3.13 Transportation

This section addresses the proposed project's impacts on traffic and the surrounding roadway network associated with construction and operation of the proposed project. The following discussion describes the existing conditions in the surrounding area, the existing federal, state, and local regulations regarding transportation, and an analysis of the potential impacts of the proposed project.

Information in this section is summarized from the *Traffic Letter Report – Brawley Solar Project* prepared by Linscott, Law & Greenspan (LLG). This report is included in Appendix G of this EIR.

3.13.1 Existing Conditions

Existing Circulation Network

The following is a description of the nearby roadway network:

North Best Avenue is an unclassified roadway in the Imperial County Circulation Element Plan. It is currently constructed as a two-lane north-south roadway in the study area. There is no posted speed limit. There are no bike lanes provided.

Ward Road is an unclassified roadway in the Imperial County Circulation Element Plan. It is currently constructed as a two-lane east-west roadway in the study area. There is no posted speed limit. There are no bike lanes provided.

State Route 111 (SR-111) begins at the International Border between Mexico and the United States traveling north with two travel lanes in each direction. SR 111 (Imperial Avenue) is classified as a 4-Lane primary north/south arterial in the City of Calexico Circulation Element. Class II bicycle lanes are provided north of SR 98. Bus stops are not provided. Curb, gutter, and sidewalks are provided south of SR 98. Curbside parking is permitted intermittently south of SR 98, on both sides of the roadway. The speed limit is posted at 55 mph.

Alternative/Public Transportation

Fixed Route Transportation

Imperial Valley Transit (IVT) is an inter-city fixed route bus system, subsidized by the Imperial Valley Association of Governments (IVAG), administered by the County Department of Public Works and operated by a public transit bus service. The service is wheelchair accessible and Americans with Disabilities Act compliant. IVT Routes are defined categorized in the following manner:

- **Fixed Routes.** Fixed routes operate over a set pattern of travel and with a published schedule. The fixed route provides a low cost, reliable, accessible and comfortable way to travel.
- **Deviated Fixed Route.** In several service areas, IVT operates on a deviated fixed route basis so that persons with disabilities and limited mobility are able to travel on the bus. Passengers must call and request this service the day before service is desired in the communities of Seeley, Ocotillo and the east side of the Salton Sea.
- **Remote Zone Routes.** Remote zone route operate once a week. These routes are "lifeline" in nature in that they provide connections from some of the more distant communities in the Imperial County area (IVT 2021).

The project site is not within the Fixed Route Transportation system and, therefore, would not receive regular bus service to the project site or within the vicinity of the project site. The IVT Gold Line serves the Brawley area with 31 bus stops. The nearest IVT bus stop is located at Flammang Avenue and Gutierrez Court, which is approximately two miles southwest of the project site.

Bicycle Facilities

The project site is located within a rural portion of Imperial County. There are no bicycle facilities in the immediate proximity of the project site.

Project Site Access

Regional access to the site would be provided by SR-78 and SR-111. As shown in Figure 2-3, primary access to the project site would be located off N Best Avenue. A secondary emergency access road would be located in the northwest portion of the project site.

3.13.2 Regulatory Setting

This section identifies and summarizes laws, policies, and regulations that are applicable to the proposed project.

State

Senate Bill 743

In September 2013, the Governor's Office signed Senate Bill 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes include the elimination of Auto Delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The guidance identifies vehicle miles traveled (VMT) as the most appropriate CEQA transportation metric, along with the elimination of Auto Delay/LOS for CEQA purposes statewide. The justification for this paradigm shift is that Auto Delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions.

California Department of Transportation

Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Specifically, Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System.

As it relates to the proposed project and potential construction access routes within the County, Caltrans District 11 is responsible for maintaining and managing I-8, SR-78 and SR-111.

Regional

Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal)

On September 3,2020, SCAG adopted the 2020-2045 RTP/SCS (SCAG 2020). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic,

environmental and public health goals. Input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2020-2045 RTP/SCS demonstrates how the region will reduce emissions from transportation sources to comply with SB 375 and meet the NAAQS set forth by the Clean Air Act.

The updated RTP/SCS contains thousands of individual transportation projects that aim to improve the region's mobility and air quality and revitalize the economy. Since the RTP/SCS's adoption, the county transportation commissions have identified new project priorities and have experienced technical changes that are time-sensitive. Additionally, the new amendments for the plan have outlined minor modifications to project scopes, costs and/or funding and updates to completion years. The amendments to the RTP/SCS do not change any other policies, programs, or projects in the plan.

