

Energy Assessments
Department of Planning & Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Karl Okorn

**SSI-48492458 for Waratah Super Battery at Station Road, Colongra
(Lot 10/ DP1201414)**

19 December 2022

Dear Karl,

Thank you for referring the abovementioned application via the NSW Major Projects Planning Portal on 10 November 2022 inviting further comment from Transport for NSW (TfNSW).

TfNSW's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Pacific Highway (HW10) and Central Coast Highway (Scenic Drive) (HW30) are classified (State) roads. Pursuant to section 7 of the *Roads Act 1993*, Council is the roads authority for this road and other public roads in the area.

TfNSW understands the proposal seeks approval for the construction, operation and decommissioning of a large scale 850MW / 1,680MWh Battery Energy Storage System (BESS) and supporting ancillary infrastructure, to be constructed over approximately 18 months (commencing June 2023), with a peak workforce of 150 workers. It is further understood the development is proposed to be staged, with 350 MW to be installed by 2024 and remainder installed by 2025.

TfNSW has reviewed the proposal and supporting documentation submitted and **is not satisfied** the proposed development has adequately addressed the anticipated construction traffic impacts on the classified road network.

To enable TfNSW to undertake an assessment of the proposal the following additional information is required:

1. Traffic Impact Assessment (TIA)

A dedicated Traffic Impact Assessment does not appear to have been undertaken for this development. TfNSW does not consider Section (6.7) within in the Environmental Impact Statement (EIS) to be sufficient in addressing the full traffic impacts of the proposed development.

TfNSW key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with the Future Transport Strategy 2056.

To ensure that TfNSW's key interests are addressed, TfNSW requests the application be updated with a supplementary Traffic Impact Assessment (TIA), prepared by a suitably qualified person/s in accordance with the *Austroads Guide to Traffic Management Part 12, Australian Standards* and any complementary *TfNSW Supplements*, and *Roads and Maritime Guide to Traffic Generating Developments*. The TIA is to directly address and include the information already addressed within Section 6.7 of the EIS (and updated where applicable) in addition to the following additional key information required to determine the proposed development's traffic impacts:

- Traffic volumes including:
 - Project-related traffic for each phase or stage of the project,
- Traffic characteristics including:
 - Number and ratio of heavy vehicles to light vehicles,

Transport for NSW

- Peak times for existing traffic,
- Peak times for project-related traffic including commuter periods,
- Proposed hours for transportation and haulage,
- Interactions between existing and project-related traffic.
- Vehicle specifications:
 - Including OSOM, largest design vehicles for deliveries, transport vehicles for specialist equipment etc.
- The origins, destinations and routes for:
 - Commuter (employee and contractor) light vehicles and pool vehicles (including shuttle buses)
 - Heavy (haulage) vehicles,
 - OSOM vehicles including return routes for OSOMs.

The TIA is to include details on the number of OSOM movements, intended time(s) for OSOM movements to occur and identify the location of pull-over bays / rest areas along OSOM routes where applicable.

- Road safety assessment of key haulage route/s:
 - Where road safety concerns are identified at a specific location along the proposed haulage routes and workforce commuter routes, the TIA is to be supported by a targeted Road Safety Audit undertaken by suitably qualified persons in accordance with the *Austrroads Guidelines*, including proposing mitigation measures to manage any identified impacts.
- A review of crash data along the identified transport route/s for the most recent 5 year reporting period and a road safety assessment along the proposed transport route/s considering safe systems principles adopted under Future Transport 2056 – further details are required, including a map clearly showing the relevant crash locations and relevancy to the data provided.
- Controls for transport and use of any dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, the *Australian Dangerous Goods Code* and *AS4452 Storage and Handling of Toxic Substances*.

Notwithstanding the noted above required information, TfNSW provide the following comments, regarding the Transport information provided in Section 6.7 of the EIS, including mitigation measures in Appendix C and traffic data in Appendix I, to assist the applicant in providing further information in a future TIA.

