

17 June 2026

TfNSW reference: REN26/00019/002, SF2026/

Your reference: SSD-8950984

Department of Planning, Housing and Infrastructure

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PARRAMATTA NSW 2124

By Email: jessie.meyers@dpie.nsw.gov.au

Attention: Jessie Meyers

SSD-8950984: Response to Submissions for the Burrendong Wind Farm Project

Transport for NSW (TfNSW) is responding to the Burrendong Wind Farm Project response to submissions, as referred to in April 2026.

TfNSW has reviewed the following key documents for preparing this response:

- Burrendong Wind Farm Amendment Report Version 06, Project No. 24COF7589 prepared by Ecological Australia, dated 07 April 2026;
- Burrendong Wind Farm Traffic and Transport Impact Assessment Revision H, Reference No. 300305882, prepared by Stantec Australia Pty Ltd and dated 10 March 2025
- Burrendong Wind Farm Amendment Report – Appendix H.2 Intersection Strategic Designs (Goolma Road and Twelve Mile Road, Goolma & Mitchell Highway & Goolma Road, Wellington)
- Burrendong Wind Farm Amendment Report – Appendix G Revised Route Study Ark Energy, Project: Burrendong Wind Farm Ex Newcastle Port, Wund Turbine Type 82 metre blade, Revision 02 dated 29 November 2024.

The information provided in the Response to Submissions (RtS) Amendment Report does not adequately address all TfNSW's previous requests for information, and TfNSW has requested further information following its review of the updates to the Traffic Impact Assessment (TIA) and changes to the project scope.

TfNSW has provided a reconciliation table in Attachment 1 and Attachment 2 that identifies the status of the additional information raised in TfNSW's response to the EIS dated 11 January 2024, advises what information remains outstanding, and includes a request for further information due to the project amendments/revisions to the TIA.

TfNSW's key rationale for requesting information is to demonstrate that the designs comply with Austroads, establish the scope of works, and mitigate the project's impacts on the state road network from a safety, efficiency, and asset management perspective.

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TfNSW advises that the additional information requested below must be satisfactorily addressed in a revised TIA and EIS (where applicable) and resubmitted to TfNSW for review via the Major Projects Portal, preferably before determination. TfNSW requests that the revised TIA include track changes and a reconciliation table to identify where changes have been made.

If you have any questions, please contact Alexandra Long, Development Services Case Officer, at 1300 019 680 or email development.renewables@transport.nsw.gov.au

Yours sincerely,

A handwritten signature in black ink, appearing to read "Alexandra Power".

Alexandra Power

A/Manager Development Services - West

Transport Planning

Planning, Integration and Passenger

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SSD-8950984: Response to Submissions for the Burrendong Wind Farm Project

This attachment relates to TfNSW's response dated 17 June 2026 reference Ren 26/00019/002.

Context

- Burrendong Wind Farm consists of the installation, operation, maintenance, and decommissioning of up to 70 Wind Turbine Generators (WTGs), electrical infrastructure, ancillary infrastructure, public road upgrades and access tracks and temporary facilities.
- The Project is designed to accommodate WTGs up to 250 m in height, with a nameplate capacity of approximately 6-8 MW.
- Electrical Infrastructure
- Ancillary Infrastructure
- Temporary Workforce Accommodation Facility
- Port of entry – Port of Newcastle

TfNSW comments and further information required

No.	TfNSW comments from EIS requiring RFI	TfNSW response to RTS, and request for further information for revised TIA
OSOM Route (High Risk Heavy Vehicles Requiring Escort)		
1.	Route Study	The submitted Burrendong Wind Farm Amendment Report – Appendix G Revised Route Study Ark Energy, Project: Burrendong Wind Farm Ex Newcastle Port, Wind Turbine Type 82 metre blade, Revision 02 dated 29 November 2024 is outdated for the entirety of the route and is required to be updated noting the commentary <i>“The 2024 Rex J Andrews Route Study is preliminary and uses indicative blade lengths and transport vehicle dimensions. A full route study, vertical curve study, vegetation assessment, floodway assessment, bridge assessment and overhead utilities scoping assessment would be required once the actual dimensions, weights and transport frames have been determined.”</i>

