4.17 TRANSPORTATION AND CIRCULATION

4.17.1 Existing Conditions

4.17.1.1 Transportation Network

Travel in the County is primarily automobile oriented due to the rural nature of the local communities, low development densities, and limited options for using alternative modes of travel. The roadway system serving the County is comprised of approximately 3,520 miles of roadway and highways. The system is built around a backbone of state and federal highways, including US 395, US 6, SRs 127, 136, 168, 178, and 190 that connect with a network of local roadways and private and federally controlled roads. These regional highways are described below and illustrated in Figure 4.17-1.

US Highway 395

US 395 is the major north-south transportation corridor that traverses the County. It is designated as a Rural Principal Arterial, and is part of the National Highway System and included in the Subsystem of Highways for the Movement of Extra Legal Permit Loads systems. US 395 is also a federal Surface Transportation Assistance Act route, authorized for use by larger trucks.

US 395 passes through the states of California, Nevada, Oregon, and Washington. Approximately 95 percent of the traffic on US 395 within Inyo County originates from outside the County, which indicates that US 395 carries a substantial amount of interstate and interregional travel. Approximately 16 to 18 percent of the traffic in Inyo County on US 395 consists of recreational vehicles, and 6 to 16 percent of the traffic consists of trucks (Inyo County Local Transportation Commission 2009).

In Inyo County, US 395 is generally a four lane highway with some sections that are two lanes. In downtown Bishop, US 395 is four lanes with limited on street parking and a posted speed limit of 25 miles per hour.

US Highway 6

US 6 originates in Bishop where it intersects with US 395. US 6 is a two lane, east-west highway that connects Inyo and Mono Counties, and the state of Nevada and continues east throughout the country. As US 6 enters/leaves Bishop, it is a north-south roadway which transitions to an east/west roadway near Montgomery Pass, Nevada. It is a well-traveled truck route.

State Route 127

SR 127 is a two lane road that traverses the southeast corner of Inyo County and it originates in San Bernardino County at I-15 in Baker. The route heads north into Inyo County through Shoshone, where it intersects SR 178, and it also intersects SR 190 at Death Valley Junction. SR 127 provides access to Death Valley National Park via connections with SR 178 and SR 190.

State Route 136

SR 136 is a two lane road originating at US 395 south of Lone Pine. The route proceeds southeast along the north side of Owens Lake for approximately 18 miles where it connects to SR 190. SR 136 provides access to the historic sites of Dolomite, Swansea, and Keeler along the northeastern side of Owens Lake.

State Route 168

In Inyo County, SR 168 originates near Lake Sabrina in the Inyo National Forest, approximately 18 miles southwest of Bishop. In the Sierra Nevada (for approximately 10 miles) the roadway is two lanes with long, steep grades. This section of roadway is primarily used for recreation and to provide access to residential areas within the forest. During the winter the higher elevations of the road receive considerable snowfall but the road is kept open between Aspendell and Bishop. Near Bishop, the roadway is two lanes with a continuous two-way left-turn lane and it is designated as a bicycle route.

At US 395, there is a break in the continuity of SR 168. It continues northeast from Big Pine, approximately 15 miles south of Bishop, providing access to the ancient bristlecone pine area and Deep Springs Valley. The route then passes into Mono County and Nevada. The road is steep and winding as it traverses the White Mountains.

State Route 178

SR 178 is a two lane road that begins in Kern County and heads east through Ridgecrest and Trona. After a 56-mile unconstructed gap between Trona Road in San Bernardino County and the eastern boundary of Death Valley National Park in Inyo County, SR 178 meets SR 127 just north of Shoshone, diverts to the south, and then continues northeast toward Pahrump to the Nevada state line.

State Route 190

In Inyo County SR 190 is a two lane road that begins at Olancha and heads eastward along the south side of Owens Lake. The road travels around the southern end of the Inyo Mountains where it provides access to Darwin, the Panamint Valley, the Panamint Range, Death Valley National Park, and terminates at SR 127 at Death Valley Junction.