2. Construction timeframes.

- The proposed construction timeframes are not clearly explained. 18 months is often used, throughout the EIS, with context to the entire (850MW) construction timeframe. However, it is understood the 18 month construction timeframe relates to construction of the first stage (350MW) only, which is expected to commence June 2023 and be completed by November 2024. Section 3.5, states construction will occur longer than 18 months (18-24 months), and further specifies the additional 500MW is estimated to be installed by March 2025.
- Given the total 24 months is referenced once only throughout the EIS, and not within context of the traffic assessment, clarification is required to determine if all relevant assessments within the application are based on the initial 18 months only or the full 24 months, in particular the workforce volumes and the forecasted traffic impacts of the development extending beyond the 18 months period. This should include any concurrent workforce & deliveries for stage 1 testing / operational preparations & stage 2 construction activities.

Further to this, the peak construction period within the total construction timeframes has not been identified and should be included in a future TIA.

3. Key Intersection: Pacific Highway / Wyee Road / Scenic Road

- This existing key intersection is clearly demonstrated in the EIS and SIDRA Outputs (Appendix I) to be under strain or nearing capacity during the peak hours. Additionally, the construction traffic of the development is demonstrated to place the intersection under further strain. No mitigation measures have been provided to directly address this traffic impact. It is noted:
 - Construction workforce is stated to be likely based on the Central Coast or in Sydney or Newcastle and has the potential to access the site from all directions, including through this key intersection.

- Accommodation strategy is proposed as part of Mitigation Measure SE3, however the location of any future accommodation and / or associated transport needs is not clear.
- Carpooling is loosely suggested in the EIS, but not expanded on other than to identify the “persons per vehicle” rate of 1.25 for light vehicles.

Consideration needs to be given to further reducing the volume of light vehicles to site, by formally committing to, developing and implementing a carpooling or shuttle bus arrangement for the construction workforce arriving and departing the development site. Further details of this need to be addressed in a future TIA.

4. SIDRA & directional traffic volumes

- Appendix I – Traffic Data
 - Presents SIDRA outputs as extracts only, which are extremely small text, without relevant footnotes and does not include any intersection diagrams.
 - The SIDRA traffic volumes do not appear to match those in the traffic distribution tables in the EIS (figures 6.21 & 6.23). It is unclear which is correct. This information needs to be updated.
 - The “build phase” in the SIDRA analysis is noted to be for the year, 2024. However, construction is noted to commence in 2023, with the end of the 18 month construction timeframe (stage 1 only) expected to be in 2024. The project is noted to extend further into 2025 during the construction of the final 500MW of the project. The traffic impacts of the development are likely to increase after stage 1 is complete, in order to accommodate the additional workforce undertaking testing and operational activities of stage 1, concurrent to the construction traffic of the remaining 500MW.
 - The SIDRA analysis, directional traffic diagrams and traffic assessments need to be updated to further address the potential additional traffic impacts of any additional workforce accessing / departing the site for testing and / or operational activities required for the first stage of development (initial 350MW) concurrent to the construction staff working on the remaining 500MW of the development.

This traffic data needs to be included in a future TIA as supplementary Appendices, expanded on in detail.

- Mitigation Measure, SE3 – refers to the development of an accommodation strategy to address the needs of non-resident workers. This information may impact the direction of travel of light vehicles to site and needs to be addressed further within a TIA to identify any relevant traffic impacts, in particular, at key intersections.

5. Cumulative Impacts

- TfNSW understands Station Road provides access to the subject site and Colongra Power Station (both within the former Munmorah Power Station (MPS) site), in addition to Koala Park, a venue open to the public.
- The traffic counts undertaken by the development are noted to be a one-day count on a Thursday only. It is unclear if the traffic counts collected, would have sufficiently captured any peak traffic activity generated by the Koala Park venue. Further investigations are required to determine the peak activity periods of that development and how such traffic may, in a worst-case scenario, impact the peak traffic movements of the proposed development at the key intersections, in particular, Scenic Drive / Station Road intersection.

