

TfNSW reference: WST24/00265/001, SF2024/127686
DPHI reference: SSI-72887208

17 July 2024

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

Attention: Julia Green

SSI-72887208, Victoria to New South Wales Interconnector West, Request for Secretary's Environmental Assessment Requirements (SEARS);

Thank you for referring the abovementioned request for SEARs to Transport for NSW (TfNSW) seeking comments in relation to the proposal located within the LGA(s) of Edward River Council, Murray River Council, Murrumbidgee Council and Wagga Wagga Council.

TNSW has reviewed the Scoping Study prepared for the Victoria to New South Wales Interconnector by Transgrid dated May 2024 and provides advice in **Attachment A** to assist in the preparation of the Environmental Impact Statement (EIS) and supporting documentation for the future lodgement of the application with the Department of Planning, Housing and Infrastructure.

TfNSW recommends a meeting to discuss the SEARs requirements before proceeding to EIS. If you have any questions or wish to discuss this matter further, please contact Glen Hanchard on 1300 019 680 or email development.renewables@transport.nsw.gov.au

Yours faithfully,



Ruvimbo Timba
Acting 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

Attachment A

SSI-72887208, Victoria to New South Wales Interconnector West, Request for Secretary's Environmental Assessment Requirements (SEARS);

Context

- A new 500kV double circuit overhead transmission line between the NSW / Victoria border near Murrabit and the Dinawan substation (around 235 kilometers).
- The application includes substation works and ancillary transmission lines/activities.
- Construction of the proposal is expected to commence in early 2026 till 2028.
- Around 400 construction workers are nominated as being required for substation works and around 600 workers (potentially up to 1200) during peak periods;
- The road network within the proposal corridor includes several major roads. Those identified in the Scoping Report as classified roads include Cobb Highway and Kidman Way.

TfNSW advice

Following review of the *Scoping Report*, TfNSW 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 is required to be 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.
 - Peak times for existing traffic.
 - Peak times for project-related traffic.
 - Directional splits for turning traffic.
 - Transportation hours.

Transport for NSW

- 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:

▲ 51-55 Currajong Street, PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 | DX20256

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P 1300 207 783

transport.nsw.gov.au

<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.
- 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.
- A review of crash data along the identified transport route/s for the most recent 5-year reporting period and an assessment of road safety along the proposed transport route/s.

Concept Level Route Analysis required for High Risk OSOM

- The route assessment is required for high risk OSOM (as defined on TfNSW website) required to deliver components to the project. The concept level route analysis must include:
 - The port or point of origin and must be for the entire route to the site access or intersections required to facilitate the high risk OSOM movements required for the project.
 - The TIA is required to include details of all high risk OSOM loads and vehicle configurations for the project.
 - The location of pull-over bays / rest areas along the high risk OSOM routes (including GPS coordinates) and demonstrate through swept paths that the high risk OSOMs can be physically accommodate all high risk OSOMs for the project (in terms of size, width and accessibility).

Expanding on the points above, the concept route assessment is required to include:

- Details of the road geometry and alignment along the identified transport route/s, including existing formations, crossings, bridges, intersection treatments and any identified hazards, including:
 - Bridge Assessments for any at risk bridges on the classified road network due to dimensions and weight of OSOM vehicles.
 - Swept path analysis demonstrating the largest design vehicle can enter and leave the development, and simultaneously pass through intersections along the proposed transport route/s.

- The design vehicle templates used in the swept path analysis software are also requested in order for TfNSW to review the performance within the software (e.g. Autodesk Vehicle Tracking or Transoft AutoTURN).
- Highlighting each at-risk road structures that the haulage route crosses including bridges, traffic signals, signage, major culverts, and minor culverts that may not meet the desirable cover to cater for proposed axle loads.
- Identify and provide the following measurements parameters of OSOM components / materials to be moved:
 - Identify types and numbers of high risk OSOM vehicles proposed to be used for the project.
 - Overall combination type, configuration, load and vehicle configuration:
 - length, width, height and mass (gcm, tare, weight to axle and payload) for components and nominated vehicles.
 - Wheelbase dimensions.
 - Maximum trailer articulation angle(s).
 - Minimum overhang heights above the road surface.
 - Vehicle configurations.
 - Traffic mitigation measures or road works, modifications, or road upgrades to facilitate the movement of the high risk OSOM(s) associated with the project.
 - Potential high level mitigation measures or commitments to mitigate known traffic, safety and impacts to road users along the high risk OSOM route (i.e school bus routes, mining shift changes, TSRs, harvest periods and events).
- Identify and assess implications of any road and rail projects that may be under construction during the indicative schedule for the OSOM movements.

Note: NHVR permits do not cover road works or upgrades and environmental approvals required along any proposed OSOM route. Any road works or upgrades works required along the OSOM route must be included within the scope of works in the SSD to ensure the development is constructable.

Note: given the high number of renewable energy and other large scale projects requiring haulage of OSOM components on the road network, restrictions, and limitations on OSOM movements may be imposed. In this regard, it is recommended that you engage earlier with TfNSW's Development Services Renewables team to discuss the requirements of the route assessment.