Table 4.17-1 presents the existing peak hour volumes, percentage of trucks, and roadway levels of service (LOS) on major roadway facilities within Inyo County. LOS is the professional industry standard term used to denote the different operating conditions that occur on a given roadway segment or intersection. LOS is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometrics, signal phasing, speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection and is defined on a scale of A to F, where LOS A represents the best operating conditions, and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free flowing traffic conditions with no restrictions on maneuvering and little or no delays. LOS F facilities are characterized as having highly

unstable, congested conditions with long delays. In general, LOS D or better is considered acceptable for roadway, freeway, and intersection operations.

Table 4.17-1 EXISTING ROADWAY CONDITIONS IN INYO COUNTY			
Roadway	Peak Hour Volume	Truck Percentage	LOS
US 6 at US 395 in Bishop	383	12	В
SR 127 in Shoshone	157	11	A
SR 127 at SR 190	130	22	A
SR 136 at US 395	112	2	A
SR 168 in Big Pine	899	3	С
SR 178 in Shoshone	149	9	A
SR 190 at SR 136	108	5	A
US 395 at SR 190	1,020	12	D
US 395 at SR 136*	1,215	17	A
US 395 in Independence	1,195	10	D
US 395 in Bishop at SR 168*	1,682	6	A
US 395 at Ed Powers Drive*	1,165	10	A

Source: Inyo County Regional Transportation Plan 2009

4.17.1.2 Public Transportation

No passenger or freight rail service currently exists in Inyo County and air travel is limited. The Eastern Sierra Transit Authority offers fixed route and dial-a-ride bus service in and between the populated areas of Inyo and Mono Counties in addition to an interregional route between Reno, Nevada and Lancaster, California. Existing fixed route bus routes along US 395 include stops at Pearsonville, Coso Junction, Olancha, Lone Pine, Independence, Aberdeen, Big Pine, and Bishop. Dial-a-ride service is provided in Lone Pine and Bishop. Figure 4.17-2 illustrates existing public transit routes in the County.

4.17.1.3 Bicycle Facilities

Inyo County communities can be traversed in under 20 minutes by bicycle, making bicycling a practical alternative travel mode for trips within the unincorporated towns and their nearby vicinities. Intercity bicycle commuting is limited by long distances, limited availability of alternatives to US 395, and weather.

LOS A = level of service with free flowing traffic

LOS B = level of service with reasonably free flowing traffic

LOS C = level of service with a stable flow of traffic, at or near free flow

LOS D = level of service approaching an unstable flow of traffic

SR = State Route

US = US Highway

^{*}Four-lane segment. All others are two lanes.

The County has 2.2 miles of Class I bicycle facilities, two Class II bicycle facilities, 11.2 miles of Class III routes, and hundreds of miles of striped shoulder that are legal for bicycle use, including the full length of US 395. The striped shoulders of US 395, US 6, and SR 168 are used by bicyclists for utility trips near Bishop and also for touring and day rides. Two Class I bike paths are located within Bishop that are relatively short: the Sierra Street Path that extends between Sierra Street and US 395, and the path along South Barlow Lane. A Class I bike path also occurs along SR 190 at Furnace Creek that connects the Death Valley National Park headquarters to Borax Mill Road.

The County also has approximately 2,500 miles of unpaved rural roads and trails used by mountain bikers, including abandoned railroad ROW and roads maintained by the Inyo National Forest, NPS, BLM, SCE, and LADWP.

4.17.1.4 Regulatory Framework

Federal Regulations

Code of Federal Regulations

CFR Title 49, Subtitle B, provides guidelines pertaining to interstate and intrastate transport of goods and hazardous materials and substances, as well as safety measures for motor carriers and motor vehicles that operate of public highways. Within Inyo County, there are several public highways that provide access the SEDAs and the OVSA and would be utilized in conjunction with solar energy projects within the SEDAs. The primary transportation corridor within the County is US 395; most of the County's population is located along this highway and four SEDAs and the OVSA are located along US 395.

CFR Title 23, Part 658 prescribes national policies that govern truck sizes and weights on the national network of highways based on the Surface Transportation Assistance Act. The maximum length of a semitrailer operating in a truck tractor-semitrailer combination is 48 feet. The maximum length of a semitrailer or trailer operating in a truck tractor, semitrailer-trailer combination, is 28 feet. The maximum width of vehicles operating on the national network is 102 inches (except for mobile home transport, which requires a special permit). The maximum gross vehicle weight is 80,000 pounds.

