

SECTION 5.0 - CUMULATIVE IMPACTS

The regulations implementing the National Environmental Policy Act require that the cumulative impacts of a proposed action be assessed (Title 40 Code of Federal Regulation (CFR) Parts 1500-1508). A cumulative impact is an “impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions” (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

5.1 PAST, OTHER CURRENT, AND REASONABLY FORESEEABLE FUTURE PROJECTS

Coordination with the Bureau of Land Management (BLM), San Bernardino County, Los Angeles Department of Water and Power, Southern California Edison, California State Lands Commission, and the California Department of Transportation (Caltrans) was conducted to identify current and planned future projects within the cumulative impact area. Information regarding past, current, and reasonably foreseeable future projects was obtained.

5.1.1 Past Projects

Along Interstate 15 (I-15), from approximately Bailey Road to the California-Nevada state border, the land immediately northwest of the freeway has historically been and is currently used for grazing as part of a grazing allotment issued by the BLM. Additionally, Ivanpah Dry Lake is used frequently for both national and international recreation events, including landsailing regattas and kite buggy competitions. The Stoddard Valley Off-Highway Vehicle (OHV) Recreational Area, through which Segment 3 of the Proposed Project passes, is also a historical recreational use area.

The Proposed Project area also contains an extensive network of existing roadways and utility rights-of-way (ROWs), including fiber optic cable lines, fuel pipelines, natural gas pipelines, and electric transmission lines. Routine maintenance and repair activities are occasionally required for the continued operation of these existing utility lines and roadways.

5.1.2 Current Projects

The only current project under construction in the Proposed Project vicinity is the Caltrans I-15 Mountain Pass Truck Lane Project, which involves the construction of a truck descending lane on the northbound side of I-15 and the repaving of the existing southbound truck lane from the Bailey Road interchange to the Yates Well Road interchange, a distance of approximately 12.1 miles. This would be located roughly parallel to Segment 1 between 0.2 and 1.1 mile east of the Proposed Project. This project is anticipated to be completed in the summer of 2010.

5.1.3 Future Projects

There are several anticipated foreseeable future actions in the vicinity of the Proposed Project. Several large-scale solar and wind energy generating facilities have been proposed within the Mojave Desert region. Two specific solar projects—Ivanpah Solar Electric Generating System (SEGS) and a project proposed by Optisolar, Inc.—are located east of Ivanpah Dry Lake adjacent to the east side of Segment 1. Both projects are anticipated to be between 4,000 and 10,000 acres in size. An application to construct the Ivanpah SEGS, located just east of Ivanpah Dry Lake, was submitted to the BLM on November 17, 2006. Due to site and engineering delays, the project is currently still in its early planning stages and the date of construction is unknown at this time. The application for the Optisolar, Inc. project was received by the BLM on December 14, 2006; however, this project is also in its preliminary planning stages and a construction start date has not yet been determined. A third solar project, which is located in Nevada approximately 2.5 miles east of Segment 1 southeast of Primm, has been proposed by Solel, Inc. and is anticipated to comprise approximately 7,500 acres. The application for this project was received by the BLM on November 6, 2007 and is also in its preliminary planning phase. None of the aforementioned

solar projects would be constructed before or during construction of the Proposed Project. The multitude of solar and wind energy-generating projects proposed in the Mojave Desert region would necessitate the upgrade of electric transmission lines associated with these facilities; however, formal applications for the upgrading of these transmission lines have not yet been submitted to jurisdictional agencies. As a result, it is premature to consider these projects within this cumulative impacts discussion.

Two high-speed rail projects from southern California to Las Vegas, Nevada have also been proposed near the Proposed Project area—DesertXpress and the California-Nevada Interstate Maglev. Both of these projects would roughly follow the I-15 alignment. These projects are currently in their early planning phases and are not likely to be constructed within the next year.

5.2 CUMULATIVE IMPACTS

Potential cumulative impacts were evaluated for each resource area and are discussed in the following sections.

5.2.1 Soils and Geology

The Proposed Project would disturb a maximum of approximately 51.4 acres within unpaved roadways and along road shoulders during construction. Because the Proposed Project is located in previously disturbed areas and the Project applicant would return disturbed areas to preconstruction conditions once construction has been completed, no long-term impacts to soils or geology are anticipated. In addition, construction of the Proposed Project would not overlap with any other soil-disturbing projects.

5.2.2 Visual Resources

The Proposed Project would introduce a maximum of 77 new marker poles and may replace up to 189 existing marker poles along the direct bury portions of the Proposed Project segments. No other aboveground structures are proposed. Of the proposed projects in the area, the solar energy generating facilities would have the most significant impact on visual resources. The addition or replacement of existing marker poles along the Proposed Project alignment would not be cumulatively considerable because marker poles already exist for underground utility routes in the area and the minor increase of marker poles would be negligible when compared with visual impacts produced by the solar facilities. In fact, such a minor increase in marker poles is not likely to be visible in the same viewshed due to the small scale of the marker poles.

5.2.3 Vegetation

The Proposed Project may impact approximately 22.4 acres of predisturbed desert scrub vegetation located within the Proposed Project's existing ROW. This vegetation may be crushed by Proposed Project equipment, but no removal or grubbing of vegetation would be conducted so that revegetation is facilitated. Vegetation disturbance would only result from construction and would be temporary and short term. Once construction has been completed, the disturbed areas would be reseeded and restored to preconstruction conditions. Vegetation disturbed by construction is anticipated to be mostly recovered prior to the start of the construction of the solar facilities and railway projects. Furthermore, construction of the Proposed Project and the Caltrans I-15 Mountain Pass Truck Lane Project would both be conducted immediately adjacent to disturbed roadways.

