

4.10 Mineral Resources

This section describes the existing conditions in the study area and evaluates the potential for the Proposed Project and alternatives to result in impacts to mineral resources.

4.10.1 Setting

Existing Mineral Resources

The Santa Rosa and San Jacinto Mountains, including the high desert areas, have a history of mining that dates back to the late 1800s. Mines in the Santa Rosa and San Jacinto National Monument have produced asbestos, beryllium, gold, limestone, tungsten, copper, garnet, and tourmaline. With the exception of limestone, however, these mineral deposits have not been extensively mined, are limited, or are not precisely known (City of Palm Springs, 2007).

Eroding hills and mountains surrounding the Coachella Valley have filled the valley with significant amounts of sand and gravel, known collectively as aggregate. Aggregate is used for asphalt, concrete, road base, stucco, plaster, and other similar construction materials (City of Cathedral City, 2002). The Palm Springs Production-Consumption (P-C) Region is a 631 square mile area in the Coachella Valley that is heavily mined for aggregate. This region covers the area east of Cabazon, south of Morongo Valley and Joshua Tree National Park, west of the Mecca Hills, and north of the community of Mecca and the San Jacinto Mountains (CGS, 2007). According to California Geological Survey, the Palm Springs P-C Region has 30,072 acres classified as land where significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists (CGS, 2007).

The California Geological Survey (CGS) has classified the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975 (SMARA). Mineral Resource Zones (MRZs) delineated by CGS identify the presence and significance of mineral deposits within the study area. In general, areas subject to pressures of urbanization are zoned by the CGS, while those areas outside these areas are not. The designations are (CGS, 2007):

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high. MRZ-2 designations are as follows:
 - *MRZ-2a:* Areas where geologic data indicate that significant measured or indicated mineral resources are present; and

- *MRZ-2b*: Areas where geologic data indicate that significant inferred mineral resources are present.
- **MRZ-3**: Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.

The study area contains three locations with MRZ-2 designations:

- Within the City of Palm Springs, the CGS has classified Northern Palm Springs as MRZ-2a. This area contains Portland cement concentrate (PCC) grade aggregate (CGS, 2007). Granite Construction operates the Garnet Pit located south of Garnet Hill and Interstate 10, and east of Indian Canyon Drive, which is mined for construction grade aggregate. (The area was historically mined by Massey Rock and Sand Company.) The annual tonnage mined from Garnet Pit has fluctuated tremendously over the last 12 years depending on the economy, ranging from very little to over 600,000 tons per year (Malone, 2008).
- Approximately one mile north of the community of Thousands Palms, 50.5 acres of land are designated MRZ-2a (CGS, 2007). This area contains 27 acres in an alluvial fan of a small drainage along the Indio Hills. As of 2001, the deposit held an estimated 2.1 million tons of aggregate resources (City of Palm Desert, 2004). E.L. Yeager Construction Company/Skanska currently holds the permit to mine the Thousand Palms mine in this area (CGS, 2007), and as of 2007, the mine was active and running (McGee, 2008). According to the Riverside County Planning Department, there are approximately 135 acres permitted for mining (McGee, 2008).
- Approximately two miles northwest of Thousand Palms is an MRZ-2 area with three mines permitted for sand, gravel, and decorative stone extraction (CGS, 2007; McGee, 2008). The three permitted mines are (County of Riverside, 2008):
 - a. Mesa Blanca Mine, operated by Gary Butler. Mine status is “Approved Not Active,” meaning the mine has an active permit but has not completed a special inspection. The mine is permitted for up to 225,000 tons per year on average.
 - b. Sam Jones Mine, operated by Sam Jones Mining Company has a status of “Interim Management Plan” (IMP), meaning the mine is idle but may come out of Interim Management Plan status at any time if the mine reports it is producing more than the threshold.
 - c. Vista Mine, operated by James Rue Construction, has a mine status of “Active,” and the mine is permitted for up to 375,000 tons per year.

