

11 December 2024

TfNSW reference: WST24/00395/001
Your reference: SSD-53293710

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

Attention: David Way

**SSD-53293710 – Mallee Wind Farm - Access via Silver City Highway / Arumpo Road, Wentworth
Local Government Area – Response to EIS**

Dear David,

Transport for NSW (TfNSW) is responding to Mallee Wind Farm Environmental Impact Statement (EIS), exhibited from 13 November to 10 December 2024 and referred via the Major Projects Portal.

TfNSW has reviewed the Environmental Impact Statement prepared by Spark Renewables– November 2024 and the Traffic and Transport Assessment prepared by Access Traffic – 25 September 2024 as key documents for preparing this response.

The information provided in the EIS does not demonstrate that the Mallee Wind Farm project 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. 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 (staging/timing and accommodation facility volumes) and swept paths need to be provided. Refer to Point 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 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 Point 4 and 5.
4. Impacts to the rail network are required to be considered. Refer to Point 6.

OFFICIAL

On request, TfNSW can meet with DPHI and the Applicant to discuss the information in **Attachment 1**.

If you have any questions, please get in touch with Glen Hanchard, Development Services Case Officer, at 1300 019 680 or email development.renewables@transport.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink that reads "Sarah Anderson".

Sarah Anderson

Manager Development Services West
Transport Planning
Planning, Integration and Passenger

OFFICIAL

Attachment 1

SSD-53293710 – Mallee Wind Farm - Access via Silver City Highway / Arumpo Road, Wentworth Local Government Area – Response to EIS

This attachment relates to TfNSW's response dated 11 December 2024 reference WST24/00395/001

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) Update strategic concept designs for intersection road upgrades

The strategic concept design for the proposed intersection of the Silver City Highway and Arumpo Road will need to be updated in line with the following:

- a. The applicant proposes to increase the use of the existing treatment, please review this to ensure it meets minimum Austroads requirements in *Austroads Guide to Road Design, Part 4A* and *Austroads Guide to Traffic Management Part 6*.
- b. The layout for the intersection will need to be amended to comply with the A value within Table 7.2 of *Austroads Guide to Road Design Part 4A*. The current A value is 55m which is introducing a reverse curve movement. The A value is to be increased to ensure It is tangential and not introducing a reverse curve movement to conform with Austroads.
- c. The current design proposes a short chevron on approach into the rest area egress. The departure chevron line markings must be increased in area to conform with *Part 4A of Austroads Guide to Road Design*. A widened shoulder that complies with Austroads is to be included within the revised design.
- d. The design does not identify how the northern portion of the existing intersection where there are two existing northbound lanes will be tied into proposed changes to the road geometry. In addition, the second auxiliary lane is too short to be an acceleration lane or to be used as an overtaking opportunity. Please revise in accordance with *Austroads Guide to Road Design Part 4a*.
- e. The right turn from Silver City Highway onto Arumpo Road requires signs to be relocated or made removable on the inside of the corner of turn. The design is to be revised to address this issue.
- f. Widening to accommodate high-risk OSOM vehicles identified within the RJA Route Assessment for the state road network are required to be permanent pavement and not temporary hardstand treatments and must be consistent with the existing pavement of the state road network.
- g. 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. See fact sheet [Strategic-Design-requirements-for-DA-Factsheet.pdf](#)

OFFICIAL

2) Revised Traffic Impact Assessment (TIA)

The TIA is to be revised to address the key issues raised below in relation to the inclusions of staging, pre-construction minor work, workforce accommodation scenarios, traffic associated with input materials and the inclusion of accumulative traffic volumes:

- 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) and the flow-on impacts of this work. The revised TIA is to include separate turn warrant assessments are also to be completed for peaks of any pre-construction minor works.
- b. Section 1.2.2 notes that a temporary workforce accommodation will be provided “if required”. The application is to provide detail on the scenarios that would determine requirement of the facility and provide specific detail including location, timing (would it be part of pre-construction minor works) and traffic volumes for the camp (traffic volumes should be inclusive of any staging, parallel construction activities while the camp is being constructed, the traffic volumes post completion of the workforce accommodation camp and any parallel activities that will occur post completion of the workforce accommodation.
- c. Noting that the project proposes optioning of the accommodation camp then both the with the accommodation camp and without the accommodation camp scenario is required to be assessed inclusive of any changes to the strategic concept designs.
- d. The TIA in the accompanying route study identifies the intersection of the Sturt Highway and Danson’s Road as a possible access point to the site. The study identifies that further assessment is required to determine the routes suitability. The Response to Submissions must clarify if this intersection is to be used by the project and for what purposes. If proposed to be used for the project, a full assessment of impacts, similar to that provided for the Arumpo Road / Silver City Highway intersection will need to be provided. Traffic mitigation measures and strategic concept designs are required to accompany the resubmission of the revised TIA.
- e. Section 4.2.1 notes that quarry materials are proposed to source from a local quarry and that transport requirements would have been assessed as part of the consent for quarry operations. All volumes of deliveries should be provided for the purposes of the Wind Farm (including for water and other items) are to be assessed within the TIA, including traffic volumes, distribution splits at key intersections with the state road network, routes and the turn warrant assessments are to be adjusted accordingly based on the inclusion of the quarry and other input materials for the wind farm.
- f. The potential for cumulative construction overlap is identified however there does not appear to have been full consideration to the general increase in traffic volumes for the affected state roads. A broader assessment of combined impacts of all projects (EIS or approved) that will be present in the background traffic or turning traffic volumes are to be included within the revised TIA and turn warrant assessment.
- g. The routes, traffic distribution splits at each intersection and the AM/PM project peak data is required to be included within the revised TIA and form the basis of the revised turn warrants assessment, referenced in 2(g).
- h. The TIA is to be revised to address the above points within a revised turn warrant assessment, prepared in accordance with the above requirements and set out within Figure 3.25 of *Austrroads Guide to Traffic Management Part 6*. Amended strategic concept designs for the state road network are to be included in the revised TIA will need to be provided based on the outcome of the updated turn warrants assessment.

OFFICIAL

3) Update swept path assessments for all State roads

Swept paths are to be provided for the Silver City Highway / Arumpo Road Intersection for the design vehicle demonstrating the concurrent turn movements in all directions and for the check vehicle (the largest high-risk OSOM) demonstrating that the check vehicle will complete the arc within the pavement and the offset requirements without creating additional impacts to State road assets.

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

The following section provides overall considerations for all identified routes in the assessment provided, which need to be resolved and included within the revised TIA. Refer below for specific comments related to routes from the Port of Newcastle.

- 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 an assessment of the bridges and culverts of TfNSW assets on the state road network.

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. An extensive review of the height obstructions along the high-risk OSOM route (e.g., powerlines, traffic control signals and gantry heights) is required, and mitigation measures to navigate them must be clearly identified.
- c. Intersection widening is proposed along the routes. Strategic concept designs must be updated with typical sections depicting transverse and longitudinal drainage requirements and compliance with Austroads.
- d. Dimensions of swept paths and parking plans must be provided for each pullover, layby, and rest area on OSOM routes, demonstrating that 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.

- e. The route assessment needs to include road modifications where raised concrete medians must be removed.
- f. The Traffic Control Signs (TCS) layout and TCS changes must be assessed for each route, where TCS is identified as a pinch point. Changes to TCS will require the identification of a strategic concept design.
- g. The location and details of light poles to be relocated on the State road network must be clearly identified (e.g., Gillenbah Intersection). The proposed relocations must comply with TfNSW requirements.
- h. The timing of high-risk OSOM deliveries within the construction schedule, indicative weekly program(s), and timeframe for completing deliveries from the relevant port to the site are required.
- i. Details of road geometry and alignment along the identified transport routes must be clearly identified, including:
 - existing formations, crossings, medians, transmission lines, roundabouts, bridges, intersection treatments and any identified hazards;

- each at-risk road structure i.e., bridges, traffic signals, signage, powerlines, medians, major and minor culverts.
- j. Plantings and beautification works in the roundabout and medians at Buronga are substantial, and pavement levels are significantly higher than those of the road pavement levels. Consideration should be given to avoiding the modifications to the roundabout and medians within Buronga.
- k. Concept diagrams are required for the works to roundabouts along the Sturt Highway including at the intersection of Carey Street /Sturt Hwy and at the intersection of Sturt Highway and the Cobb Highway.
- l. The RJA route assessment only includes some relevant TfNSW projects or other third-party projects 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., Hexham Straight project).
- m. With reference to the above point, the route assessments must be updated to assess the alternative route via Newcastle Inner City Bypass to Newcastle Road for high-risk OSOM loads that do not exceed the vertical clearance limitations post-completion of the road upgrades along this route.

5) High Risk OSOM Port of Newcastle Routes

The following section provides specific comments for the Newcastle Route assessments from the Port of Newcastle.