5.2.4 Wildlife

Although the Proposed Project is not anticipated to impact any federally or state-listed species or other wildlife that is generally known to inhabit the Proposed Project area, temporary habitat disturbances caused by construction may impact wildlife. Construction activities would be conducted in accordance with all resource agency permits issued for the Proposed Project and the Project applicant would work with these agencies to ensure that impacts to wildlife are minimized. No permanent modifications to any

habitat would result from the Proposed Project. Due to the past projects described in Section 5.1.1 Past Projects, the Proposed Project area is highly disturbed, so the Proposed Project's short-term impacts would not contribute significantly to the long-term wildlife habitat impacts.

5.2.5 Invasive and Noxious Weeds

Implementation of the Proposed Project would have the potential to create impacts associated with invasive and noxious weeds. Measures to minimize the spread of invasive and noxious weeds would be incorporated as standard mitigation for all projects. Additionally, the solar facilities proposed in the vicinity would involve the permanent removal of invasive and noxious weeds. This, in conjunction with the implementation of the aforementioned measures, would minimize cumulative impacts associated with invasive and noxious weeds.

5.2.6 Noise

The Proposed Project would generate short-term construction noise only, and would not exceed county noise ordinance requirements. Construction of Segment 1 of the Proposed Project may occur concurrently and in the same vicinity as the Caltrans I-15 Mountain Pass Truck Lane Project, which would generate potentially significant noise impacts; however, cumulative construction noise from the two projects would be extremely short-term. Furthermore, this portion of the Proposed Project is not located near residences or other sensitive noise receptors that would be affected. Construction of the solar facilities and railway corridors are not expected to occur concurrently with construction of the Proposed Project. No noise would be generated from operations or maintenance of the Proposed Project beyond existing conditions.

5.2.7 Air Quality

Construction of the Proposed Project would generate fugitive dust due to soil-disturbing activities and vehicles and equipment driving on unpaved access roads. In addition, a nominal amount of greenhouse gas emissions from the construction equipment and vehicles would be generated. As previously stated, Segment 1 is the only portion of the Proposed Project that may be constructed concurrently and in the vicinity of another project, the Caltrans I-15 Mountain Pass Truck Lane Project. Best management practices would be implemented as part of the Proposed Project in order to minimize fugitive dust for both projects. In addition, greenhouse gas emissions from construction equipment and vehicles would be minimal and mitigated per state requirements. Furthermore, no sensitive receptors, such as residences, are located in the vicinity of this portion of Segment 1. Operations and maintenance of the Proposed Project would be the same as existing conditions.

5.2.8 Surface and Groundwater

The Proposed Project involves trenching, which has the potential to incidentally impact groundwater. However, neither construction nor operations and maintenance of the Proposed Project would result in significant extraction of water from any groundwater basins. Additionally, because the Proposed Project involves the replacement of an existing underground fiber optic cable line and disturbed areas would be returned to preconstruction conditions, no long-term impacts to drainages or other surface water features would occur.

5.2.9 Health and Safety / Hazardous Materials

As discussed in Section 4.9 Health and Safety/Hazardous Materials, the Proposed Project area does not have a history of hazardous materials being present or a history of land uses that would involve the use or storage of hazardous materials. There are no hazards associated with airport safety and low potential for wildland fires. As a result, the Proposed Project would not contribute to cumulative impacts associated with health, safety, or hazardous materials.

5.2.10 Cultural Resources

No known cultural resources are anticipated to be affected by construction activities. As a result, cumulative impacts to cultural resources are not expected to occur.

5.2.11 Environmental Justice

Because no environmental impacts are anticipated, as described in Section 4.11 Environmental Justice, no cumulative impacts would occur.

5.2.12 Recreation

There are two recreational areas that may be impacted due to construction of the Proposed Project—Primm Valley Golf Club and the Stoddard Valley OHV Recreational Area. No other projects are planned or proposed in the Stoddard Valley OHV Recreational Area; therefore, no cumulative impacts would occur. The I-15 Mountain Pass Truck Lane Project may be constructed concurrently with the Proposed Project near the Primm Valley Golf Club. Due to the short-term duration of construction and the distance the Caltrans project and the Proposed Project are to the golf course, no cumulative impacts are anticipated. Operations and maintenance of the Proposed Project would be conducted in the same manner as prior to construction, so no cumulative impacts would result.

5.2.13 Transportation

The Proposed Project would require the closure of three roadways during construction; however, none of these are major transportation corridors. All closed roadways are unpaved access roads that are infrequently used; therefore, closure of these roadways would not create traffic delays in the Proposed Project area. Construction of the Proposed Project may occur concurrently with the Caltrans I-15 Mountain Pass Truck Lane Project; however, the Proposed Project would not impact I-15, with the exception of minor commute traffic to and from the construction site. While use of I-15 for commuting purposes may occur concurrently and in the vicinity of the Caltrans project, traffic increases from both projects would be minimal and short-term. Operations and maintenance would continue in the same manner as it was conducted prior to the Proposed Project; therefore, it would not contribute to cumulative impacts associated with transportation.

5.2.14 Utilities

Construction of the Proposed Project has the potential to impact adjacent underground utilities, such as existing fiber optic cable lines and pipelines, during trenching or plowing. None of the other proposed projects are located in the same corridor as the Proposed Project. While other projects that involve excavation could also affect underground utilities, it is highly unlikely that service would be interrupted at the same time, as only the construction timeframe of one project—the Caltrans I-15 Mountain Pass Truck Lane Project—overlaps with the Proposed Project. Operations and maintenance of the Proposed Project would be conducted in the same manner as prior to construction.