

NZ Transport Agency Waka Kotahi Reference: Application-2024-1363

9 June 2025

Lodestone Energy Limited
C/- Mitchell Daysh
PO Box 489
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Sent via Email: [REDACTED]

Dear Andrew,

Proposal for the construction, operation, and maintenance of a solar array– Haldon Rd, Burkes Pass – Lodestone Energy Limited

Thank you for consulting with the New Zealand Transport Agency Waka Kotahi (NZTA) in relation to your application that is to be lodged for approval under the Fast Track Approvals Act 2024 (FTAA) with the Environmental Protection Authority (EPA). Your proposal has been considered as follows:

Proposal

Resource consent is sought for the following activities:

- The construction, operation, and maintenance of a solar array and substation located on Haldon Road, Burkes Pass. The legal description of the land subject to the proposal is Part Reserve 1358 held in Record of Title CB437/82. The solar array would cover approximately 320ha of the 7689ha land parcel.
- The proposal would include, but is not limited to, the following:
 - The installation of approximately 360,000 solar photovoltaic (PV) modules, mounted on single-axis tracking tables, that are supported by piles driven into the ground. The configured PV modules will be approximately 2.6 m above ground level when at their maximum rotation of 60 degrees;
 - The construction, operation, and maintenance of a substation to facilitate the connection of the solar array to the National Grid;
 - The upgrade of part of an existing National Grid transmission line with a new transmission tower to support an in-out connection to the proposed substation;
 - Associated infrastructure and site improvements including the formation of access roads and the construction of fencing and support buildings and;
 - Alterations to the intersection of Haldon Road and State Highway 8 (SH8) at 'Dog Kennel Corner'.
- It is anticipated that the construction of the solar array would take between 14-18 months. The solar array is intended to initially operate for a period of 35 years. However, this would be reviewed in the future and could be extended

Assessment

In assessing the proposed activity, NZTA notes the following:

- Vehicles will be required to access the subject site during construction and for ongoing operational purposes via the intersection of Haldon Road and SH8. Haldon Road connects with SH8 at 'Dog Kennel Corner', where it splits into two separate road legs (a western and eastern leg) creating a 'Y' intersection with SH8 as shown in **Attachment 1**.
- SH8 at 'Dog Kennel Corner' has a posted speed limit of 100km/hr, an advisory speed of 85km/hr where SH8 curves, and has an average daily traffic count of 2645 (11% heavy).
- The proposal would lead to an increase in the number of vehicle movements in this locality along SH8 during both the construction and operation of the solar array. Construction traffic would largely comprise of imported material and equipment container deliveries, and personnel travelling to and from the subject site. It is noted that the operational traffic volumes would be relatively low.
- The Haldon Road and SH8 intersection, consisting of both the western and eastern legs, does not comply with the minimum recommended sightline distance recommendation of the Austroads road engineering guide. Austroads recommends a minimum sightline distance of 250m for intersections designed within a 100km/hr speed environment and a minimum sightline distance of 200m where a 85km/hr advisory speed limit is imposed. In this case, a sightline distance of approximately 220m is provided at the intersection (for both the western and eastern legs of Haldon Road).
- If traffic associated with the construction of the solar array were to approach SH8 on the eastern Haldon Road leg, when leaving the subject site, the intersection geometry of 'Dog Kennel Corner' provides poor sightlines to the left (west). Therefore, it is noted that an increase in traffic in this locality during the construction phase would increase the likelihood of crashes occurring at this intersection and resulting in adverse safety effects on the state highway.
- In relation to the western leg of Haldon Road at 'Dog Kennel Corner' this would generally only cater for construction traffic travelling to and from the west due to its alignment with SH8. In comparison to the eastern leg, vehicles using this leg would be provided with greater sightlines and given that the exit (left turn) onto SH8 is designed to enable vehicles to accelerate before merging with traffic on the state highway this would assist with minimising adverse safety effects associated with construction traffic using the western leg.
- The applicant has provided NZTA with an Integrated Transport Assessment (ITA) completed by Stantec New Zealand and dated 22/04/25. The ITA provides an assessment on the likely volume of traffic generated by the proposal, during both its construction and operation, and concludes on the potential adverse safety and efficiency effects on the surrounding road network. The ITA recommends that alterations be made to the eastern leg of Haldon Road at the intersection with SH8 and also recommends other forms of mitigation to manage the potential adverse effects on the roading network.
- The ITA has been reviewed by an NZTA Safety Engineer who considers the transport assessment and mitigation measures outlined within the ITA, insofar as they relate to the state highway, to be appropriate to minimise the potential adverse effects of the proposal on the state highway network. The mitigation measures are discussed in detail in the ITA and include undertaking minor physical works at the eastern SH8/Haldon Road intersection and at the intersection of the two Haldon Road legs. Additional measures include erecting truck warning signage and implementing driver behaviour protocols and supporting private vehicle travel minimisation for contractors.
- As an additional measure, and to support the conclusions reached in the ITA, the applicant also proposes to implement a Construction Traffic Management Plan (CTMP) in accordance with the Code of Practice for Temporary Traffic Management. It is noted that the applicant would require a Corridor Access Request (CAR) from NZTA prior to undertaking any works within the SH8 road corridor and through this process the CTMP would need to be reviewed and approved by NZTA.
- In relation to the intersection upgrades at 'Dog Kennel Corner' as discussed above, the applicant has volunteered conditions that require the final detailed design for the intersection upgrades to be confirmed with NZTA prior to works commencing. The conditions volunteered in consultation with NZTA are listed below.
- No other adverse effects are of concern to NZTA. Given the distance of the subject site from SH8 it is not anticipated that glint and glare effects would be an issue.

