



4/08/2023

TfNSW Reference: WST23/00092/01 SF2023/131539

Your reference: SSD-8911

Energy Assessments
Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

Attention: Nestor Tsambos

Dear Nestor Tsambos

SSD-8911: Review of Environmental Impact Statement – Sundown Solar Farm

Thank you for the request for review of the Environmental Impact Statement (EIS) for the Sundown Solar Farm development (SSD-8911) via the Major Projects Planning Portal on the 4 July 2023.

From review of the EIS Transport for NSW (TfNSW) notes the development will involve:

- A network of approximately 660,000 PV panels and associated mounting infrastructure and a 150 MW (AC) battery BESS (4 hour)
- A 330 kV onsite substation, electrical collection and conversion systems, including inverter and transformer units, switchyard and control room, underground and aboveground cables
- A management hub, including demountable offices and amenities and equipment sheds
- Security fencing, temporary laydown areas (during construction and decommissioning)
- Parking, onsite creek crossings and internal access roads
- Access is proposed from Sturmans Road via Spring Mountain Road and the Gwydir Highway.

TfNSW has reviewed the information and is unable to properly assess possible impacts on the state transport network and its users. TfNSW requires additional information to continue the assessment of the Sundown Solar Farm (SSD-8911). Details of additional information required is set out in **Attachment 1**.

If you wish to discuss this matter further, please contact the undersigned on ph 1300 019 680 or via development.west@transport.nsw.gov.au.

Yours faithfully

Alexandra Power

Team Leader Development Services (Renewable Resources)
West Region | Community and Place
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SSD-8911: Review of Environmental Impact Statement – Sundown Solar Farm

This attachment relates to TfNSW's response dated [4 August 2023] reference WST23/00092/01 SF2023/131539

In preparation of this response TfNSW have reviewed the EIS prepared by EMM Consulting for Sundown Solar Farm dated June 2023 and the TIA prepared by EMM Consulting dated December 2022.

TfNSW require the following additional information to continue the assessment of the Sundown Solar Farm, in relation to TfNSW legislative remit.

1. The Traffic Impact Assessment (TIA) proposes to use the Spring Mountain Road/Gwydir Highway intersection as a construction route for light and heavy vehicles. Section 6.2 of the TIA shows that safe intersection sight distance (SISD) at this intersection does not comply with Austroads Guide to Road Design (AGRD) Part 4A – Table 3.2. TfNSW does not support intensifying traffic at an intersection without compliant SISD.

Note:

- Scaled plans and longitudinal section are required to demonstrate that sight distance is available at any proposed access point (refer to Table 3.2 of Austroads Guide to Road Design Part 4A) that intersects with a classified road. The plan must demonstrate any landscaping and/or fencing, will not compromise sight distance and measures including any necessary civil works to achieve compliant SISD.
 - Section 6.2 of the TIA suggests the use of temporary reduction of the posted speed on Gwydir Highway to achieve SISD requirements. TfNSW does not support temporary reduction of the posted speed to achieve compliant SISD. This would cause delay to vehicles using this stretch of road and cause confusion to drivers. This is supported by the NSW Speed Zoning Guidelines (2011) which specifies temporary reduction in the posted speed zone is not supported to service private developments.
2. Section 3.6.3 of the TIA suggests a traffic survey was completed in June 2021 at the Gwydir Highway/Spring Mountain Road intersection to determine the peak hours. A full breakdown of traffic counts is required to clearly demonstrate the peak periods.
 3. Section 4 of the TIA states Sundown Solar is in consultation with the White Rock Wind Farm regarding potential cost sharing of the upgrade of the Gwydir Highway/Spring Mountain Road intersection. Consultation details and information regarding proposed construction timeframes is required to understand and assess the cumulative traffic impacts at the AM/PM peak during peak construction. The revision of the TIA to include the cumulative traffic impacts of both developments is pertinent to understand the full scope of works at the Spring Mountain Road/Gwydir Highway intersection.
 4. Section 5 of the TIA suggests that construction workforce will generate up to 100 light vehicle trips and 14 shuttle bus trips per day. The TIA needs to be updated with the following information:

- a. Provide enforceable measures/strategies/protocols to ensure full compliance with the TIA, maximum light and heavy vehicles for peak construction (100 light vehicle trips and 14 shuttle bus trips per day). As a part of addressing this specify who is responsible for enforcement, how the measures will be enforced, what methods will be provided to monitor compliance, procedure for breaches in compliance and specify procedure for reviews of the implemented protocols and procedures.
 - b. Clarification of the shuttle bus size.
 - c. Identify the locations for the accommodation pick up and drop off points for the shuttle bus service.
 - d. Identify if the shuttle buses will be located at the project area during the day or return to another location outside of the AM/PM peak hours, the traffic assessment needs to be updated with any additional associated trips.
 - e. Specify how the commitment to the use of shuttle buses and to the maximum light vehicle numbers identified within the TIA will be achieved.
5. Section 5 of the TIA identifies that OSOM vehicles will be required during construction to transport the transformer. Swept path analysis is required demonstrating the largest design vehicle entering and exiting the development, and moving in each direction through intersections along the proposed OSOM transport route/s. The route analysis is to include at a minimum the following:
- a. The design vehicle templates used with 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).
 - b. Identify pullover, layby and emergency breakdown locations from the nominated Port to the project access.
 - c. Highlighting each at-risk road structures that the haulage route crosses including bridges, traffic signals, signage, railway lines, major culverts, and minor culverts that may not meet the desirable cover to cater for proposed axle loads.

Note:

- o Refer to NSW NHVR Class 1 Load Carrying Vehicle Operators Guide for further information.
 - o For the classified road network the bridge assessment request would need to be submitted to spu@transport.nsw.gov.au with details of the vehicle combinations (including axle spacing, ground contact width, number of tyres and requested axle loads).
- d. Identify and provide the following measurements parameters of the OSOM components / materials to be moved:
- o Identify all the types of OSOM vehicles proposed to be used for the project.
 - o Overall combination load length, width, height and mass
 - o Maximum component length, widths and heights
 - o Wheelbase dimensions,
 - o Maximum trailer articulation angle(s),
 - o Minimum overhang heights above the road surface,
 - o Axle loads and axle group loads in terms of both tonnes and Equivalent Standard Axles (refer to Austroads Guide to Pavement Technology).

- e. Strategic designs are required for any identified road works required along the classified road network based on the outcome of the above route assessment.

It should be noted that NHVR permits do not cover the civil works required along any proposed OSOM route. Any works required along the OSOM route must be considered within the scope of works for the SSD to ensure that the development is constructable.

Intersection Design

6. Table 4.3 of the TIA suggests the property access opposite Spring Mountain Road has been closed and moved approx. 50m to the west, Google Maps still shows the access opposite Spring Mountain Road. Evidence of the relocation and closure is required, any existing property access within the intersection upgrade footprint needs to be shown within the design.
7. Spring Mountain Road is unsealed at the intersection with Gwydir Highway which provides a safety risk, this must be sealed a minimum of 10m back from the edge of seal to prevent loose gravel tracking onto the highway. The plans need to be updated to demonstrate this.
8. There is an existing school bus stop located at the Gwydir Highway/Spring Mountain Road intersection (with no signage or infrastructure). The proposed bus stop facilities need to be shown within the plans considering safety and further information detailing the proposed measures to prevent conflict with vehicles travelling through the intersection is needed.
9. The fingerboard sign on the eastbound approach to the intersection on the Gwydir Highway should be replaced by an Advance Intersection Warning Sign, the plans need to be updated to demonstrate this.
10. Appendix B includes a 2D layout over an aerial image. A strategic design is required which must be to scale and include, but not be limited to details on, legal property boundaries including the existing road reserve boundaries, existing and proposed ground levels, existing and proposed lane configurations, existing and proposed lane widths, new lane lengths, typical cross sections, conceptual drainage details (for any changes required), proposed signage, impacts to utilities &/or signage etc.

Rail Impacts

11. TfNSW is the rail authority of the Country Rail Network (CRN) across NSW and the Transport Asset Holding Entity (TAHE) is a State – owned corporation that holds rail property assets and rail infrastructure, including the CRN. As of 29 January 2022, UGL Regional Linx (UGLRL) has been appointed by TfNSW to operate and manage the CRN to ensure any potential impacts to rail corridors are considered and addressed. The TIA needs to be updated considering the following:
 - The Environmental Impact Statement (EIS), Table 3.3 provides indicative construction haulage routes, however the TIA or EIS do not indicate or provide any information on where the proposed haulage routes cross both Biniguy to Inverell and Glenn Innes to Wallangarra CRN rail corridors. The proposal must ensure the safety of the rail corridor and rail infrastructure. The TIA needs to be updated to include all railway crossing locations of CRN corridors on the proposed routes.
 - If non-CRN corridors are affected by the haulage routes, the appropriate rail manager should be notified.