Route 1 – via Sydney - Blades and Components Under 5.0 m loaded height

- a. The NorthConnex tunnel operator will need to be consulted, and any assessments and mitigation measures regarding the tunnel's use in proposed Route 1 will need to be identified.
- b. A vertical typical curve assessment is to be provided for the rail underpass on Sturt Highway at Wagga Wagga before further consideration of the proposed route is made. This is required as the underpass clearances may impact the viability of the transport route for blade components.
- c. The height constraints along the Hume Highway must be considered, including the Fairway Drive overpass, which has a maximum restriction of 5.2 m.
- d. The Route 1 study suggests a maximum laden height of 5.0 metres whilst Route 2 suggests a maximum laden height of 5.9 metres, however the blade proposed to utilise route 1 is 5.2 metres high and the base tower section proposed to utilise Route 2 is 6.1m high. The Updated TIA will need to correct the discrepancy and confirm if the error relates to the maximum total heights for the routes or the maximum height for the loads. Further identification of other height limits considering the updated data must be provided.
- e. Removing traffic islands at the Gillenbah Road/Sturt Highway pinch point to facilitate the high-risk OSOM movements will conflict with the service centre conditions and infrastructure, prohibiting right turns into Gillenbah Road. Designing this pinch point without impacting the service centre must be investigated and included within a revised route assessment (including swept paths and strategic designs).
- f. Updated route assessment identifying any roundabout intersections to be removed (ie. along the Sturt Highway):

- Clarification on whether a portion of roundabouts will be removed or if it is proposed to mount existing annulus(es). If mounting is required, an assessment of the existing suitability or upgrades required to the roundabouts for the movements must be included.
- Swept paths and road design plans for impacts on the roundabout(s).
- Vegetation is trimmed or removed, and other infrastructure is to be removed or modified.

Route 2 via Golden Highway, Newell Highway, Sturt Highway and Silver City Highway

- The RJA route assessment and TIA is contingent upon road upgrades provided by EnergyCo from the Port of Newcastle to Elong Elong. Pavement extents and the scope of works must be reviewed to ensure configurations and swept paths for this project's higher-risk OSOM align with the scope of the Port to Renewable Energy Zone (P2R) project, particularly the relocation of traffic signals at George Street, Industrial Drive and Maitland Road intersections. An assessment of consistency with the P2R project is required as a part of the revised route assessment.
- The refugee island at Bettington Street and Vernacher Street, Merriwa is located on a State Classified road (Golden Highway). The scope of works must be provided in the form of a strategic concept design identifying the removal of the refugee island and evidence of consultation with Upper Hunter Shire Council.
- An updated route assessment is required to provide further details regarding the realignment of the Newell Highway near Tomingley for the Gold Mine and the Parkes Bypass.
- Further assessment of the Tomingley Road to Newell Highway intersection is required regarding the existing medians' ability to be mounted. Strategic concept designs will be required for any changes.
- Further information is required on managing the detour at West Wyalong.
- The Traffic Control Signal (TCS) post at Dowling Street is proposed to be removed. The TCS layout must be amended and submitted for review and approval.

6) Inclusion of Country Rail Network rail crossing impacts in the route assessment

All matters involving the Country Rail Network (CRN) must adhere to the transport management and safety requirements of RGLRL and TfNSW. Relevant approvals for use, impact or changes to level crossings must be sought from UGL Regional Linx (UGLRL) and TfNSW.

Any potential and known adverse impacts to the rail crossings along the CRN must be considered, with all crossings identified and included in the high-risk OSOM route assessment, revised TIA and the RtS. This includes the following routes:

- Port of Newcastle (Route 1) – The Heavy Vehicles and OSOM access route will be crossing the CRN non-operational rail corridor at two (2) locations:
 - Sturt Highway route crossing from Narrandera to Tocumwal rail corridor at Narrandera
 - Hume Highway route crossing non-operational rail corridor from Cootamundra to Gilmore at Coolac.
- Port of Newcastle (Route 2) – High Load Route, Max Loaded Height 5.9m. The Heavy Vehicle and OSOM access route will be crossing the CRN rail corridors / rail infrastructure at eight (8) locations.
 - Sturt Highway: Crossing non-operational rail corridor from Narrandera to Tocumwal rail corridor at Narrandera

- Newell Highway: Crossing Overbridge and operational rail corridor from Junee to Narrandera at Narrandera
- Newell Highway: Crossing Public Vehicle Level Crossing and operational rail corridor from Temora to Griffith at Mirrool
- Newell Highway: Crossing Public Vehicle Level crossing and non-operational Barmedman to Rankins rail corridor at Alleena
- Showground Road: Crossing Public Vehicle Level crossing and CRN operational rail corridor from Barmedman to West Wyalong at West Wyalong
- Boothenba Road: Crossing the public level crossing and CRN operational rail corridor from Dubbo to Coonamble at Troy Junction
- Newell Highway - Crossing public level & pedestrian level crossing and CRN operational rail corridor from Molong to Parkes at Parkes
- Golden Highway - Crossing CRN non-operational rail corridor from Sandy Hollow to Merriwa at Gungal

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.