5.12 Mineral Resources

This section describes the existing sources of mineral and energy resources in the Proposed Project area and evaluates the potential for construction, operation, and maintenance of the Proposed Project and alternatives to result in the loss of availability of known or locally important mineral resources.

5.12.1 Setting

Minerals are naturally occurring chemical elements or compounds, or groups of elements or compounds, formed from inorganic processes and from organic substances. Naturally occurring concentrations of minerals in the earth's crust are known as mineral deposits. Mineral resources are mineral deposits of which the economic extraction of a commodity (such as gold or copper) from the deposit is currently potentially feasible. In addition to metallic minerals, materials used for construction (e.g., sand and aggregate), industrial and chemical processes (e.g., salt), and fuel (e.g., crude oil) can be considered mineral resources in California. Locations of past and current mining activity as well as the presence of geologic materials that can be mined both can be used to assess the potential mineral resources at a site.

The primary mineral resources of Ventura County are petroleum (oil and gas) and aggregates (sand and gravel) (Ventura County, 2011). Other minerals of commercial value found in the County include asphalt, clay, decorative stone, expansible shale, gypsum, limestone, and phosphate (Ventura County, 2011). As described in Section 5.7, *Geology and Soils*, geologic materials in the vicinity of the Proposed Project sites generally consist of poorly consolidated to unconsolidated alluvium in Little Simi Valley and Santa Rosa Valley, highly folded and faulted sedimentary rocks in the Las Posas Hills, and volcanic rocks in the Calleguas Hills.

Thousands of oil and gas wells have been drilled in Ventura County since exploration and production began in the mid-1800s. In Ventura County, petroleum production accounts for approximately 75 percent of the total mineral extraction (Ventura County, 2011). Oil fields closest to the Proposed Project alignment are the Moorpark West, Moorpark, and Conejo fields (approximately 1 mile northwest, northeast, and southwest, respectively. These fields are largely abandoned, with the exception of one producing well in the Moorpark West field. Multiple dry exploration wells are present in the Calleguas Hills near the Proposed Project. There are no producing, idle, or abandoned oil or gas wells within the rights-of-way (ROW) in which the Proposed Project would be constructed and operated (California Department of Conservation Division of Oil, Gas, and Geothermal Resources [DOGGR], 2014).

Aggregates are another significant mineral resource in Ventura County. Sand, gravel, and rock used for fill, concrete, and riprap are extracted in the county. Aggregate resource areas identified by the county are based upon the Mineral Resource Zone maps created by California Division of Mines and Geology (now California Geological Survey [CGS]) (Ventura County, 2013). In accordance with the Surface Mining and Reclamation Act of 1975, the California Department of Conservation, Division of Mines and Geology, mapped nonfuel mineral resources of the state to

show where economically significant mineral deposits are either present or likely to occur based on the best available scientific data. The Proposed Project traverses lands where either (1) adequate information indicates that no significant mineral deposits are present or are likely to exist, or (2) mineral deposits exist but are of undetermined significance (MRZ-1 and MRZ-3, respectively, as described in greater detail below) (CDMG, 1981). The Proposed Project does not intersect lands designated by Ventura County as Mineral Resource Areas (Ventura County, 2010). The U.S. Geological Survey (USGS) Mineral Resource Data System indicates the nearest mineral resources to the Proposed Project are aggregate resources (sand and gravel) currently mined at the Blue Star Pit near Moorpark, approximately 1 mile east of Moorpark Substation (USGS, 2005).

Regulatory Setting

Federal

No federal mineral resource-related regulations would apply to the Proposed Project or alternatives because they would not traverse any federal lands or require federal approvals.

State

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code [PRC] §§2710-2796) and its implementing regulations (14 California Code of Regulations [CCR] §3500 et seq.) establish a comprehensive state policy for the conduct of surface mining operations and for the reclamation of mined lands to a usable condition that is readily adaptable for alternative land uses. SMARA encourages the production, conservation, and protection of the state's mineral resources and recognizes that "the state's mineral resources are vital, finite, and important natural resources and the responsible protection and development of these mineral resources is vital to a sustainable California" (PRC §2711). Under SMARA, the term "minerals" includes "any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and bituminous rock, but excluding geothermal resources, natural gas, and petroleum" (14 CCR §3501).

