

TfNSW reference: WST24/00282/001, SF2024/13635
DPHI reference: SSD-73123714

29/07/2024

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

Attention: Tanja Ibsen

SSD-72123714, Bowmans Creek Wind Farm Stage 2, Bowmans Creek - SEARs Request

Thank you for referring the abovementioned request for SEARs to Transport for NSW (TfNSW) seeking comments in relation to the proposed Bowmans Creek Wind Farm Stage 2 located within the Muswellbrook and Singleton LGAs.

TNSW has reviewed the Scoping Study prepared for Bowmans Creek Wind Farm Pty Ltd by Umwelt Australia dated July 2024 and provides advice in **Attachment A** to assist in the preparation of the EIS and supporting documentation for the future lodgement of the application with the Department of Planning, Housing and Infrastructure.

If you have any questions or wish to discuss this matter further, please contact Tim Mitchell on 1300 019 680 or email development.renewables@transport.nsw.gov.au

Yours faithfully,



Alexandra Power
Team Leader Development Services Renewables
Community and Place
Region West Regional & Outer Metropolitan Division

OFFICIAL

A 51-55 Currajong Street, PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 | DX20256
E development.renewables@transport.nsw.gov.au | ABN 18 804 239 602
P 1300 207 783
transport.nsw.gov.au

1 of 5

OFFICIAL



Attachment A

SSD-72123714, Bowmans Creek Wind Farm Stage 2, Bowmans Creek - SEARs Request

Context

- The site is in the Muswellbrook and Singleton LGAs.
- The affected state road is New England Highway.
- The proposed access is off Scrumlo Road.
- The construction period will be over 18-24 months with a proposed commencement late 2025.
- The peak workforce will be 160 workers.
- At present there is limited information on proposed traffic generation.

TfNSW advice

Following review of the *Scoping Report*, TfNSW have requests the following matters to be included and assessed as a part of the Environmental Impact Assessment and the Traffic Impact Assessment (TIA).

- A Traffic Impact Assessment (TIA) is required to be prepared in accordance with prepared in accordance with the methodology set out in section 2 of the *RTA Guide to Traffic Generating Developments 2002*, part 12 of *Austroads Guide to Traffic Management and other applicable Austroads* and TfNSW requirements within supplements and technical directions. The following must be specifically addressed as a part of the TIA:
 - Hours, days and periods of construction.
 - Schedule for phasing/staging of the project (including pre-construction activities, accommodation, and ancillary infrastructure works) and identifying the timeframe of each stage, traffic volumes, vehicle types and any parallel or overlapping stages.
 - If timing for pre-construction activities occur before the road upgrades it is advised that alternative routes with existing and suitable access treatments that conform to *Austroads* and TfNSW requirements be reviewed and assessed for each vehicle type.
 - Traffic volumes:
 - Surveyed existing background traffic at key intersections with the state classified road that form part of the routes for pre-construction and construction. Traffic surveys are to be in accordance with Part 3 *Austroads Guide to Traffic Management* with survey raw data (inclusive of the GPS locations for the traffic survey) included in the TIA.
 - Project-related traffic volumes (measured as vehicle trips per an hour and per a day) for each stage including pre-construction, construction, operation and decommissioning and identifying the peak period for traffic volumes.
 - Traffic volumes are to also include a description of:
 - Ratio of light vehicles to heavy vehicles.
 - Differentiation of Over Size/Over Mass (OSOM) that do or do not require an NHVR permit and the time of day that they would be arriving at the project accesses.

Transport for NSW

- Peak times for existing traffic.
- Peak times for project-related traffic.
- Directional splits for turning traffic.
- Transportation hours.
- Project related traffic interaction with existing and projected background traffic with annual growth rate applied linearly.
- The origin, destination and routes for each stage of construction including pre-construction and the intersections new and existing with the State road network for each of the following vehicle types:
 - Employee and contractor light traffic
 - Shuttle bus traffic
 - Heavy vehicle traffic.
 - OSOM vehicle traffic (for OSOM that do not require an NHVR permit).
 - OSOM high risk loads as identified on TfNSW's website (link below) <https://www.transport.nsw.gov.au/system/files/media/documents/2022/transport-management-plan-fact-sheet.pdf>

Note: A high risk OSOM loads route analysis is required as part of the TIA. For further information on undertaking a concept route analysis for these movements please refer to [Attachment B](#).

Note: GPS coordinates and hyperlinks are required to clearly identify the connections new and existing with the State road network that form part of the project routes.

- A description of all non-high risk OSOM vehicles and materials to be transported. The shortest and least trafficked route is to be given priority for movement of materials and machinery to minimise risk and impact to other motorists, so far as is reasonably practicable.
- The impact of generated traffic and measures employed to ensure efficiency and safety on the public road network during construction, operation and decommissioning of the project. This includes enforceable measures proposed to manage traffic volumes, driver behaviour along the routes and at the access points to the project.

