

2.10 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. MINERAL RESOURCES—Would the project:				
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"/>

2.10.1 Setting

Existing Mineral Resources

The most significant mineral resource in the project area is non-metallic minerals such as broken and crushed rock products.

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 project area. In general, areas subject to pressures of urbanization are zoned by the CGS, while those areas outside these areas are not. MRZ categories defined by the CGS are presented below:

- 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.

Most of the project area is outside a classified MRZ. Local areas along Sonoma Creek are zoned MRZ-2 and MRZ-3 based upon sand and gravel reserves. The western and eastern edges of Sonoma Valley are zoned MRZ-1. The western boundary of this zone intersects segment 2 of the proposed project route (PG&E PEA, 2004).

Sand and Gravel Quarries

Extraction operations exist outside the project area. Sonoma Volcanics, the result of a volcanic event that happened millions of years ago, have been quarried for block and paving stone in the past and are currently being extracted. Basalt is being extracted in Petaluma west of Highway 101 and at a quarry in Napa. A small quarry is located along the north side of Highway 116, about a mile and one-half south of the central portion of Segment 1. The Proposed Project would not cross areas presently being used for mineral extraction, nor is the project within an area identified by the Sonoma County Aggregate Resources Management Plan as a potential future aggregate resource extraction site.

Oil and Minerals

There are no known oil and mineral resources within the project alignment (DOGGR, 2001).

Geothermal Resources

Geothermal resources in the project area 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. The hydrothermal area northeast of the project and north of Sonoma is located in an area designated “most likely geothermal production zone” by the USGS. A number of wells with elevated temperatures are located outside this main hydrothermal area and are located south of the project area (Youngs et al., 1983).

2.10.2 Regulatory Setting

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, Sections 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).

Sonoma County

Sonoma County has adopted the Aggregate Resources Management (ARM) Plan, a plan for obtaining future supplies of aggregate material (this is now the predominate mineral mined in Sonoma County). This plan serves as the state-mandated mineral management policy for the county and is intended to accomplish the mandated purposes. During the process of adoption of the plan, the County considered the aggregate resource areas subsequently classified as MRZ-2 by the State Geologist and transmitted by the Board in compliance with the Act in February, 1985. (Aggregate resources are mapped in the ARM Plan). Policies that could be applicable to the Proposed Project include:

- Policy RC-11a: Consider lands designated in the Aggregate Resources Management Plan (ARM) as priority sites for aggregate production and mineral extraction and review requests for additional designations for conformity with the general plan and the ARM plan.
- Policy RC-11b: Review projects for environmental impact and land use conflicts and consider the following minimum factors when approving mining permits: topsoil salvage, vegetation, fisheries and wildlife impacts, noise, erosion control, roadway conditions and capacities, reclamation and bonding, air quality, energy consumption, engineering and geological surveys, aggregate supply and replenishment, drainage, and the need for economical aggregate materials.
- Policy RC-11c: Review projects which are on or near sites designated "Mineral Resources" in the ARM Plan for compatibility with future mineral extraction.

2.10.3 Mineral Resources Impacts and Mitigation Measures

- 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.***

Extraction operations exist outside the project area. There are no known economically viable sources of rock materials in the immediate project area. In addition, there are no unique geologic features identified within project area. Therefore, the potential for the project to result in the loss of mineral or unique geologic features is low and this impact would be less than significant.

- 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.***

The pole replacement activities from the proposed project affect only a very small area and would not result in the any loss of availability of locally-important minerals as the transmission line alignment crosses no areas currently used to extract known mineral

resources. The only portion of the alignment that does cross a known mineral resource occurs between poles 107 and 108 where the route crosses a portion of Sonoma Creek that is designated MRZ-2 for aggregate materials. There is no aggregate extraction occurring at this point and neither the existing poles nor the reconfigured poles in the proposed project would obstruct or impact on any future ability to access the Creek for any purpose. Thus, the Proposed Project would not result in any impacts to mineral resources.

References – Mineral Resources

Division of Oil, Gas and Geothermal Resources (DOGGR), 2001. *Oil, Gas, and Geothermal Fields within California*, 2001.

Pacific Gas and Electric Company (PG&E), 2004. *Proponent's Environmental Assessment, Lakeville-Sonoma 115 kV Transmission Line Project*, November 2004. Prepared by EDAW.

Youngs, Leslie G., Rodger H. Chapman, Gordon W. Chase, Stephen P. Bezore, and Hasu H. Majmundar, 1983. *Investigation of Low-Temperature Geothermal Resources in the Sonoma Valley Area, Sonoma and Napa Counties, California*, USGS Open-File Report OFR 83-13, 1983.