Additionally, CFR Title 14, Part 77 requires notification to the FAA for construction of structures: (1) with a height greater than 200 feet above grade; or, (2) greater than an imaginary surface extending outward and upward at a slopes of 100 to 1 for a horizontal distance of 20,000 feet from the nearest airport runway, 50 to 1 for a horizontal distance of 10,000 feet from the nearest airport runway, or 25 to 1 for a horizontal distance of 5,000 feet from the nearest airport runway. This CFR section applies due to the proximity of SEDAs to airports and military air installations within the County (refer to Figure 4.8-1).

State Regulations

California Department of Transportation

Caltrans manages California's highway system and is responsible for planning, designing, constructing, operating, and maintaining highways. For administrative purposes, Caltrans divides the state into 12 districts, supervised by district offices. Inyo County is located within District 9 which is headquartered in Bishop.

Caltrans requires an encroachment permit for non-transportation activities, including utility construction, occurring within ROWs of the state highway system. Caltrans also requires transportation permits for the movement of vehicles or loads exceeding the size and weight limitations of the California Vehicle Code.

California Streets and Highways Code

The California Streets and Highways Code contains regulations for the care and protection of state and County highways and specifies that permits issued by Caltrans be required for roadway encroachment during truck transportation and delivery, as well as loads that exceed Caltrans' weight, length, or width standards for public roadways. The code also requires permits for utilities constructed within the right-of-way of a public highway.

California Vehicle Code

The California Vehicle Code contains several regulations regarding the safe transport of hazardous materials, hazardous waste, and explosive materials. It also provides weight guidelines and excessive load restrictions for vehicles traveling on highways.

Local Regulations

Inyo County Regional Transportation Plan

The Inyo County Regional Transportation Plan, adopted in 2009 by the Inyo County Local Transportation Commission, serves as the planning blueprint to guide transportation investments in the County involving local, state, and federal funding through the year 2030. Applicable goals and policies contained in the plan include the following:

- Goal 2: A transportation system that is safe, efficient and comfortable which meets the needs of people and goods and enhances the lifestyle of the County's residents.
- Policy 2.2.1: Proper access. Provide proper access to residential, commercial, and industrial areas.
- Goal 3: Maintain adequate capacity on SRs and Local Routes in and surrounding Inyo County and the City of Bishop.
- Policy 3.3.1: Support roadway improvements to optimize public safety. Improve County roads through specific safety improvements and maintenance.

Inyo County General Plan

The Circulation Element of the General Plan (2001, as amended) addresses the movement of people and goods through a variety of transportation facilities, from roads to railroads, bicycle paths to transmission corridors. The Circulation Element presents goals and policies for roadways and highways; scenic highways; public transportation; bicycles and trails; railroads; aviation; canals, pipelines and transmission cables; parking and information technology/telecommuting. Applicable goals and policies include the following:

- Goal RH-1: A transportation system that is safe, efficient and comfortable which meets the needs of people and goods and enhances the lifestyle of the County's residents.
- Policy RH-1.4: Level of Service. Maintain a minimum of LOS C on all roadways in the County of Inyo. For highways within the County of Inyo, LOS C should be maintained except where roadways expansion or reconfigurations will adversely impact the small community character and economic viability of designated Central Business Districts.
- Policy RH-1.5: Proper Access. Provide proper access to residential, commercial, and industrial areas.

4.17.2 Significance Thresholds

The following impact analysis is based on the following State CEQA Guidelines Appendix G thresholds of significance, which indicate that a project would have a significant impact if it would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of
 effectiveness for the performance of the circulation system taking into account all modes
 of transportation, including mass transit and non-motorized travel and relevant
 components of the circulation system, including but not limited to, intersections, streets,
 highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Result in a change of air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.17.3 Impact Analysis

The REGPA is designed to minimize impacts to transportation opportunities and facilities in the County by constraining renewable energy development in the County in conjunction with the General Plan's existing protection for such resources. Indirectly, individual future projects have the potential to impact transportation resources.

