

2 October 2024

TfNSW reference: WST24/00213/002, WST22/00202, SF2024/103126

Your reference: SSD-50505215, PAE-75002470

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

Attention: Lauren Clear

SSD-50505215 – EIS Exhibition Bullawah Wind Farm - Request for additional information

Dear Lauren,

Transport for NSW (TfNSW) is responding to the exhibition of the Environmental Impact Statement (EIS) for Bullawah Wind Farm referred via the Major Projects Portal on 21 August 2024. TfNSW have reviewed the EIS and the Traffic Impact Assessment (TIA) (Appendix 2) as key reports in formulating this response.

TfNSW requests additional information is provided as part of the Response to Submissions (RtS) and a revised TIA to address the key issues identified below and the actions necessary to address these issues as raised in **Attachment 1** and **Attachment 2**. The additional information will assist the Department of Planning, Housing and Infrastructure's (DPHI) assessment in respect to section 4.42(1)(f) of the *Environmental Planning and Assessment Act 1979* for traffic and safety impacts on the State road network.

In addition, the Applicant is requested to engage with TfNSW on the preparation and provision of the information regarding **Attachment 2**, due to the on-going nature of road assessments occurring along the multiple route options identified for the project.

Key issues

1. Updated turn warrants are requested for assessing the traffic impacts to accurately scope the required road upgrades for the project access and intersections with the State road network. Refer to Attachment 1, point 1.
2. Strategic concept designs have not been prepared and are requested to be included within a revised TIA to capture the scope of road upgrades to the State road network required to facilitate access and oversize overmass (OSOM) movements. Refer to Attachment 1, point 2.

3. Detailed assessment of the traffic impacts for each stage of the construction schedule, including pre-construction minor works and temporary workforce accommodation, is requested. Refer to Attachment 1, point 3.
4. Further detail is requested as the high-risk OSOM route assessment does not provide enough information to accurately scope the required road upgrades and mitigation measures for the State road network. Further, the assessment must include impacts to rail corridors. Refer to Attachment 1, point 4 (A and B).
5. The Port of Newcastle routes require specific detail to assess the impacts of OSOM vehicle movements on public assets. This will include further engagement with TfNSW due to the developing situation in the South-West Renewable Energy Zone. Refer to Attachment 2.

TfNSW has provided advice in relation to Country Rail Network (CRN) rail crossings associated with the proposed haulage routes as part of **Attachment 1**. TfNSW further advises that the proposed haulage routes include crossing rail corridors managed by agencies other than TfNSW. It is recommended that DPHI refer this application to the Australian Rail Track Corporation (ARTC) and Sydney Trains for their consideration and advice.

TfNSW can meet with DPHI and the Applicant on request to discuss the information requested in **Attachment 1** and **Attachment 2**. If you have any questions please contact Tim Mitchell, Development Services Case Officer on 1300 019 680 or email development.renewables@transport.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Sarah Anderson".

Sarah Anderson

Manager Development Services West
Community & Place
Regional and Outer Metropolitan

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Attachment 1

SSD-50505215 – EIS Exhibition Bullawah Wind Farm - Request for additional information

This attachment relates to TfNSW's response dated 2 October 2024 reference WST24/00213/002.

Additional information requested to address the key issues

TfNSW requests additional information is provided with the RtS and a revised TIA. Actions necessary to address the key issues identified have been detailed below.

Actions for the key issues identified

1. Total traffic generation and turn warrant assessments

The revised TIA should include updated traffic generation volumes and turn warrant assessment for each project access and intersection on the State road network to capture the extent of road upgrades for the project:

- a. Project-related traffic volumes (per an hour and day) vehicle types (inclusive of OSOM vehicles) routes for each vehicle type, distribution and travel direction for each stage of the project (pre-construction, construction, operation, and decommissioning).
- b. The turn warrants assessment must be revised per Austroads Guide to Traffic Management Part 6 and include:
 - Growth rates projected for each scenario peak hour,
 - Provide an assessment of the AM/PM project peak hour with comparison to the network peak hour,
 - An assessment of each staging scenario considering overlap of the stage currently identified in the TIA and
 - The cumulative traffic volumes of major projects at (EIS or approved) that will be present in the background, turning volumes and accesses/intersections required to facilitate the project, in relation to the State road network.