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2.	Assessment of the impacts of the TfNSW Projects due to the OSOM movements proposed as a part of this project for the identified OSOM route(s) as the Route Study prepared by RJA Route Survey does not appear to have sufficiently addressed the impacts to the TfNSW Projects or the impacts to the proposed OSOM route. The RJA Route Study is required to be revised to address how the OSOM loads could traverse the TfNSW projects along the OSOM route, civil works required to facilitate the laden loads through the TfNSW projects and evidence of consultation with the TfNSW project managers to ensure that access can be provided for the OSOM movements through the TfNSW projects.	Not addressed: TfNSW requires a revised Route Analysis to confirm: The EnergyCo route has not been checked or designed to accommodate all proposed blade, height, width and lengths and articulation for all proposed laden combinations for high risk OSOM for all renewables projects; therefore, it is the proponents' responsibility to complete a verification check of the modified height and corridor width, as well as confirmation that the swept path of the high-risk OSOM-laden loads can turn within the proposed pavement footprint. Evidence in the form of swept path analysis overlaid on the EnergyCo-issued construction designs, along with checks of the EnergyCo-designed height (checking powerlines, gantries, TCS) and width envelope and modifications to infrastructure on the state road network such as updated height, width, and infrastructure along the corridor (such as medians and TCS), must be reviewed, with evidence of these checks included in the revised TIA. The consistency check should be performed on the longest, widest, and tallest of the proposed high-risk OSOM-laden configurations. If the consistency check reveals the need for further road modifications, adjustments, or pavement widening, the scope of the road upgrades/modifications must be captured in strategic concept designs and included in the revised TIA. Further to the above points, the revised route analysis must assess: • The laden high-risk OSOM height of the towers exceeds the 5.8m height maximum laden height to achieve the 200mm clearance to the underside of Tarro Bridge (see the mobile laser scan cross section in attachment 2). Alternate routes will need
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		to be considered to detour around this clearance restriction. • Review of overhead utilities to confirm that no further utilities are required to adjust to accommodate the height of the Burrendong Wind Farm components, beyond the work completed by EnergyCo for the Port to REZ route from Newcastle to Elong Elong. • Check the Merriwa pedestrian refuge and advise on clearance or modifications required to the refuges to avoid mounting of the refuges. • Review the powerline adjustments and clearances along the route from Port of Newcastle to site and identify the powerlines that require adjustments and the pathway for approval and completion of the adjustments prior to the high risk OSOM deliveries commencing. • Identify any projects that may be occurring at the time of movements and mitigation measures; projects that may be under construction include the Golden Highway Improvements Programs; transmission line construction and upgrades associated with other major projects. • Safety considerations must be given to narrow segments of the state road network, in particular the Golden Highway and approaches to narrow bridges, as the timing of the project will be occurring during the peak of high-risk OSOM movements associated with the CWO and New England REZ. • Provide strategic concept designs for the identified road upgrades referenced within the revised Burrendong Wind Farm route analysis. • Ungula Wind Farm is currently completing road upgrades for the Mitchell Highway/Goolma Road intersection. The final designs should be requested from Squadron (Ungula Wind Farm) and assessed using a swept-path analysis to determine whether the intersection upgrades would be suitable to
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		accommodate the Burrendong Wind Farm blade articulation. • The National Heavy Vehicle Regulator (NHVR) Route ID is to be provided to assist with the review of the routes. Based on the current route analysis, overhead structures have not been identified. • OSOM crossing at the rail level crossing is classified as low risk, but this categorisation is incorrect. The actual risk is high, primarily due to the short time interval between rail signalling and passing through the level crossing before a train arrives, not because of the length or speed of the OSOMs. Therefore, this risk must be reconsidered and addressed in the updated Route Analysis. • Distinguish which pull-over bay or rest area will be used for which type of high-risk OSOM components and for what purpose (ie: traffic management, safety or fatigue break) and confirm that the parked high-risk OSOM will be located wholly within the rest area or pull-over bay without overhang of wheel paths onto unsealed sections or overhanging of the laden configurations within the through lanes. • The RJA Route Analysis identifies that night delivery of OSOM to prevent daytime congestion and mitigate impact on traffic, including peak hours and school bus routes, is incorrect. Due to travel restrictions and a night departure from the Port of Newcastle, such a delivery is improbable unless there are plans to pause the journey partway along the route once off state roads. This scenario is not detailed, is unlikely to occur, and must be addressed in the revised high-risk OSOM route analysis. • Traffic management must ensure hardstand areas adjacent to intersections are kept clear of public use, particularly given evidence of vehicles parking within swept paths. Appropriate controls are required to prevent conflicts with OSOM movements, especially during installation and peak construction. The TIA must
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		outline mitigation measures — such as signage, delineation, traffic control, or physical restrictions — to ensure the hardstand remains unobstructed at all times. <i>Note: Port capacity should be considered, and it is advised to hold early discussions with the Port of Newcastle to determine availability at the time of delivery.</i>
3.	Previously requested bridge assessments to be completed as part of response to EIS.	No bridge and culvert assessments have been carried out for the state road network assets. The revised TIA must include the bridge and culvert assessments, which must be completed prior to determination. The proponent is to contact TfNSW Freight Operations team via: spu@transport.nsw.gov.au to obtain bridge assessments and must include the following information: The high-risk OSOM-laden loads, class and vehicle configuration must include the following information regarding the dimensions, weight and length: ○ NHVR route ID, ○ Overall dimensions (width, height and length) of the laden load (laden load is the vehicle combination and the load to be transported), ○ Total weight of the laden load, ○ GSM, ○ Payload, ○ deck height, ○ axle configuration, ○ axle spacing, including from the prime mover, and axle masses (including split axle and group axle masses).