Except where noted, the following impact analysis primarily focuses on utility scale solar energy facilities because those would likely result in the greatest increase in traffic associated with construction and operation due the potential size of such facilities; however, the analysis also applies to the other proposed categories of solar energy facilities, including distributed generation and community scale facilities.

The proposed REGPA also includes provisions for development of small scale solar energy facilities. However, due to their small size (e.g., small array of ground- or roof-mounted PV panels), and location (on the building or the property it serves), these developments are currently allowed throughout the County within any zoning district under ICC Title 18, and require only electrical and building permits for development. As a result, these developments are not considered to result in impacts under CEQA, and would not typically require the CEQA analysis or associated mitigation measures described in this document.

The County routinely reviews all development proposals for environmental impacts. Therefore, all future solar energy projects would be evaluated on a project-specific basis to assess specific impacts to transportation and circulation against the program-level analysis contained in this PEIR. Applicable mitigation measures identified in this PEIR would be implemented for the individual project, as well as any additional mitigation or design measures identified in the traffic impact analysis conducted for the project.

4.17.3.1 Transportation Activities

Implementation of solar energy development would require a variety of transportation activities over the life of a project. Most of these transportation activities would involve the movement of workers, materials, and equipment to the specific solar energy development project site during the construction phase. The types and amounts of materials and equipment would depend on the solar energy technology type as well as site-specific characteristics. Ongoing operations and maintenance of solar energy project would require worker commutes and deliveries of supplies. The following discussion provides a general overview of expected transportation requirements during construction and ongoing operation and maintenance of solar energy developments.

Construction

Construction activities for utility-size solar facilities are expected to occur over a period of one or more years depending on the size and type of the project, with anticipated peak construction period daily workforces of 1,000 or more. The types of heavy construction equipment would include bulldozers, excavators, scrapers, front-end loaders, trucks, cranes, rock drills, chain saws, chippers, and trenching machines. Typically, the equipment would be moved to the site by flatbed combination trucks and would remain on-site through the duration of construction activities. Typical construction materials hauled to the site would include gravel, sand, water,

and ready-mix concrete. Concrete batch plants may also be set up on-site. Peak truck deliveries of materials and supplies, including solar array components, might be expected to be on the order of 50 trucks per day. Construction wastes would be hauled off from the solar energy project site.

Once the foundations are constructed, construction of the different types of solar projects would be similar with respect to transportation needs. Solar collectors would be assembled on-site, and materials would be delivered to the solar energy project site by regular truck shipments without the need for oversize or overweight permits. The total number of shipments over the course of the construction period would be dependent on the type of solar technology and the size of the facility. Oversize exceptions would include the delivery of steam turbine generators and main transformers. Such equipment is typically transported to the solar energy project site via specially designed tractor trailers. These deliveries may require multiple days, escorts, and transport during off-peak hours.

Operations and Maintenance

Operations of solar energy projects would require varying numbers of on-site personnel, depending on the technology and capacity of the facility. Small PV facilities might require only one on-site worker daily to monitor controls and inspect equipment or might be monitored remotely without the need for any on-site workers. Larger solar energy projects, such as power towers would require an operations workforce of up to 100 or more.

Maintenance requirements would also vary by technology type and capacity of the facility. A common maintenance requirement for both PV and solar thermal technologies would be panel/reflector/mirror washing. Some technologies require frequent washing to maintain energy conversion efficiency (e.g., parabolic trough), whereas others may require very infrequent washing (e.g., PV systems). Additional maintenance activities are required for solar thermal systems such as preventative maintenance on steam turbine generators, which would require additional personnel that travel to and from the specific project site via trucks.

4.17.3.2 Construction Impacts

Construction of solar energy projects would result in temporary increases in traffic trips on local roads and highways in the vicinity of a proposed solar energy project site. Construction-related traffic would include worker vehicles and trucks delivering materials and supplies to the specific solar energy project site.

