**t** +1 213 267 2332 | **f** +1 213 318 0744
info@gentecsol.com | www.gentecsol.com
11900 W Olympic Blvd #450, Los Angeles, CA 90064
**GTS | General Technologies and Solutions**

# MEMORANDUM

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| **Date:** | May 11, 2023 | **GTS:** 220903 |
| **To:** | Meghan Gibson, Chambers Group | |
| **From:** | Rawad Hani, GTS | |
| **Subject:** | **Vehicle Miles Traveled (VMT) Analysis – Stroud Energy Storage Project** | |

This memorandum describes the vehicle miles traveled (VMT) screening analysis for the proposed Stroud Energy Storage Project (Project), in the City of Lancaster, California.

The Project is a lithium-ion battery energy storage facility that will comprise lithium-ion battery modules installed in racks housed in purpose-built outdoor Battery Energy Storage System (BESS) enclosures, associated equipment, a project substation, and a generation tie-line connecting the Project to the adjacent existing Southern California Edison (SCE) 500 kilovolt (kV) Antelope Substation. The Project is proposed within a 9.7 acre area comprising of one parcel (3203-034-004) and then the associated gen-tie area consisting of a small portion of four separate parcels (3203-034-810, 3203-034-811, 3203-034-818, and 3203-034-806) also in City of Lancaster, California (Project site). A second gen-tie option is also proposed that would consist of a small portion of three separate parcels (3218-002-007, 3218-002-116, and 3218-002,005) in Los Angeles County, California.

The VMT analysis evaluated the Project using the Los Angeles County VMT guidelines outlined in the June 2020 *Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report*.

## Background

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

## Project Trip Generation

While the Project will sit on a 9.7-acre site, data provided by Stroud ESS, LLC (the Applicant) indicates that the majority of operations will be performed remotely, however, it is estimated that maintenance will include two to four staff performing maintenance visits weekly and as needed. The Project will be monitored and operated remotely 24 hours per day, 7 days per week from an off-site control center with no permanent on-site operations and maintenance personnel.

The Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition (2021)* was utilized to estimate daily project trip generation. The trip generation manual does not include data for a battery energy storage facility land use category specifically, or for power plants in general. The most appropriate specific land use in the manual is "Utility" (Code 170), representing land uses pertaining to energy production and similar uses. The Trip Generation Manual includes formulas and rates for trip generation based on metrics including project building square footage and number of employees. Often, building

square footage is the appropriate metric to use, however in this case, it is not possible given that the Project is on a 9.7-acre site, while the maximum building square footage allowed in ITE Code 170 is less than 50,000 square feet. Therefore, employment is the only metric for estimating trip generation.

The following table shows employment information for the Project, as provided by the Applicant for the maximum of 4 employees per day.

| Land Use | ITE Land Use Code | Units | Daily Rate | Estimated Daily Trips |
|---|---|---|---|---|
| Utility | 170 | Employees | 3.85 per Employee | 16 |

Based on the rates presented in the manual, estimated daily trips for the Project are 16 daily trips.

## VMT Screening Analysis

Pursuant to SB 743 technical guidance published by OPR and the *Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report* of June 2020 as well as the City of Lancaster *Transportation Analysis Updates in Lancaster of May 2020*, there are several screening procedures to potentially streamline project analysis (i.e., provide a presumptive non-impact finding and remove the need for a VMT analysis). Prime among these are Project Size whereby projects that generate fewer than 110 trips per day can be presumed to have a less than significant transportation impact.

Data (presented in the previous section) indicates that the Project would generate less than 110 daily trips.

Therefore, based on the VMT screening analysis presented above, the Project represents a less than significant transportation impact based on VMT and no further VMT analysis is required.

## Conclusion

Based on the VMT analysis as shown above, the Project doesn’t constitute a significant impact for VMT.