CRN rail corridor to UGLRL and TfNSW and obtain written approval.

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Note – TfNSW Rail Team requests further consultation by the applicant and DPHI on any conditions of consent. Initial recommended conditions are as follows, but may change subject to further information provided:

- *Lights, Signs and Reflective Materials - The design, installation and use of lights, signs, and reflective materials, whether permanent or temporary, which are (or from which reflected light might be) visible from the rail corridors must limit glare and reflectivity to the satisfaction of UGLRL on behalf of TfNSW. The use of Red, Amber, or Green lighting colours to avoid adverse effects on train running schedules and safety issues due to misidentification of lighting colours. The Principal Certifying Authority (PCA) shall not issue the relevant construction certificate until written confirmation has been received from UGLRL on TfNSW confirming that this condition has been satisfied.*
- *Fencing - The appropriate fencing is to be installed or maintained between the boundary of the proposed development site and the rail corridor in accordance with the relevant CRN civil standards relating to Boundary Fences including CRN CS 510 (standard) (BOUNDARY FENCES (sitecorecloud.io)), CRN CM 511 Boundary Fences (manual) (BOUNDARY FENCES (sitecorecloud.io)), and CRN CP 511 Boundary Fences (specification) (Boundary Fences (sitecorecloud.io)) to prevent unauthorised access.*
- *Before commencing any fencing work (either new installation, upgrade, or renewal), the applicant must provide fencing design/site plans to UGLRL and TfNSW for approval. The applicant is advised to contact UGLRL's third-party works via thirdpartyworks@uglregionallinx.com.au for more information.*

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