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Pullover and rest areas		
4.	The pull over, rest area and emergency breakdowns locations along the OSOM route(s) need to be reviewed regarding the suitability and viability to accommodate all High Risk OSOM loads dimensions (length, height, width) of the rest area and approaches.	Not addressed. All fatigue/rest areas are to be revised, identified, and dimensioned, particularly Location #4 Mitchell Highway at Wellington.
5.	The Route Survey must be revised to ensure that the pull-over and rest area locations for the largest OSOM components are not located where they will conflict with vulnerable road users.	Not addressed.

Weight of the heaviest vehicle requiring escort		
6.	The RJA Route Study does not identify the vehicle combination and laden dimensions for the transformers to be delivered to the development. The weights of the transformers and vehicle configurations must be provided as part of the Route Assessment, and the transformer's weight and vehicle configuration must be used to inform the bridge assessments.	Required to be addressed and updated in Route Study.

Bengalla and Wybong Road		
7.	Bengalla and Wybong Road are identified as local roads and will be required to be used for the loads that exceed the bridge tolerances for Denman Bridge and therefore the following matters are required to be addressed regarding this route within the RJA Route Study: a) Provide the detailed scope of work required for Bengalla and Wybong Road to facilitate the OSOM movements, inclusive of the intersections with the classified road network.	Required to be addressed and updated in Route Study.

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	b) Provide swept paths of the largest OSOM components completing the detour via Bengalla and Wybong Road, including the manoeuvring through the intersections with the classified road network. c) Road works are in progress with further work planned along Bengalla Road. Further information is required to understand the impacts or impediments the road works along Bengalla Road will have on the OSOM movements for the Burrendong Wind Farm	
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Appendix H1 – Revised to the turn warrants assessment assumptions

8.	Revised turn warrant assessment requirements The Traffic Impact Assessment requires revision, as the turn warrants assessment is based on an incorrect methodology: it applies project peak traffic to background AM/PM periods rather than the network peak hour. It must instead use construction peak traffic applied to the network peak hour and include background growth and cumulative impacts from concurrent projects. Traffic count data has not been collected at key intersections and must be obtained through site-specific surveys (minimum one day), with raw data provided and used to define network peak conditions. The assessment must also reflect the true worst-case scenario, which is likely to occur during peak construction and the staging of the Temporary Workforce Accommodation Facility (TWAF), rather than post-completion. Workforce and TWAF assumptions are inconsistent (130, 250, and 375 FTEs referenced) and must be clarified and aligned across the assessment, using a single confirmed peak workforce to update modelling. In addition, assumptions about light- and heavy-vehicle movements rely on unconstrained averages (including carpooling) and must either be supported by enforceable monitoring measures or revised to adopt conservative worst-case scenarios. Overall, the TIA must be updated to ensure consistent assumptions, robust data inputs, and alignment between the modelling, assessment outcomes, and conclusions
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Appendix H2 – Revisions required to the Strategic concept designs