6. Mitigation measures

- Mitigation Measure, T3 – refers to rectifying any road deposits caused by site vehicles, to maintain the safety of road users. It is unclear what the term “Road deposits” means and it is further unclear how this would be monitored and / or how any “road deposits” would be clearly identified as being a result of the site vehicles. These statements and proposals are to be clarified and expanded.

7. Over Size Over Mass (OSOM) & Largest Design Vehicles

- Section 6.7.4.1.4 in the EIS states, that three transformers & two transmission supporting structures will be delivered to site via OSOM specialist vehicles, however, section 3.2.4 appears to indicate, many more components requiring OSOM transportation.
- The EIS notes permits will be required (undertaken by a contractor) and raises the potential need for traffic control measures to accommodate these movements. Mitigation Measure NV2 (in Appendix C) – refers to the potential for noise impacts of out of scheduled hours activity for the delivery of “oversized plant or structures”.

Transport for NSW

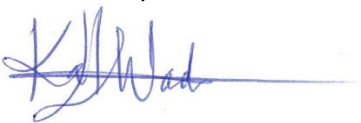
- Although the need for permits for the future OSOM movements across the state road network is acknowledged in the documentation, TfNSW notes, critical transportation information regarding the OSOM components and associated movements is still required and is essential during the development's assessment and approvals stage, to ensure all relevant factors impacting the state road network are sufficiently identified, addressed and mitigated early.
- TfNSW require further information regarding:
 - all oversized components and specialist vehicles required for transportation, specifying the load and vehicle dimensions (height, width and mass).
 - the proposed transportation routes (beyond noting use of designated Heavy Vehicle Routes) from the points of origin to the development site. The identified route/s should clearly identify any pinch points, points of conflict and any road infrastructure (in particular bridges and culverts) along the route/s;
 - Swept path diagrams, demonstrating that all required design vehicles (Over Size Over Mass vehicles) will be able to safely and efficiently access the site, and no additional works will be required to accommodate those vehicles, in particular at the key classified road intersections.
 - Noise mitigation measures for any out of scheduled hours activity relating to OSOM deliveries.

8. Construction Traffic Management Plan (CTMP)

- Further to the proposed inclusions in a CTMP (Mitigation Measure T1) the CTMP is to be prepared and implemented, in accordance with *Australian Standard 1742.3* and the *Work Health and Safety Regulation 2017* and in consultation with relevant Councils and TfNSW. The CTMP needs to identify strategies to manage the impacts of project related traffic. TfNSW recommends the CTMP includes:
 - OSOM transportation details, including but not limited to, requirements for permits, pilot vehicles, identification of route/s, pull-over bays, processes and approvals for contraflow / traffic control to manage restricted OSOM vehicle movements etc.
 - Relevant procedures, to identify and address Mitigation Measure T2, to ensure trucks used for the delivery of diesel to the Colongra Power Station are unimpeded.
 - Where applicable, further considerations to address peak traffic activity at the nearby Koala Park, in particular proposing relevant safety procedures for drivers during any identified peak traffic periods.
 - A Driver Code of Conduct (DCoC) for haulage / transport operations which addresses, but not limited to:
 - Map of primary transport route/s (Light Vehicle, Heavy Vehicle & OSOM) highlighting critical locations.
 - Any proposed temporary measures such a Traffic Guidance Scheme (TGS)
 - Any proposed workforce travel restrictions to mitigation traffic impacts.
 - Identification of local bus operations, including maps and consultation with local bus operators.
 - Safety initiatives for haulage through residential areas and/or school zones.
 - An induction process for vehicle operators and regular toolbox meetings.
 - A public and company/contractor complaint resolution and disciplinary procedure.
 - Procedures for transport in adverse weather conditions.
 - Community consultation measures for peak haulage periods.
 - Fatigue Management
 - Appendices of documentation relevant to external contractors and employee responsibilities, where applicable to the TMP and DCoC inclusions.

If you wish to discuss this matter further, please contact the undersigned on ph. 0429 270 678 or via development.west@transport.nsw.gov.au

Yours faithfully,



Katrina Wade

A/ Team Leader Development Services (Renewables)

West Region | Community and Place

Regional and Outer Metropolitan