

Appendix K.2

Transportation Impact Assessment

TECHNICAL MEMORANDUM

July 3, 2025

Project# 29233

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SWCA

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From: Mychal Loomis, PE/TE/PTOE/RSP

RE: Starlight Solar Traffic Statement for Water Truck Change

Introduction

Kittelison prepared a Transportation Impact Assessment dated February 16, 2024, for the Starlight Solar project. The study evaluated two phases of construction and post-construction conditions for intersections near the project site. The study found no impacts to the roadway network during construction or operations of the project. Assumptions for construction traffic were assumed in the analysis, and there has been a change in construction traffic since approval of the study.

CONSTRUCTION TRAFFIC CHANGE

The approved study used information available at the time that estimated total construction water demand to be 26,086 gallons per day for Phase I and 24,996 gallons per day for Phase II, with a water truck tank capacity of 10,000 gallons. This resulted in 3 round-trip truck trips for both Phase I and for Phase II, and assumed one trip would occur during the morning peak hour and the other two would occur at non-peak times of the day. Further, non-water truck estimates for Phase I was 164 trucks per day and Phase II was 466 trucks per day. These numbers were considered conservative and included a mix of heavy duty trucks that could be needed on site.

New information about construction estimates the total Phase I construction water demand has *decreased* from 26,086 gallons per day to 18,522 gallons per day and Phase II construction water demand has *increased* from 24,996 gallons per day to 44,367 gallons per day. The capacity of water trucks also changed to 6,000-gallon capacity trucks instead of 10,000-gallon trucks as previously assumed. These changes result in 4 round-trip trucks for Phase I (an increase of 1 truck) and 8 round-trip trucks for Phase II (an increase of 5 trucks). With the number of overall trucks estimated to the site in the approved study, this change in water truck assumptions would likely not affect the overall trucks going to and from the site on an average day. However, following similar estimates to the approved study, it can be assumed the additional Phase I water truck trips would occur during a non-peak time. It can also be assumed that two additional truck trips would occur during the morning peak hour during Phase II and the other three would occur at non-peak times of the day.

FINDINGS

The analysis in the approved study showed the intersections within the study area were operating at LOS B or better during both phases of construction and had excess capacity. The addition of 1 round-trip truck in Phase I peak hours and 2 round-trip trucks in Phase II peak hours would not change the LOS, and would not result in unacceptable operations at intersections. Further, the overall trucks to the site assumed in the study were considered conservative and the change in water truck estimates would likely not result in a change to the average trucks visiting the site each day. Thus, this new information on water truck capacity and number of daily trips would not change the findings of the approved traffic impact assessment for the Starlight Solar project.