7	The submitted intersection strategic concept designs are inconsistent with the swept path analysis presented in the Rex J Andrews route analysis, which identifies the requirement for a larger hardstand widening, for example, Figure 27- Goolma Road onto Twelve Mile Road compared to the scope of the hardstand widening identified for the same intersection in the Appendix H_2 Intersection strategic designs.
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	The swept path analysis for each intersection requiring widening, specifically for the high-risk OSOM turning movements on the state road network and for intersections outlined within the Rex J Andrews route analysis pertaining to Burrendong Wind Farm, must undergo a cross-verification process against the Appendix H_2 Intersections strategic designs. This is to ensure that the designated hardstand aligns accurately with the wheel path of the high-risk OSOM design vehicle configuration. In instances where discrepancies are identified, the strategic concept designs are to be revised accordingly to achieve consistency with the swept paths detailed in the Rex J Andrews route analysis.
8	Referring to a 'hard stand' or planning to use a non-pavement hardstand is not acceptable. A properly designed pavement solution is necessary due to the project's construction timeframe, OSOM loading, including turning movements, and the need for ongoing maintenance during and after construction. Additionally, consideration of potential erosion and environmental impacts is required. Temporary pavement solutions are not acceptable and will not be supported by TfNSW. Relevant details addressing these requirements should be provided and updated within the strategic concept design package.
9.	BAR Dimensions: The current proposals show a widened shoulder of 3.0m. If Goolma Road is a type 1 or type 2 approved route, this width should be 3,5m shoulder. If there are no Road Trains, then this is no issue. Refer to the Austroads Guide to Road Design, Part 4a, Fig 7.1. This comment relates to the dimensions of the proposed BAR treatment. This can be addressed in 2 ways: if the route is an approved type 1 or type 2 road train route, the BAR dimensions need to be increased to meet that standard. If it is not an approved route, the proprietor can respond accordingly after investigating and providing evidence.
10.	How will traffic be managed on the new Hardstand areas provided? In terms of prohibiting unwanted parking or stopping in this area? In the same vein, how will traffic be managed to prevent undesirable left turns out of Twelve Mile Road, cutting the corner and using the hardstand area to "shortcut" the intersection? This comment needs to be addressed and should highlight the proposed treatments or controls to prevent unwanted or undesirable movements in these hard-stand areas during the installation of the wind farm.
11.	Verge, batter, and table drain details must be included in all proposed strategic concept designs. It will be important to show how drainage will be managed at these intersections. Additional information is sought regarding the road formation and footprint. There are no shoulders or verges provided, nor any batters or table drains. Survey data will need to be collected to enable the designers to model all of this.