The location of solar energy projects can cause direct impacts on the local roadway network. The proximity of a solar energy project site to major roads contributes to potential traffic congestion from construction traffic. Some areas within the SEDAs are located in remote areas that are served by only one major road (e.g., a state highway) providing access from two directions, while other locations may have multiple access routes. Limited access can result more severe traffic impacts particularly if delays occur due to road maintenance or construction, higher vehicle volumes, traffic accidents, or inclement weather.

The location of the solar energy project site with respect to the electrical grid determines where the electrical transmission line from the site would connect to the grid and the route and length of the transmission line. The construction and operation of the electrical utility connection lines would not be expected to result in any significant transportation impacts, but the addition of construction workers associated with them could increase the severity of traffic impacts when combined with the construction traffic generated by a specific solar energy project.

Construction equipment and materials required for site access, site preparation, and solar array footing or foundation construction do not pose unique transportation considerations. Local road improvements could be necessary if access routes are not built to support heavy truck traffic up to the federal limit of 80,000 pounds gross vehicle weight. In addition, a small number of one-time oversized and/or overweight shipments may be required for large construction equipment typically required for site preparation and large solar components such as steam turbine generators and main transformers.

Overweight and/or oversized loads can be expected to cause temporary disruptions on the roads used to access a solar energy project site. Moreover, the solar energy facility access road must be constructed to accommodate such shipments. Overweight and oversized loads typically require tractor-trailer combinations with multiple axles, special permits, advance and trailing warning vehicles, and possible police escorts. Travel during off-peak hours and/or temporary road closures may also be necessary. Most of the construction equipment would remain at the site for the duration of the construction period. Because such construction equipment is routinely moved on US roads and there will be only a limited number of one-time shipments, no significant impact is expected from these movements to and from the construction site.

Transport of other equipment and materials to the site during construction would cause a small increase in the LOS of local roadways during the construction period. Shipments of materials, such as gravel, concrete, water, and solar components, would not be expected to significantly affect local roadways. For larger projects, the average number of deliveries could be around 30 per day and as much as 85 per day during peak construction periods. Deliveries would likely occur during the morning hours and could add about 20 vehicles per hour to traffic volumes on local roadways during peak construction periods. Such an increase would not be at a magnitude to degrade the LOS of a roadway; however, the culmination of these trips could degrade County roads.

Significant traffic impacts could result from workers commuting to the solar energy project site for larger projects. Peak construction workforces for solar energy projects have been estimated to range from about 100 to 1,400 daily workers, with averages from about 100 to 400 or more workers over construction periods ranging from 2 to 4 years. If each worker drives to the solar energy project site during peak construction periods, 700 or more additional vehicles per hour (1,400 workers arriving on-site between 7:00 a.m. and 9:00 a.m.) could degrade the LOS of a local roadway or highway, resulting in a potentially significant impact.

4.17.3.3 Operational Impacts

Transportation activities during operation of solar energy projects would involve commuting workers, material shipments to and from the facility, and on-site work and travel. Operations crews may number more than 150 for larger solar energy projects, but are anticipated to number 10 to 50 workers during daytime hours, with a minimal crew of a few personnel during the

nighttime in most cases. A few daily truck shipments to or from a site also would occur. Shipments from facilities would also include wastes for disposal.

Accordingly, transportation activities during operations would be limited to a small number of daily trips by personal vehicles and a few truck shipments. Given the small number of traffic trips generated by operations of solar energy projects, the associated negligible increase in trips on local roadway and highways would not adversely impact the local transportation system or otherwise degrade LOS operations. Operational traffic impacts would be less than significant.

4.17.3.4 Aviation Impacts

Some SEDAs and the OVSA are located in close proximity to airports (refer to Figure 4.8-1). Specifically, the Laws SEDA is located approximately one mile from the Bishop Airport, the OVSA contains three airports within its boundaries (Bishop, Independence, and Lone Pine), the Trona SEDA contains the Trona Airport within its boundaries, the Charleston View SEDA is located approximately 1.1 miles from Hidden Hills Airport (private), and the Sandy Valley SEDA is located approximately 0.9 mile from the Sky Ranch Airport (private). Implementation of solar energy projects within these SEDAs and the OVSA could potentially result in air traffic hazards related to placement of structures such as towers and solar arrays, depending on their nature and location. Certain solar components and utility infrastructure consist of tall vertical structures; power towers can reach heights of more than 700 feet and electrical transmission towers can reach heights of about 125 feet. In addition, construction equipment, such as cranes of more than 100 feet in height could be utilized during construction activities. When located near airports, these structures and equipment can pose low-altitude flight hazards to aircraft and could affect air traffic patterns, especially within airport runway approach flight patterns, lowaltitude flight corridors, and within military exercise areas. Pursuant to CFR, Title 14, Part 77, notification to the FAA is required for proposed structures over 200 in height regardless of the distance from an airport. These regulations establish standards for determining obstructions in navigational airspace.