Local

County of Imperial Circulation and Scenic Highways Element

The Circulation and Scenic Highways Element identifies the location and extent of transportation routes and facilities. It is intended to meet the transportation needs of local residents and businesses and as a source for regional coordination. The inclusion of Scenic Highways provides a means of protecting and enhancing scenic resources within highway corridors in Imperial County. The purpose of the Circulation and Scenic Highways Element is to provide a comprehensive document which contains the latest knowledge about the transportation needs of the County and the various modes available to meet these needs. Additionally, the purpose of this Element is to provide a means of protecting and enhancing scenic resources within both rural and urban scenic highway corridors.

Coordination across jurisdictional standards for road classification and design standards was identified as a crucial component to the 2008 update of the Circulation and Scenic Highways Element. The intent of this element is to provide a system of roads and streets that operate at a LOS "C" or better (County of Imperial 2008).

County of Imperial Bicycle Master Plan Update: Final Plan

In 2012, the County of Imperial adopted an updated Bicycle Master Plan to serve as the guiding document for the development of an integrated network of bicycle facilities and supporting programs designed to link the unincorporated areas and attractive land uses throughout the County. This document is an update to the previously adopted Countywide Bicycle Master Plan; and was prepared to accomplish the following goals:

- 1. To promote bicycling as a viable travel choice for users of all abilities in the County
- 2. To provide a safe and comprehensive regional connected bikeway network
- 3. To enhance environmental quality, public health, recreation and mobility benefits for the County through increased bicycling

The County of Imperial's General Plan, Circulation and Scenic Highways Element, and Conservation and Open Space Element, provide a solid planning basis for the Bicycle Master Plan. In spite of the fact that there are a limited number of bicycle facilities in Imperial County and no comprehensive bicycle system, there is a growing interest in cycling and numerous cyclists bike on a regular basis for both recreation and commuting to work and school.

3.13.3 Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to transportation are considered significant if any of the following occur:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities
- Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access

Methodology

The assessment evaluates the proposed project's trip generated during and after construction, and roadway conditions for roads that would be utilized to access the project site for construction.

Project Trip Generation

Construction of the proposed project would occur in phases beginning with site preparation and grading and ending with equipment setup and commencement of commercial operations. During peak construction activities, 120 workers and a maximum of 60 trucks at a time 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. A worst-case scenario in which all employees would arrive prior to the morning peak commuter period (7:00 - 9:00 a.m.) and depart within the evening peak period (4:00 - 6:00 p.m.) was assumed. Truck trips are anticipated to be distributed generally evenly throughout the 12-hour-shift day. In order to provide a conservative analysis, all employees were assumed to arrive and depart during peak commute periods. In addition, no carpooling for construction employees was assumed.

A passenger-car-equivalent (PCE) factor of 2.5 was applied to heavy vehicles (per the Highway Capacity Manual or HCM) to account for their reduced performance characteristics in the traffic stream (e.g. starting, stopping, and maneuvering). This information was used in calculating the project-generated average daily traffic (ADT).

Table 3.13-1 tabulates the total daily and peak hour project traffic volumes. The project's construction trip generation is calculated to be 540 ADT with 127 inbound/19 outbound trips during the AM peak hour and 19 inbound/ 127 outbound trips during the PM peak hour. These values include the heavy-vehicle PCE-adjustment.

Once fully constructed, the project would be operated on an unstaffed basis and be monitored remotely from the existing Brawley Geothermal Power Plant control room, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, no full-time site personnel would be required on-site during operations and approximately two employees would only be onsite up to four times per year to wash the solar panels.

| Use | Size | PCE ^b | Daily Trips | | AM Peak Hour | | PM Peak Hour | |
|-----------|------|------------------|--------------------|------------------------------|--------------|-----|--------------|-----|
| | | | | | Volume | | Volume | |
| | | | Rate (In + Out) | Volume (ADT) ^a | In | Out | In | Out |
| Personnel | 120 | 1 | 2.0/personnel | 240 | 114 | 6 | 6 | 114 |
| Trucks | 60 | 2.5 | 2.0/truck | 300 | 13 | 13 | 13 | 13 |
| Subtotal | | | | 540 | 127 | 19 | 19 | 127 |

Table 3.13-1. Construction Project Trip Generation

Notes: a – ADT = Average daily traffic; b – PCE = Passenger car equivalent

1. To estimate the employee traffic, it is conservatively assumed that 100% of the employee traffic would access the work area during the same commuter peak hours between 7:00 - 9:00a.m. & 4:00 - 6:00 p.m.

2. The In/Out splits assumed are 95:5 during AM peak hour and 5:95 during the PM peak hour.

3. Truck trips are estimated to occur relatively evenly throughout a 12-hour construction hours proposed for the project. For 30 trucks, this calculates to approximately 2.3 trucks/hour without PCE.