2. Strategic designs for the impacted state road intersections

The revised TIA should include strategic concept designs for required road upgrades for each project access and intersection on the State road network and assessment of swept paths:

- a. Strategic concept designs are required within the updated TIA for each road upgrade and modification to accommodate the high-risk OSOM and project traffic at each intersection and access with the State road network.

- b. Swept paths are to be provided for the largest design vehicle to travel through each intersection with the state road network. Swept paths must demonstrate the largest heavy vehicle can turn concurrently without crossing into the incorrect lane, well within proposed/existing pavement and within existing intersection treatments (where applicable).

Note: It is the proponent's responsibility to acquire and dedicate land required to accommodate road infrastructure, including but not limited to footways, structures, stormwater drainage, batters, maintenance access, and utilities.

3. Pre-Construction Works and Temporary Workforce Accommodation

The revised TIA is to consider the impacts of pre-construction works and the proposed workforce accommodation facilities:

- a. The TIA is to assess the pre-construction minor works' scope (inclusive of any operation of workforce accommodation), traffic volumes, types, hours of operation, timing, stages, and traffic types and recommend traffic mitigation measures to mitigate the traffic impacts during this stage.
- b. Assess the traffic volumes, trips, distribution, directions and routes for any parallel construction activities coinciding with the stages of the construction and occupation of the workforce accommodation, including an assessment of the changes to the traffic assessment post-full occupation of the workforce accommodation camp.

4. (A) The high-risk OSOM route assessment scope and mitigation measures

This section provides overall considerations for all identified routes in the assessment provided, which need to be resolved within the revised TIA. Refer to Attachment 2 for specific comments related to routes from the Port of Newcastle.

- a. The route assessment identifies heavy-massed and large-axle group load vehicles. Bridge and culvert assessments are required for TfNSW assets to assess their suitability for use of these vehicle types. The proponent is to contact TfNSW to discuss the bridge and culvert assessment requirements and process. The route assessment is to be revised based on the outcomes of the TfNSW bridge and culvert assessments.
- b. An extensive review of the high-risk OSOM routes regarding vertical and horizontal obstructions alignment, including existing formations, crossings, bridges, culverts, intersection roadside furniture, hazards, roundabouts, traffic signals, level crossings, existing developments, signage and powerlines.
- c. EIS section 3.3.9.1 assumes reliance on Port to Hay road works being completed under an agreement between EnergyCo and TfNSW (Port to REZ MOU). TfNSW advises that the routes and extent of the road upgrades for the Southwest REZ have not yet been determined. Road upgrades to facilitate the high-risk OSOM deliveries are the responsibility of the Applicant. The scope of all required road upgrades is to be identified by the Applicant within a revised route assessment and supported by strategic concept designs for each road upgrade to the State road network.

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- d. The route assessment does not include 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 projects along the routes (ie., the Hexham Straight project).
- e. The route assessment is to include the use of the alternative route via Newcastle Inner City Bypass to Newcastle Road for high-risk OSOM loads that do not exceed the vertical clearance limitations after the road upgrades are completed.
- f. Tables 5.1 and 5.2 of the TIA identify night travel for some components; however, the routes are not approved for night travel, with Route 2 likely to be mostly day travel. Scheduling of OSOM movements should be reviewed, with AM/PM network peak times to be avoided through townships.
- g. Include an assessment of the pull-over locations and rest areas providing the following:
 - Locations (including GPS coordinates) and dimensions, and
 - Swept path analysis for the largest high-risk OSOM vehicles demonstrating that the largest design vehicle can physically enter, exit and park without impacting travel lanes for pull-over locations or public parking within rest areas.

