

3.11 MINERAL RESOURCES

3.11.1 INTRODUCTION

This section describes existing conditions and potential impacts on mineral resources as a result of construction, operation, and maintenance of the project. The analysis concludes that the project will have no impact on mineral resources. The project's potential effects on mineral resources were evaluated using the significance criteria set forth in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The conclusions are summarized in Table 3.11-1 and discussed in more detail in Section 3.11.4.

Table 3.11-1: CEQA Checklist for Mineral Resources

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.11.2 REGULATORY BACKGROUND AND METHODOLOGY

3.11.2.1 Regulatory Background

Federal

No federal regulations related to mineral resources are applicable to the project.

State

The California Surface Mining and Reclamation Act (SMARA) of 1975 requires that the State Geologist classify land into mineral resource zones (MRZs) according to the known or inferred mineral potential of the land. MRZs delineated by the California Department of Mines and Geology (CDMG) identify the presence and significance of mineral deposits within the project area. In general, areas subject to pressures of urbanization are zoned by the CDMG, while those areas outside these areas are not. MRZ categories defined by the CDMG include:

- MRZ-1. Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2. Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.

- MRZ-3. Areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- MRZ-4. Areas where available information is inadequate for assignment to any other.
- MRZ-SZ. Areas containing unique or rare occurrence of rocks, minerals, or fossils that are of outstanding scientific significance.

Local

Because the CPUC has exclusive jurisdiction over project siting, design, and construction, the project is not subject to local discretionary regulations. This section includes a summary of local land use plans that delineate locally important mineral resource recovery sites for informational purposes and to assist with the CEQA review process.

Sonoma County has identified areas along certain streams and rivers as locally important mineral resources within the General Plan, specifically for aggregate mining.

3.11.2.2 Methodology

Information on mineral resources was compiled from published literature, maps, and aerial photographs. Geologic units and structural features were obtained from maps published by the California Geological Survey (CGS). Mineral resources impacts that can result from project-related activities were evaluated qualitatively based on site conditions; expected construction practices; and materials, locations, and duration of construction and operational activities.

3.11.3 ENVIRONMENTAL SETTING

Fitch Mountain Substation is located within an area classified as MRZ-2 for known mineral resources based upon sand and gravel reserves (CGS 2013; CGS 2005). The substation is bordered on the west by a sand and gravel extraction operation. Both the Fulton-Shiloh and Shiloh-Fitch segments are located within areas that have been classified as MRZ-3 for aggregate resources. Aggregate resources consist of sand, gravel, and crushed rock that are physically and chemically suited for use in construction. Aggregates are used to provide bulk and strength to concrete and can be used for subbase, drain rock, and fill. Rock groups in the project area that contain crushed stone aggregate resources include younger volcanic rocks of the Sonoma Volcanic group and Pleistocene alluvial terrace deposits along major streams and rivers.

There are no locally important mineral resources within the project area. Sonoma County recognizes two aggregate mineral resources, sand and gravel, along Windsor Creek and the Russian River. The Winsor Creek resources are approximately 0.25 mile from the project. Extraction operations are present on the south bank of the Russian River, outside of the project area in MRZ-2 zoned areas west of Fitch Mountain Substation.

There are no geothermal features in the immediate vicinity of the project. Geothermal resources in the Sonoma Valley exist as a widely distributed, moderately shallow, low-temperature source. The resource is characterized as a liquid-dominated hydrothermal convection system that ascends into fractures and faults within permeable units of the Sonoma Volcanics. Geothermal

resources in Sonoma County consist of hot water, steam, and heat found at or below the earth's surface. The Geysers Known Geothermal Resource Area (KGRA), located in northeastern Sonoma County in the Mayacamas Mountains, is the largest steam-powered geothermal development in the world. A number of wells with elevated temperatures are located outside the KGRA and east and southeast of the project.

3.11.4 APPLICANT-PROPOSED MEASURES AND POTENTIAL IMPACTS

The following sections describe significance criteria for mineral impacts derived from Appendix G of the CEQA Guidelines, provide Applicant-Proposed Measures (APMs), and assess potential project-related construction and operational mineral impacts.

3.11.4.1 Significance Criteria

According to Section 15002(g) of the CEQA Guidelines, “a significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” As stated in Section 15064(b) of the CEQA Guidelines, the significance of an activity may vary with the setting. Per Appendix G of the CEQA Guidelines, the potential significance of project impacts on mineral resources were evaluated for each of the criteria listed in Table 3.11-1, as discussed in Section 3.11.4.3.

3.11.4.2 Applicant-Proposed Measures

No APMs are required for mineral resources.

3.11.4.3 Potential Impacts

Project impacts related to mineral resources were evaluated against the CEQA significance criteria and are discussed below. The impact analysis evaluates potential project impacts during the construction phase and the operation and maintenance (O&M) phase.

The project includes reconductoring existing 60 kV and 230 kV electric utility lines between Fulton Substation and Fitch Mountain #1 Tap. The O&M activities required for the reconducted power and transmission lines will not increase from those currently required for the existing system; thus, no operation-related impacts related to mineral resources will occur. Therefore, the impact analysis is focused on construction activities that are required to install the new conductor, replace and remove poles, perform minor substation modifications, and establish required access and work areas, as described in Chapter 2.0, Project Description.

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state? *No Impact*

Fitch Mountain Substation is located within an area classified as MRZ-2 (areas with known mineral resources); however, the substation has been resurfaced with gravel within the existing fence line and all work at the substation will be conducted within the existing fence line. Thus, there will be no impact. The project will not otherwise be located within any area classified as MRZ-2. Project activities in areas classified as MRZ-3 (potential mineral resources) will be temporary, and will include a minimal amount of ground disturbance associated with construction and installation of new light-duty and tubular steel poles. These activities will not

inhibit future recovery of mineral resources, if such resources are determined to be present. Therefore, no impact will occur.

b) Would the project 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*

Based on a review of Sonoma County Aggregate Resource Management (ARM) Plan and the Sonoma County General Plan, the project area is not located within an area of known mineral resources. Therefore, no impact will occur.

3.11.5 REFERENCES

CGS. Department of Conservation. 2013. Special Report 205: Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin, and Southwestern Solano County, California.

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