## Appendix I

Vidal Trip Generation Memorandum

## Kimley»Horn

LLG Reference: 3-21-3455
Subject: Vidal Solar Project
San Bernardino County, California
Dear Ms. Bonine:
Linscott, Law \& Greenspan, Engineers (LLG) has prepared this letter report to summarize the results of our evaluation of the proposed Vidal Solar Project ("Project") from a traffic and transportation perspective.

## InTRODUCTION

The Project is proposing to build, operate and maintain the Vidal Solar Energy Facility. The Project will provide 160 megawatts of alternating current of renewable energy on approximately 1,220 acres in Vidal, San Bernardino County.

The County's Zoning Map identifies the zoning of the Project site as Resource Conservation (RC; County Zoning Map). The RC land use zoning district provides sites for open space and recreational and similar and compatible uses. Commercial renewable energy facilities are an allowable land use within the RC land use zoning district (County Development Code 2007).

Included in this traffic report are the following.

- Project Description
- Existing Conditions Discussion
- Trip Generation
- Summary and Conclusions


## Project Description

## Project Location

The Project site is located approximately 2.5 miles southeast of Vidal, an unincorporated area of San Bernardino County (County) that is located just east of U.S. Route 95 (US 95), just north of the Riverside County border, and just west of the

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Colorado River. The Project site encompasses 1,220 acres within 26 privately-owned parcels (in their entirety and portions of) that are in the process of lease acquisition.
Figure 1 shows the Project Area Map.

## Project Description

Primary access to the Project from the regional transportation system would be gained by exiting U.S Route 95 directly onto a Project-controlled, dirt access road on the west side of the Project site. While existing roads would be utilized to the greatest extent possible, potential new unpaved roads may need to be constructed off site to serve as access roads from the existing road network to the Project. Any new roads surrounding the Project site would be a minimum of 20 feet wide for fire department and emergency vehicles. Additional internal maintenance roads would be located throughout the Project site. Internal access roads would be up to 20 feet wide and would be cleared and compacted for equipment and emergency vehicle travel and access to the solar blocks. These Project site access roads would remain in place for ongoing operations and maintenance activities after construction is completed.

The construction of the Project would last up to approximately 10 to 14 months, with construction occurring between the hours of between 7:00 a.m. and 7:00 p.m. every day except Sundays and Federal holidays in accordance with County noise standards.

The various elements of the Project would be constructed concurrently on the property. Construction is anticipated to commence in 2023. Onsite workforce is expected to average 220 workers per day with a peak of up to 495 workers.

Construction activities would be expected to include site preparation, fencing, mowing, excavation, grading, trenching/underground work, pile driving, system installation, testing, and cleanup. Site preparation and construction of the Project would be in accordance with all federal, state, and County zoning codes and requirements. Noise-generating construction activities would be limited to the construction hours noted above. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from noise receptors to the extent practicable. The contractor would conduct construction activities in such a manner that the maximum noise levels at the affected buildings would not exceed established noise levels.

Upon completion of the construction and testing phases, the Project would be operated during daylight hours. Up to 8 to 12 full-time and/or part-time staff would be required for operation, inspection, security, maintenance, and system monitoring purposes.

Figure 2 shows the Project's Site Plan.

## Existing Conditions

US 95 is a United States Numbered Highway, stretching from the Mexican border in San Luis, Arizona and running through California and Nevada. Within California, US 95 traverses through the far eastern edges of both Riverside and San Bernardino counties running parallel to the Colorado River. US 95 serves Blythe and Needles and junctions with State Route 62 (SR 62) at Vidal. Upon entering San Bernardino County, US 95 turns away from the Colorado River, heading northwest towards the Vidal Junction, the junction with SR 62 in the Vidal Valley. Along the Project frontage, U.S. Route 95 is constructed as a two-lane undivided highway.

## Trip Generation

## Project Trip Generation

As described above, the Project construction activities would be expected to include site preparation, fencing, mowing, excavation, grading, trenching/underground work, pile driving, system installation, testing, and cleanup. During peak construction activities, approximately 495 workers and a maximum of 25 medium size trucks per day would be required.

Daily and peak hour trip generation rates and in/out splits were calculated for the peak construction period using detailed data developed for analysis of the Project's impacts. Construction activities would generally occur during a 12-hour-shift day with the vast majority of the trips occurring outside the typical commuter peak hours. To be conservative, it was assumed that $20 \%$ of employees would arrive during a single hour of the morning peak commuter period (7:00-9:00 AM) and depart within a single hour of the evening peak period (4:00-6:00 PM). Truck trips are anticipated to be distributed generally evenly throughout the 12 -hour-shift day. In addition, no carpooling for construction employees was assumed to be conservative.

## Construction

Table 1 tabulates the total daily and peak hour Project traffic volumes. The Project during construction trip generation is calculated to be 1,040 average daily traffic volume (ADT) with 101 inbound/ 12 outbound trips during the AM peak hour and 12 inbound/ 101 outbound trips during the PM peak hour.

## Post Construction Operations

Post-construction approximately 8 to 12 full-time and/or part-time staff would be required for operation, inspection, security, maintenance, and system monitoring purposes.

Table 1
Construction Project Trip Generation


General Notes:

1. To estimate the employee traffic, it is assumed that $20 \%$ of the employee traffic would access the work area during the commuter peak hours.
2. Truck trips are estimated to occur evenly throughout a 12-hour construction period proposed for the Project.
3. A Passenger Car Equivalent (PCE) factor of 2.0 was applied based on HCM $6^{\text {th }}$ Ed. to account for the diminished operations of trucks.
4. Rate accounts for the fact that personal and trucks enter and exit the site for a total of the trips each.

## Conclusion

Based on the relatively low amount of Project generated peak period construction trips and low existing baseline traffic volumes on area roadways, no substantial transportation impacts are anticipated.

Vehicle Miles Traveled (VMT) analysis is not required since the post construction operational traffic is only about 20 ADT, which is less than the 110 ADT Office of Planning and research (OPR) screening threshold.

Please call us at 858.300 .8800 if you have any questions or comments regarding this letter report.

Sincerely,
Linscott, Law \& Greenspan, Engineers


John Boarman, PE
Principal