(B) The High Risk OSOM Route assessment is to consider impacts to rail corridors

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 clearly identified, and included in the high-risk OSOM route assessment, revised TIA and the RtS. This includes the following routes:

- a. Port of Newcastle (Route 1) – The Heavy Vehicles and OSOM access route will be crossing the CRN non-operational rail corridor at three (3) locations:
 - Sturt Highway route crossing from Narrandera to Tocumwal rail corridor at Narrandera
 - Hume Highway route crossing from Cootamundra to Gilmore rail corridor at Tumblong
 - Hume Highway route crossing from Cootamundra to Gilmore rail corridor at Coolac
- b. Port of Newcastle (Route 2) – The Heavy Vehicle and OSOM access route will be crossing the CRN operational and non-operational rail corridor at seven (7) 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: Newell Highway crossing public level crossing and non-operational Barmedman to Rankins rail corridor at Alleena.
- Newell Highway: Crossing Public Level Crossing and operational rail corridor from Temora to Griffith at Mirrool.
- Henry Parkes Way: Vehicle and Pedestrian Level Crossing on CRN operational rail corridor from Molong to Parkes at Parkes.
- Newell Highway: Public Level Crossing on CRN operational West Wyalong to Unagarie rail corridor at West Wyalong.
- Golden Highway: Crossing non-operational rail corridor from Sandy Hollow to Merriwa near Maitland Street Gungal.

Attachment 2

SSD-50505215 – EIS Exhibition Bullawah Wind Farm - Request for additional information

This attachment relates to TfNSW's response dated 2 October 2024 reference WST24/00213.

Additional information requested to address key issue five (5)

The Applicant is requested to engage with TfNSW on the preparation and provision of the additional information below, due to the on-going nature of road assessments occurring along the multiple route options identified for the project. The additional information should be provided with the RtS and a revised TIA.

The Applicant is encouraged to engage with other developers in the area or utilising the transport routes to consider coordination to establish operational management of high risk OSOM movements.

1. High Risk OSOM Port of Newcastle Route 1 via Sydney and Wagga Wagga

The following section provides assessments to be undertaken for the route assessment from the Port of Newcastle via Sydney and Wagga Wagga.

- a. The NorthConnex tunnel operator will need to be consulted and any assessments and mitigation measures be identified regarding the use of the tunnel in proposed Route 1.
- b. The NorthConnex tunnel has a 4.9m height restriction. Loads over this height will need to use an alternate route via Pennant Hills Road. An assessment of Pennant Hills Road and pinch points via this route will be required to form part of the revised route assessment.
- c. Route 1b requires further consideration of the intended check vehicle, pinch points and maximum heights permissible.
- d. Further assessment of the height constraints along the Hume Highway must be undertaken, including the Fairway Drive overpass which has a 5.2m maximum restriction.
- e. 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.
- f. Provide within the updated route assessment further assessment of roundabout intersections identified on the Sturt Highway through Wagga Wagga addressing the following:
 - Clarification on whether a portion of roundabouts will be removed or if it is proposed to mount existing annulus(s). If mounting is required, assessment of the existing suitability or upgrades required to the roundabouts for the movements must be included.

- Swept paths and road design plans are needed to confirm the impacts on the roundabout(s).
 - Vegetation trimmed or removed and other infrastructure to be removed or modified.
- g. The removal of 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 to prohibit right turns into Gillenbah Road. Designs to navigate this pinch point without impacting service centre consent conditions must be investigated and included within a revised route assessment.
- h. The Cobb Highway/ Jerilderie Road widening must consider longitudinal drainage on the Cobb Highway. A pipe may be required under the hardstand area. Strategic designs are required.

2. High Risk OSOM Port of Newcastle Route 2 via Golden Highway, Newell Highway and Sturt Highway

- a. The 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 the 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.
- b. The refuge island at Bettington Street/Vernacher Street Merriwa is located on a State road network (Golden Highway). TfNSW requires the scope of works in the form of a strategic concept design identifying the removal of the refugee island and evidence of consultation with Upper Hunter Shire Council.
- c. Strategic concept designs and swept paths must be provided for any road widening on the State road network required to accommodate high-risk OSOM vehicles. The hardstands and pavement are to be sealed to the standards of the adjacent road.
- d. Timing of high-risk OSOM deliveries within the construction schedule, indicative weekly program(s), and timeframe to complete deliveries from the relevant port to the site is required.

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