4. A passenger-car-equivalent (PCE) factor of 2.5 was applied to heavy vehicles (per the Highway Capacity Manual or HCM) Source: Appendix G of this EIR

Impact Analysis

Impact 3.13-1 Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

During the construction phase of the proposed project, the maximum number of trip ends generated on a daily basis would be approximately 540 trips. Based on the low amount of construction trips generated and low existing traffic volumes on area roadways, no substantial transportation impacts are anticipated. Implementation of the proposed project would not require any public road widening to accommodate vehicular trips associated with the proposed project (construction phase and operational phase), while maintaining adequate LOS. Additionally, future operations and maintenance would be conducted remotely, with minimal trips to the project site for panel washing and other solar maintenance. Approximately two employees would be onsite up to four times per year to wash the solar panels, which equates to 8 trips per employee or 16 trips annually. There is no regular bus service to the general area and project-related construction and operations and maintenance phases would not impact mass transit. The proposed project would not interfere with bicycle facilities because the proposed project is located in a rural portion of the County with no existing or potential future designated bike routes in the immediate vicinity. Therefore, the proposed project would not result in any significant impacts to any roadway segments or transportation related facilities/infrastructure within the project area during construction and operation; and would not conflict with a program plan, ordinance, or policy as it relates to traffic and transportation. Impacts are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.13-2 Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Section 15064.3(b) of the CEQA Guidelines provides guidance on determining the significance of transportation impacts and focuses on the use of vehicle miles traveled (VMT), which is defined as the amount and distance of automobile travel associated with a project.

Although the proposed project would increase VMT during the construction phase as a result of trips made by construction workers and transportation of construction material and equipment, these increases are temporary in nature. Further, as discussed above, operation of the proposed project would only require intermittent maintenance (including inspection, panel washing, and vegetation removal), which would be a nominal amount of vehicle trips generated (16 trips annually). Therefore, the proposed project would not conflict or be inconsistent with Section 15064.3(b) of the CEQA Guidelines and this impact is considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.13-3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Project construction would include the renovation of existing dirt roads to all-weather surfaces (to meet the County standards) from N Best Avenue to the City of Brawley wastewater treatment plant. Construction of the proposed project would begin with clearing of existing brush and installation of fencing around the project boundary. A 20-foot road of engineering-approved aggregate would surround the site within the fencing.

As shown in Figure 2-3, primary access to the project site would be located off N Best Avenue. A secondary emergency access road would be located in the northwest portion of the project site. Access roads would be constructed with an all-weather surface, to meet the County Fire Department's standards. An all-weather surface access road would surround the perimeter of the project site, as well as around solar blocks no greater than 500 by 500 feet.

At the time of final design for the proposed project, and as a Condition of Approval of the proposed project, the applicant will submit a final Haul Route Study that identifies what road improvements, if any, are requested by Department of Public Works and a cost estimate. The applicant would work with the Department of Public Works to address the appropriate improvements and Applicant's responsibility for the cost of improvements, if required. The Haul Route Study would include the following components:

- 1. Pictures and/or other documents to verify the existing conditions of the roads proposed to be utilized for haul routes
- 2. The Haul Route Study shall evaluate the impact to the roads and access points listed above, and provide recommendations on improvements, as well as quantity and cost estimates for such improvements

The County Department of Public Works will require a Roadway Maintenance Agreement, and that the application provide financial security to maintain the road on the approved Haul Route Study during construction. The Applicant would be responsible to repair any damages caused by construction traffic

during construction and maintain them in safe conditions. The use of the proposed access roads are not otherwise anticipated to increase hazards because of design features or incompatible uses and no significant impact is identified.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.13-4 Would the project result in inadequate emergency access?

PV panels would be spaced to maintain proper clearance for emergency access. Internal access roads would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles. Access roads would be constructed with an all-weather surface, to meet the County Fire Department's standards. The access roads would also have turnaround areas at any dead-end to allow clearance for fire trucks per fire department standards. Based on this context, impacts on this issue area are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

3.13.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. As presented above, construction traffic would not result in a significant impact on any of the project area roadway segments, intersections, and freeway segments because of the low volume of traffic. A similar scenario would occur during the decommissioning and site restoration stage for the proposed project. ADT would be similar to or less than the ADT required for construction. Similarly, the decommissioning activities would not result in a significant impact related to possible safety hazards, or possible conflicts with adopted policies, plans, or programs as the decommissioning and subsequent restoration would revert the project site to pre-project conditions. Therefore, decommissioning and restoration of the project site would not generate traffic resulting in a significant impact on the circulation network. A less than significant impact is identified and no mitigation is required.

Residual

The construction and operation of the proposed project would not result in direct impacts on intersections, roadway segments, and freeway segments. Therefore, less than significant impacts have been identified. No mitigation is required and no residual unmitigated impacts would occur with implementation of the proposed project.

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