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DPHI reference: SSD-78179499

9 December 2024

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

Attention: Megan Ramsdale

**SSD-78179499, Hanworth Battery Energy Storage System, Hanworth Road, Bannaby;
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 Hanworth Battery Energy Storage System located within the Upper Lachlan Shire Local Government Area (LGA).

TfNSW has reviewed the Scoping Study prepared for Hanworth Battery Energy Storage System by NGH dated November 2024 and provides advice in **Attachment A** and **Attachment B** 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.

If you have any questions or wish to discuss this matter further, please contact Kane Hitchcock, Development Services Case Officer, on 1300 019 680 or email development.renewables@transport.nsw.gov.au

Yours faithfully,



Alexandra Power

Team Leader Development Services –Renewables
Community and Place
Regional and Outer Metropolitan Division

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Attachment A

SSD-78179499, Hanworth Battery Energy Storage System, Hanworth Road, Bannaby; Request for Secretary's Environmental Assessment Requirements (SEARS)

Context

- The Project would involve the development, construction, operation and decommissioning of a BESS with a capacity of 1.2 GW / 4.8 GWh (4 hour storage).X
- The site access is from Hanworth Road, a local road extending from Bannaby Road with the main haulage route utilising the Hume Highway through Goulburn.
- OSOM Route analysis to be provided in TIA.
- The construction phase is expected to take approximately 24 months. It is anticipated that the Project would operate for about 40 years.

TfNSW advice for SEARs

The Environmental Impact Statement to be submitted as part of the environmental planning process will need to include the following:

Following review of the *Scoping Report*, TfNSW have identified and recommends the following issues be addressed in the Environmental Assessment:

A Traffic Impact Assessment (TIA) prepared in accordance with the methodology set out in *Guide to Traffic Impact Assessment (GTIA) 2024* and part 12 *Austroads Guide to Traffic Management* including:

1. Hours, days and periods of construction.
2. Schedule for phasing/staging of the project (including pre-construction, accommodation and ancillary infrastructure works) and identifying the traffic volumes for each stage.
3. Traffic volumes:
 - a. Surveyed existing background traffic at key intersections per Part 3 *Austroads Guide to Traffic Management* with survey raw data included.
 - b. 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 peak period(s) for traffic volumes.
4. Traffic volumes are to include a description of:
 - a. Ratio of light vehicles to heavy vehicles.
 - b. Differentiation of Over Size/Over Mass (OSOM) that do or do not require an NHVR permit and proposed times of operation on the State road network.
 - c. Project related traffic interaction with existing and projected background traffic with annual growth rate applied linearly.
 - d. Peak times for existing traffic and project related traffic.
 - e. Transportation hours.
5. The origin, destination and routes for:

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- a. Employee and contractor light traffic.
- b. Heavy vehicle traffic.
- c. OSOM vehicle traffic.
- d. OSOM high risk loads.
- e. 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.
- f. 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 enforcement to managing traffic volumes, driver behaviour and access paths to site.
- g. A turn warrant assessment for the worst-case scenario (ie peak project traffic volumes applied to peak background traffic) in accordance with Part 6 *Austroads Guide to Traffic Management* is to be undertaken at identified key intersections on project routes, project site access and site access points to access ancillary infrastructure.
- h. 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 roads. Proposed road facilities, access and intersection treatments are to be identified and conform with *Austroads Guide to Road Design* and TfNSW Supplements, including safe intersection sight distance. Strategic designs are to include swept path analysis for largest vehicle passing through the intersection(s). To assist the proponent in preparing strategic designs, the below link is provided: [Strategic-Design-requirements-for-DA-Factsheet.pdf \(nsw.gov.au\)](https://www.nsw.gov.au/transport/strategic-design-requirements-for-da-factsheet)

Note: Swept paths for OSOM vehicles on, entering and existing 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.