Regulatory Context

State

Surface Mining and Reclamation Act

The primary State law concerning conservation and development of mineral resources is the California Surface Mining and Reclamation Act (SMARA) of 1975, as amended to date. SMARA is found in the California Public Resources Code (PRC), Division 2, Chapter 9, Section 2710, et seq.

Depending on the region, natural resources can include geologic deposits of valuable minerals used in manufacturing processes and the production of construction materials. SMARA was enacted in 1975 to limit new development in areas with significant mineral deposits. SMARA calls for the State Geologist to classify the lands within California based on mineral resource availability. In addition, the California Health and Safety Code requires the covering, filling, or fencing of abandoned shafts, pits, and excavations (California Health and Safety Code Sections 24400-03). Furthermore, mining may also be regulated by local government, which has the authority to prohibit mining pursuant to its general plan and local zoning laws.

SMARA states that the extraction of minerals is essential to the continued economic well-being of the State and to the needs of society, and that reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety. The reclamation of mined lands will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land. Surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different, and reclamation operations and the specifications therefore may vary accordingly (California Public Resources Code Section 2711).

Local

Riverside County General Plan

The Riverside County General Plan Land Use Element includes the following applicable policies related to mineral resources (County of Riverside, 2003):

Policy LU 21.1: Require that surface mining activities and lands containing mineral deposits of statewide or of regional significance comply with Riverside County Ordinances and the SMARA.

Policy LU 21.2: Protect lands designated as Open Space-Mineral Resource from encroachment of incompatible land uses through buffer zones or visual screening.

City of Palm Springs General Plan

The City of Palm Springs General Plan Recreation, Open Space, and Conservation Element includes the following applicable goal and policies related to mineral resources (City of Palm Springs, 2007):

Goal RC8: Employ the efficient, sustainable, and environmentally appropriate use and management of energy and mineral resources to ensure their availability for future generations.

Policy RC8.2: Develop zoning regulations that restrict encroachment of incompatible land uses in areas that are conserved for mineral use, and minimize conflicts between extraction activities and other uses.

Cathedral City General Plan

The Cathedral City General Plan Open Space and Conservation Element includes the following applicable policy related to mineral resources (City of Cathedral City, 2002):

Policy 10: The City shall, to the greatest extent possible, regulate development in the vicinity of significant mineral resources located in the City and its sphere-of-influence.

City of Rancho Mirage General Plan

The City of Rancho Mirage General Plan Conservation and Open Space Element includes the following applicable program (City of Rancho Mirage, 2005):

Program 1.B: To the extent practical, monitor and influence development in the vicinity of significant mineral resources occurring within the City's Sphere of Influence.

City of Indian Wells General Plan

The City of Indian Wells General Plan does not include any applicable goals, objectives, or policies related to mineral resources (City of Indian Wells, 1996).

City of Palm Desert General Plan

The City of Palm Desert General Plan Energy and Mineral Resources Element does not include any applicable goals, objectives, or policies related to mineral resources (City of Palm Desert, 2004):

4.10.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, an impact resulting from the Proposed Project would be considered significant if it would result in:

- a) Loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- b) Loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

4.10.3 Applicant Proposed Measures

No applicant proposed measures have been identified by SCE to reduce project impacts on mineral resources.

4.10.4 Impacts and Mitigation Measures

a) Loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Extraction operations exist within the Farrell-Garnet study area at the Garnet Pit, which is mined by Granite Construction. However, the proposed Farrell-Garnet 115 kV subtransmission line alignment is located nearly 2,000 feet north of the Garnet Pit and would not interfere with

extraction of economically viable sources of rock materials. Therefore, there would be no potential for the Proposed Project to result in the loss of a known mineral resource and there would be no impact (No Impact).

b) Loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Activities that would be associated with the Proposed Project would include pole and tower removal and replacement and substation upgrades, and would affect only a small area, the majority of which is located within existing right-of-way property and existing substation fence lines. While the proposed Farrell-Garnet 115 kV subtransmission line alignment traverses near one area currently used to extract known mineral resources (the Garnet Pit), construction and operation of the proposed subtransmission line would not significantly interfere with mining operations. Furthermore, while there are a number of areas designated as MRZ-2 by the CGS in the study area, none of the Proposed Project alignments or sites traverse these areas. Therefore, the Proposed Project would not result in the loss of any availability of locally-important minerals and there would be no impact (No Impact).