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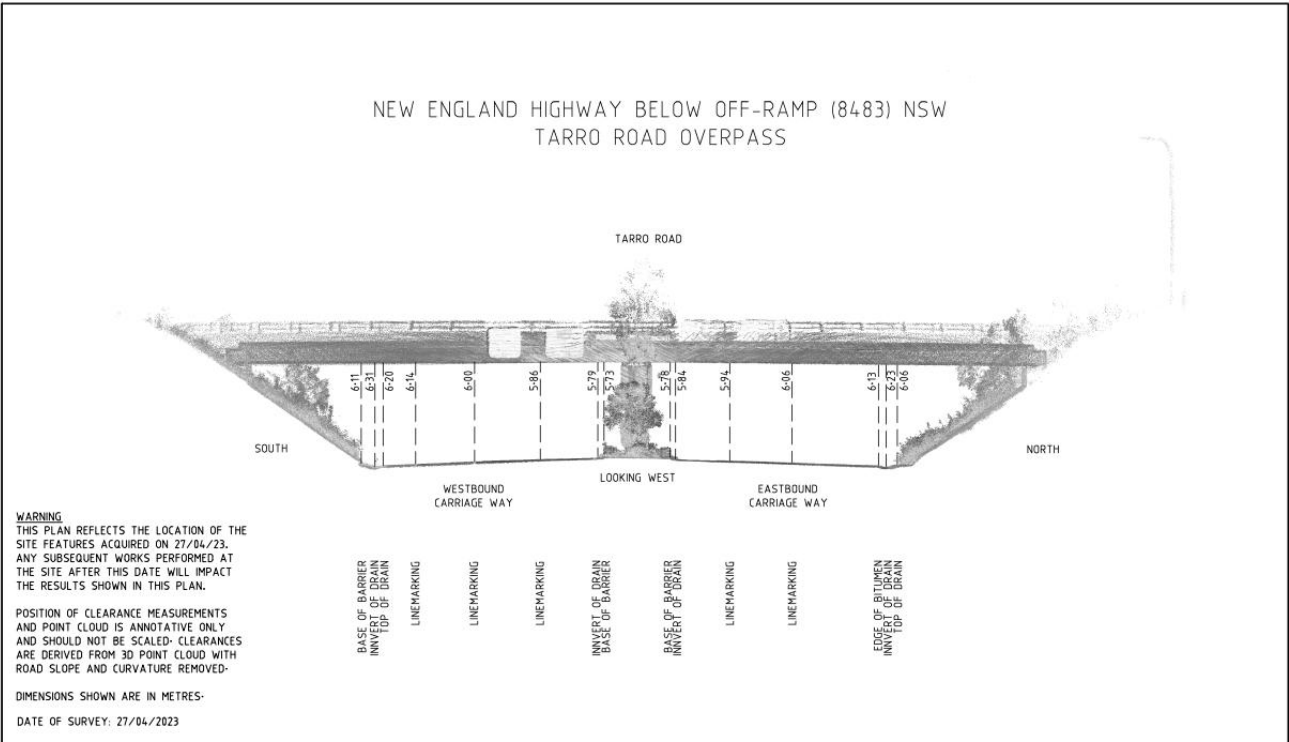
Additional Information not previously requested as part of the EIS response

12.	The revised TIA must include an assessment of travel time delay to oncoming and following traffic, which must be undertaken in accordance with the principles of traffic flow interruption and platooning outlined in the <i>Austroads Guide to Traffic Management Part 6</i>, which recognises that slow-moving vehicles on high-speed rural roads can significantly impact traffic efficiency where overtaking opportunities are constrained. This assessment is specifically required due to the width of the high-risk OSOM tower segments, which limit or prevent overtaking on sections of Goolma Road where segments of the state road network consist of pavement widths less than 9.6m (shoulder-to-shoulder) or safety barriers that prevent overtaking or sight distance constraints apply (refer <i>Austroads Guide to Road Design Part 4A</i>). For these constrained segments, the proponent must calculate the incremental delay to following and oncoming vehicles based on the difference between OSOM operating speed and free-flow traffic speed (of the design vehicle that would not be able to overtake the high risk OSOM tower segments) using the relationship: $\text{Delay} = (L / V_{\text{OSOM}}) - (L / V_{\text{FF}})$, where L is the segment length, V_OSOM is the speed of the OSOM vehicle and V_FF is the prevailing free-flow speed. This delay must be accumulated across consecutive constrained segments until a compliant overtaking opportunity or designated pull-over location is reached. In accordance with TfNSW requirements for the management of high-risk OSOM movements on the State Road network, the cumulative travel time delay to following traffic must not exceed 10 minutes or be demonstrably mitigated through the provision of engineered pull-over bays and operational controls. In regard to the identification of pull-over locations, the following information will be required: · Location (GPS coordinates), · Cadastral boundaries, · Swept path analysis demonstrates that the longest and widest load, including escort vehicles, can be accommodated within the pullover bay. TfNSW will not support any partial parking of the high-risk OSOM within the through lanes. · The dimensions and area of the pullover locations. If the travel time delay exceeds 10 minutes, further mitigation measures will need to be identified and may extend to the requirement and strategic concept designs prepared in accordance with TfNSW's fact sheet on Strategic Concept Designs
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