Note: this excludes the use of Temporary traffic mitigation measures as identified in Austroads and TfNSW requirements. Temporary traffic mitigation measures are only permitted for activities occurring in the road or road reserve.

- A turn warrant assessment(s) is to be prepared for each new and existing access with the State road network that form part of pre-construction and construction routes, access points and ancillary access points. The turn warrant assessment(s) are to be prepared in accordance with Part 6 of *Austroads Guide to Traffic Management* and must be assess on the conservative traffic scenario, defined below:
 - The peak project traffic volumes applied to background traffic at the network peak hours and a comparison for the project peak hours.
 - Growth rates applied linearly to peak of construction applied to background traffic volume.
 - Cumulative traffic volumes applied to background and turning volumes (where applicable) of other Major Projects at EIS or approved stage that will be present in the background and turning volumes during the pre-construction and construction at the construction and background peak hour).

- The TIA is to detail improvements to the road network, such as road widening and intersection treatments, to cater for and to mitigate the impact of project-related traffic (including accommodation and ancillary infrastructure components) at key intersections with State road network. Proposed road facilities, access and intersection treatments are to be identified and conform with *Austroads* and TfNSW Supplements, including safe intersection sight distance. Strategic designs are to include a swept path analysis using the largest vehicle (design and check vehicle) passing through the intersection(s). To assist the proponent in preparing strategic designs, the below link is provided:

<https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documents/planning-principles/strategic-design-fact-sheet-02-2022.pdf>

Note: Swept paths for OSOM vehicles on, entering and exiting the State road network are to be on sealed road pavement.

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.

Note: Safe intersection sight distance assessments are required to be included within the TIA for each intersection or new access with the State road network.

- Local climate conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the project (eg fog, wet weather, etc)
- Measures to be employed to ensure a high level of road safety for daily staff commutes between accommodation and the construction site, specifically addressing the impacts of unsafe driver behaviour and driver fatigue for all stages of the project and how measures employed will be enforced.
- A review of crash data along the identified transport route/s for the most recent 5-year reporting
- Details of emergency access/egress, including details of:
 - How the access will be managed (i.e gates) to prevent the use of the access by non-emergency related vehicle movements.
 - Identify emergency design vehicle and suitability of the access to accommodate.
 - Provision of sufficient storage at the throat of the access to allow emergency vehicle(s) to store within the access and not within the through lane or shoulder.

Electricity Transmission Lines

In relation to the EIS, TfNSW requires the identification of all infrastructure including the Electricity Transmission Lines that are crossing or near the **state classified road network** or rail infrastructure within TfNSW remit. In respect to this matter the following information is required:

- All roads required to access the transmission line must be identified and how they are accessed from the State road network will need to be assessed.
- Access points or access tracks required for ETLs or other infrastructure will require the same level of assessment as the primary project access point and will need to address the matters outlined within this letter for this type of access with the **State road network**. Turn warrant assessments, strategic designs and swept path analysis will be required for each new and existing access point.
- The heights or depths (under boring) and the vertical and horizontal clearances (overhead) in accordance with *Austroads*.
- The method for construction of the transmission lines, including demonstrating intermittent closures of State roads for the works are not to exceed ten (10) minute delays, with stoppages

not exceeding 5 minutes for no more than 6 times per a day, The intermittent closures are to occur outside of network peak hours.

- location of infrastructure relative to the road reserve, including demarcation of local and state classified road reserves.
- If excavation or fill is required adjacent to the road corridor.
- Access required to construct and maintain the infrastructure.
- Strategic concept designs for each transmission line crossing the State road network are to be included within the submission of the EIS.

Note: TfNSW will not support or permit easements for transmission lines over or under the State road network.

Workforce Accommodation Camp

- Section 4.1 of the application provides that workforce accommodation will be proposed. The TIA is required to assess the worst-case scenario based on the inclusion of the workforce accommodation camp, with respect to:
 - The construction schedule, staging, traffic generation until the point of when the workforce would be fully accommodated at the camp.
 - The traffic volumes during construction and if any parallel construction or pre-construction would be occurring in parallel.
 - Identify the traffic generation of all construction traffic post full occupation of the workforce accommodation camp.
 - Identify the traffic volumes associated with any pre-construction and construction works occurring in parallel to the construction and full occupation of the workforce accommodation camp.
 - Assess for the full and partial (where staged) traffic volumes, vehicle types, changes to routes, turning directions/distributions, changes to the AM/PM project peaks for the operation of the workforce accommodation camp.
 - Identify any emergency accesses or other accesses to the state classified road required for the workforce accommodation camp.