4.10.5 Cumulative Impacts

According to Section 15355 of the CEQA Guidelines, the incremental effect of individual projects that may combine to cause a significant cumulative impact must be considered when looking at the impacts of an individually proposed project. Typically, cumulative analysis is based upon the list of reasonably foreseeable projects provided in Section 3.6, *Cumulative Projects*. However, since the Proposed Project does not have an individual impact on mineral resources and other related reasonably foreseeable projects would be subject to review, it can be assumed that the Proposed Project would have no contribution to a cumulatively considerable impact to mineral resources (No Impact).

4.10.6 Alternatives

No Project Alternative

For the purposes of this analysis, the No Project Alternative includes the following two assumptions: 1) the project would not be implemented and the existing conditions in the study area would not be changed; and 2) a new subtransmission and transmission line and/or additional power generation would be constructed in or near the study area to supply power to the Electrical Needs Area. Given the highly speculative nature of the No Project Alternative assumptions, this analysis is qualitative.

Under the No Project Alternative, none of the facilities or infrastructure upgrades associated with the Proposed Project evaluated in this EIR would be constructed by SCE. However, SCE would be required to design a new project in order to satisfy the objectives of the Proposed Project. If a project under the No Project Alternative scenario would be located within an area designated as MRZ-2 it would have the potential to result in the loss of known mineral resources of value to the

State or locally important resources. However, it is likely that various measures such as design and routing considerations could be made in order to avoid impacts to mineral resources.

Alternative 2

Alternative 2 would be located near the Garnet Pit; however, similar to the Proposed Project, this alternative would not interfere with mining operations and no impact would occur. A portion of Alternative 2 located north of San Rafael Road would cross through an area designated as MRZ-2. However, there is currently no aggregate extraction occurring in this area and pole replacement that would occur under this alternative would not obstruct or interfere with the ability to access this area. Therefore, implementation of Alternative 2 would not impact mineral resources in the study area (No Impact).

Alternative 3

Alternative 3 would be located directly adjacent to the Garnet Pit along Indian Canyon Drive; however, similar to the Proposed Project, this alternative would not interfere with operation of the mine and no impact would occur. A portion of the Alternative 3 alignment located along San Rafael Drive and Indian Canyon Drive would cross through an area designated as MRZ-2. However, there is currently no aggregate extraction occurring in this area with the exception of the Garnet Pit, and pole replacements that would occur under this alternative would not obstruct or interfere with the ability to access this area. Therefore, implementation of Alternative 3 would not impact mineral resources in the study area (No Impact).

Alternative 5

The nearest mines to Alternative 5 would include the Mesa Blanca Mine, Sam Jones Mine, and Vista Mine, all of which are located at least two miles from the alignment. Therefore, as with the Proposed Project, Alternative 5 would not interfere with operation of an existing mine and no impact would occur. Alternative 5 would not traverse any areas designated as MRZ-2. Therefore, implementation of Alternative 5 would not impact mineral resources in the study area (No Impact).

Alternative 6

Alternative 6 would be located over three miles from the Garnet Pit mine and would therefore have no impact to existing aggregate operations at the mine. Furthermore, the Alternative 6 alignment does not traverse any areas designated as MRZ-2. Therefore, implementation of Alternative 6 would not impact mineral resources in the study area (No Impact).

Alternative 7

Alternative 7 would be located over three miles from the Garnet Pit mine and would therefore have no impact to existing aggregate operations at the mine. Furthermore, the alignment for Alternative 7 does not traverse any areas designated as MRZ-2. Therefore, implementation of Alternative 7 would not impact mineral resources in the study area (No Impact).

References – Mineral Resources

California Geological Survey, Department of Conservation (CGS), 2007. *Update of Mineral Land Classifications for Portland Cement Concrete-grade Aggregate in the Palm Springs Production-consumption Region, Riverside County, California*. Update to CGS Special Report 159 (SR 159), Miller, 1988.

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