The CGS maps and regulates the locations of potential mineral resources in California consistent with SMARA. In order to protect these potential mineral resources, the CGS has classified the regional significance of mineral resources into Mineral Resource Zones (MRZs) and mapped them. Descriptions of the MRZ categories are provided in **Table 5.12-1** *California Mineral Land Classification System Category Descriptions.*

Local

Local governments generally regulate mineral resources and mining within their jurisdictions pursuant to their General Plan and local surface mining ordinances. California Public Utilities Commission (CPUC) General Order No. 131-D explains that local land use regulations would not apply to the Proposed Project. However, for informational purposes, the goals and policies of

TABLE 5.12-1
CALIFORNIA MINERAL LAND CLASSIFICATION SYSTEM CATEGORY DESCRIPTIONS

Mineral Resource Zone Category	Category Description	
MRZ-1	*Areas of No Mineral Resource Significance*	
MRZ-2a	*Areas of Identified Mineral Resource Significance*	Demonstrated Reserves
MRZ-2b		Inferred Resources
MRZ-3a	*Areas of Undetermined Mineral Resource Significance*	Known Mineral Occurrence
MRZ-3b		Inferred Mineral Occurrence
MRZ-4	*Areas of Unknown Mineral Resource Significance*	No Known Mineral Occurrence

SOURCE: CDMG, nd.

local general plans and other planning documents pertaining to mineral resources that would otherwise be relevant to the Proposed Project and alternatives are described below.

Ventura County General Plan

Ventura County safeguards access to mineral resources by designating appropriate areas as Mineral Resource Areas and then applying zoning requirements known as the Mineral Resource Protection Overlay Zone to those areas (Ventura County, 2011). The Proposed Project is not within areas designated as Mineral Resource Areas. The only policy relevant to the Proposed Project is Policy 1.4.2.6, which states that all discretionary developments shall be evaluated for their individual and cumulative impacts on access to and extraction of recognized mineral resources in compliance with CEQA.

City of Moorpark General Plan

The Conservation, Open Space, and Recreation element of the Moorpark General Plan includes policies designed to maintain the overall quality of life for Moorpark residents through rational management of natural resources and open space lands (City of Moorpark, 1986). A mineral resource overlay designation is included in the land use map of the General Plan and applies to areas outside of the City limits but within the Moorpark Area of Interest. The overlay designation indicates areas containing significant mineral resource deposits as identified by CGS. The Proposed Project does not traverse areas of regional mineral resource significance as identified in the Moorpark General Plan (City of Moorpark, 1986).

City of Thousand Oaks General Plan

No significant mineral resources exist within the Thousand Oaks planning area; mineral resources are not inventoried in the General Plan and it contains no policies related to mineral resources (City of Thousand Oaks, 2013).

5.12.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, a project would result in significant mineral resources effects on the environment if it would:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

5.12.3 Applicant Proposed Measures

No applicant proposed measures are proposed related to mineral resources.

5.12.4 Impacts and Mitigation Measures

Approach to Analysis

To evaluate potential impacts of the Proposed Project on mineral resources, the locations of Proposed Project components were compared with maps of known mineral resources of value to the state, region, and local jurisdictions to determine whether components would occur on or otherwise limit access to these resources. The outcomes of this analysis are described below.

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. (No Impact)

The Proposed Project would traverse areas that have been classified as either having no mineral resources of value to the region and state or as having an unknown value. The significance of the minerals in the Las Posas Hills and the Calleguas Hills has not been determined, but minerals are known to occur in those areas. However, the Proposed Project would not impact access to mineral resources, or result in the loss of availability of a known mineral resource, and thus would have no impact pertaining to criterion a) (No Impact).

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b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. (No Impact)

As noted in Section 5.12.1, *Setting*, none of the relevant municipalities identify mineral resources of local importance along the Proposed Project alignment. The Proposed Project would not impact the availability of locally important mineral resource recovery sites (No Impact).

5.12.5 Alternatives

No Project Alternative 1

No Project Alternative 1 would result in no new 66 kV subtransmission line in the proposed location. Under this alternative structures would not be built and conditions in the area would not change; thus, this alternative would have no impact on access to mineral resources of statewide or local value (No Impact).

No Project Alternative 2

Under No Project Alternative 2, the Proposed Project would not be constructed and the infrastructure already constructed for the Moorpark-Newbury 66 kV Subtransmission line would be removed, with the exception of the previously installed LWS poles and energized conductor. There would be no change related to access to mineral resources of statewide or local value after infrastructure removal. There would be no impact on access to mineral resources under this alternative (No Impact).

References – Mineral Resources

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