6. Traffic safety assessment:

- a. Local climate conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the project (eg fog, wet weather, etc).
- b. 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).
- c. Measures to be employed to ensure a high level of road safety for daily staff commutes between accommodation and construction site(s), specifically addressing impacts of unsafe driver behaviour and driver fatigue for all project stages and how measures employed will be enforced.

7. Details of emergency access/egress, including details of:

- a. The location of the emergency access(es).
- b. How the access will be managed (e.g., gates) to prevent non-emergency-related vehicle movements from using it.
- c. 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 road shoulder.

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Electricity transmission lines (where applicable)

8. In relation to the EIS, TfNSW requires the identification of ancillary infrastructure, such as Electricity Transmission Lines that are crossing or near the state-classified road network or rail infrastructure within TfNSW remit. With respect to this matter the following information is required:
- a. The heights or depths (under boring) and the vertical and horizontal clearances (overhead) in accordance with Austroads.
 - b. The method for construction of the transmission lines.
 - c. location of infrastructure and impacts (excavation or fill) relative to the road reserve, including demarcation of local and state-classified road reserves.
 - d. Access required to construct and maintain the infrastructure. Access points or access tracks required for ETLs or other infrastructure will require the same level of assessment as the primary project access point.
 - e. Strategic concept designs must be provided for each transmission line crossing the state-classified road network.

Workforce Accommodation Camp (where applicable)

9. If workforce accommodation is proposed, then the TIA is required to assess the pre-construction, construction schedule, staging, parallel construction activities and traffic generation until the workforce is fully accommodated at the camp. The traffic assessment requirements identified in this letter will apply to the workforce accommodation.

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Concept Level Route Analysis required for High Risk OSOM

1. The route assessment is required for high risk OSOM (as defined on TfNSW website) delivering components to the project. The concept level route analysis must include:
 - a. Port or point of origin for the entire route to the site access and intersections required to facilitate the high-risk OSOM movements required for the project.
 - b. Overall combination type, configuration, load and vehicle configuration.
 - c. The laden dimensions and weight of the vehicle configuration and loads.
 - d. The TIA is required to include details of all high-risk OSOM loads and vehicle configurations for the project.
 - e. Swept path analysis for the largest high-risk OSOM vehicles demonstrating that the largest high-risk OSOM vehicle can physically enter, exit and park without impacting travel lanes and that sufficient parking and access will be provided to other vehicle types permitted to access the identified rest area or pullover locations.
 - f. Bridge Assessments for any at risk bridges on classified roads due to dimensions and weight of OSOM vehicles.
 - g. Swept path analysis for the largest and longest high-risk OSOM navigating each pinch point or intersection along the state road network.
 - h. Identify each at-risk road structure that the high-risk OSOM route crosses, traffic signals, signage, powerlines, bridges (including height clearances to overpasses and trusses), major culverts, and minor culverts that may not meet the desirable cover to cater for proposed axle loads.
 - i. Traffic mitigation measures or road works, modifications, or road upgrades to facilitate the movement of the high risk OSOM(s) on the state road network around, though, under or over any at-risk road structure that has been identified from the review and assessment of the above point (h),
 - j. 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).
 - k. Identify and assess the implications of moving the high-risk OSOM through any road and rail projects that may be under construction or will be completed during the indicative schedule for the high-risk OSOM movements.
 - l. The Hexham Straight is a notable project impacting Route 2. The route assessment must assess the alternative route via Newcastle Inner City Bypass to Newcastle Road for high-risk OSOM loads that do not exceed the vertical clearance limitations.
 - m. Where there is reliance on the EnergyCo P2R road upgrades to facilitate the project's high-risk OSOM movements, then the pavement extents, scope of work, and bridge assessments for the P2R project are to be reviewed and assessed in relation to the project proposed high-risk OSOM vehicle configuration and loads. Evidence of the consistency check with the EnergyCo P2R project is to form part of the high-risk route assessment.

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- n. Swept paths and strategic concept designs prepared in accordance with Austroads and the Strategic Concept Design fact sheet (2d section) are to be included in the route assessment.

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

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