Based on the above assessment, including the volunteer conditions proposed by the applicant, NZTA considers that the proposal is unlikely to adversely affect the safety and operation of the state highway network.

Conditions:

In discussion with NZTA your client has agreed to include the following conditions as part of your client's resource consent application. The legal name of NZTA is the **New Zealand Transport Agency**; therefore, our full legal name is referred to in the conditions.

Please note, the below condition numbering corresponds with the numbering provided to NZTA by the applicant. Condition 4 would need to be amended accordingly if the numbering were to change.

Condition 3:

Prior to any material or equipment deliveries utilising the intersection of State Highway 8 and the eastern leg of Haldon Road located approximately at grid reference (NZTM 2000) E1405375, N5114560, the Consent Holder must complete all necessary works to realign the Haldon Road eastern leg approach to State Highway 8 to improve the driver observation angle to the left.

Condition 4:

Prior to works commencing on the intersection upgrade referred to in Condition 3, the Consent Holder must:

- a. submit the detailed design of the State Highway 8 intersection realignment works to New Zealand Transport Agency for approval; and
- b. submit a copy of New Zealand Transport Agency's approval to undertake works on the state highway (as detailed in the advice notes below) to Mackenzie District Council.

Condition 5:

The completed State Highway 8 intersection realignment works must be certified by a suitably experienced Chartered Professional Engineer (CPEng) that the works have been completed in accordance with the detailed design approved by the New Zealand Transport Agency. That certification must be provided to the New Zealand Transport Agency.

Advice Notes:

- a. *It is a requirement of the Government Roadway Powers Act 1989 that any person wanting to carry out works on a state highway first gain the approval of the New Zealand Transport Agency for the works and that a Corridor Access Request (CAR) is applied for and subsequently a Work Access Permit issued (WAP) before any works commence. A CAR will be required for the State Highway 8 Intersection works.*
- b. *Detailed design approval from the New Zealand Transport Agency shall be gained by the Consent Holder prior to applying for a CAR. The detailed design shall be prepared by a suitably qualified professional. In developing the detailed design, the Consent Holder will need to consult with the New Zealand Transport Agency appointed Safety Engineer and the state highway maintenance contractor for the Mackenzie District.*
- c. *A Corridor Access Request is made online via www.submitica.co.nz. The CAR needs to be submitted at least 21 working days before the planned start of works. The Corridor Access Request will need to include:*
 - i. *The detailed final design for the State Highway 8 / Haldon Road intersection upgrade;*
 - ii. *A Construction Traffic Management Plan that has attained approval from the Waka Kotahi NZ Transport Agency appointed state highway maintenance contractor for the Mackenzie District.*

Determination

On the basis of the above assessment of the proposed activity, and the conditions volunteered by the applicant, the New Zealand Transport Agency does not have any objection to the application.

If you have any queries regarding the above or wish to discuss matters further, please feel free to contact the Environmental Planning team at environmentalplanning@nzta.govt.nz.

Yours sincerely,



Charlotte Niederer

Intermediate Planner

Poutiaki Taiao / Environmental Planning, System Design, on behalf of NZ Transport Agency Waka Kotahi.

Enclosed:

- Attachment 1: Dog Kennel Corner/Haldon Road Intersection with SH8

Attachment 1: Dog Kennel Corner/Haldon Road Intersection with SH8