Additionally, solar energy components can produce glare effects from solar collectors and other potentially reflective surfaces. The magnitude of glare effects would depend on the type and size of the solar energy project, but given that projects could encompass several thousand acres, there is potential for glare to be directed upward affecting the vision of aircraft pilots. As a result, associated air traffic impacts would be potentially significant.

4.17.3.5 Traffic Hazards Due to Design

Potential road hazards can occur due to a design feature or physical configuration of existing or proposed access roads that can affect the safe movement of vehicles along a roadway. Solar energy projects within any of the SEDAs or OVSA would require construction of access roads that would intersect with existing local roadways. These access roads would be designed in compliance with County private roadway standards to allow safe passage of construction vehicles, including oversized trucks, and would provide safe adequate sight distances from project driveways and intersections. Adequate sight distance would be verified by completion of a project-specific sight distance analysis. Additionally, solar energy projects would not likely

include curves, slopes, walls, landscaping, or other barriers that would create potential conflicts between vehicles accessing the solar energy project site.

Glare can be generated from solar components at varying intensities, depending on the size, design, and orientation of the solar energy project. Glare effects could occur along roadways in the vicinity of solar energy project sites. Because the precise locations and nature of solar energy projects within any of the SEDAS and the OVSA are not known, such effects could be substantial in that the intensity of reflected sunlight could interfere with motorists' vision on roadways. As a result, associated traffic hazard impacts could be potentially significant.

4.17.3.6 Emergency Access

The primary emergency evacuation routes in the vicinity of the SEDAs and the OVSA include the highways that traverse the County, including US 395, US 6, SR 127, SR 136, SR 168, SR 178, and SR 190. One or more of these roadways would likely be utilized during construction and operation of solar energy projects for routine vehicle activities such as employee access, material/equipment deliveries, and maintenance. Traffic control measures, such as the use of flaggers and guide vehicles, may be required at specific times to facilitate construction vehicle ingress and egress from the specific solar energy project site to local roads and highways. On-site access roads would also be provided within specific solar energy project sites to allow for sufficient emergency vehicle access. A traffic control plan would be prepared and would include measures to avoid disruptions or delays in access for emergency vehicles and to notify emergency service providers of any road or traffic conditions that may impede emergency access. Associated potential impacts related to emergency access would be less than significant.

4.17.3.7 Policy Consistency with Alternative Transportation Modes

Because the County is rural and contains substantial areas of wilderness, there are limited facilities within the County that support other modes of transportation. Automobiles comprise the principal travel mode within the County. Bus transit services are provided for the larger communities along the US 395 corridor. Bikeways are also provided within the more populated communities. While the General Plan and the Inyo County Collaborative Bikeways Plan contain goals and policies that support expansion of public transit and non-motorized transportation modes, implementation of the proposed project would not conflict with those goals and policies, nor would it preclude implementation of planned future transportation improvements. Most of the SEDAs are located in rural and, in some cases, mostly undeveloped areas where transit, bicycle, and pedestrian facilities are not available and for the most part, are not planned. Even if transit service or bicycle/pedestrian facilities would be located in the vicinity of a solar energy project site, solar developments would not be located within roadway ROWs and are typically set back from roadways and fenced and, therefore, would not compromise the safety of transit service or bicycle/pedestrian facilities. No significant impacts would occur.

4.17.4 Level of Significance before Mitigation

Based on the analyses in Section 4.17.3, future utility scale projects under the REGPA could result in potentially significant impacts related to: (1) construction traffic; (2) air traffic safety

hazards; and, (3) design-related traffic hazards. These impacts require mitigation to reduce them to the maximum extent feasible.

Due to their smaller size and location, distributed generation and community scale facilities would generally be expected to result in less severe impacts related to hazards and hazardous materials when compared with utility scale facilities; however, the severity of the impact would ultimately depend on the relation of the project to the issues described above. Small scale projects are typically considered to result in no impacts under CEQA.

4.17.5 <u>Mitigation Measures</u>

Transportation and circulation mitigation measures have been developed for solar energy development projects producing more than 20 MW of electricity for off-site use (utility scale) and would be implemented to mitigate adverse impacts to transportation and circulation. As previously mentioned, small scale solar energy projects are considered to result in no impacts under CEQA; however, all individual solar energy facility project applications (including small scale, community scale, and distributed generation) shall be reviewed by the County, and the need for implementation of the following mitigation measures shall be determined based on the professional judgment of a qualified county planner, pursuant to ICC Title 21 and State CEQA Guidelines. For example, community scale solar developments (i.e., roof- or ground-mounted PV panels for a specific community's use) may be determined by a qualified county planner to have no potential impact on transportation and circulation and would not require a project-specific traffic impact analysis or implementation of the mitigation measures listed in this section. In such cases, the County shall document that no impacts to transportation and circulation will occur and no mitigation measures are necessary in lieu of the traffic impact analysis required in Mitigation Measure TRA-2.

If a proposed distributed generation or community scale solar development project is determined by the County to have the potential to impact transportation and circulation, then the following mitigation measures shall be implemented as determined necessary by the qualified county planner. The County will review future solar energy development proposals to determine if they meet the requirements of Section 15162 of the State CEQA Guidelines; projects that do not meet the requirements may require additional CEQA analysis prior to approval. Similar to proposed distributed generation and community scale solar energy projects, small scale solar project applications undergo County review, and implementation of additional CEQA review and/or mitigation measures shall be at the discretion of a qualified county planner.

As described above in Section 4.17.3 and 4.17.4, implementation of solar energy projects would result in potentially significant impacts related to construction traffic, air traffic safety hazards, and design-related traffic hazards. Mitigation for air traffic safety hazards is identified in Section 4.8.5 (Mitigation Measure HAZ-2) and entails completion of a site-specific Airport Safety Investigation to evaluate potential impacts and identify and implement associated remedial recommendations. Mitigation for design related traffic hazards associated with glare is identified in Section 4.1.5 (Mitigation Measure AES-1) and entails preparation of site specific glare studies to assess potential glare impacts and identify and implement associated remedial recommendations. In addition to Mitigation Measures AES-2 and HAZ-2, the following mitigation measures are identified to address the issues of construction traffic for utility scale

solar projects, and include applicable BMPs and related information from REAT's Best Management Practices and Guidance Manual (REAT 2010). Implementation of these measures would avoid or reduce identified transportation and circulation impacts to below a level of significance.

MM TRA-1: Prepare site-specific traffic control plans for utility scale projects.

Site-specific traffic control plans shall be prepared for all proposed solar energy projects within the individual SEDAs and the OVSA to ensure safe and efficient traffic flow in the area of the solar energy project and within the project site during construction activities. The traffic control plan shall, at minimum, contain project specific measures to be implemented during construction including measures that address: (1) noticing; (2) signage; (3) temporary road or lane closures; (4) oversized deliveries; (5) construction times; and (6) emergency vehicle access.

MM TRA-2: Implement recommendations from traffic impact analysis on surrounding roadways and intersections.

Site-specific construction traffic impact analyses shall be prepared for all proposed utility scale solar energy projects within the individual SEDAs and the OVSA to evaluate potential traffic impacts on surrounding roadways and intersections during the construction period, including wear and tear on County roads. Applicable results and recommendations from the project-specific construction traffic impact analysis shall be implemented during the appropriate construction phase to address identified potential construction traffic impacts.

4.17.6 Significant Unavoidable Adverse Impacts

Based on the implementation of the mitigation described in Section 4.17.5, identified traffic impacts would be avoided or reduced to below a level of significance, with no significant unavoidable adverse impacts.

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