

4.12 Mineral Resources

4.12.1 Introduction

This section describes the setting and potential impacts related to mineral resources from the Proposed Project, reasonably foreseeable distribution components, and alternatives. Mineral resources include rock aggregate, oil and gas deposits, iron ore, and other materials used in industry or construction.

4.12.2 Regulatory Setting

Federal Laws, Regulations and Policies

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project, reasonably foreseeable distribution components, and alternatives.

State Laws, Regulations and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by the CDOC and CGS following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. The objective of the designation process is to ensure, through appropriate local lead agency policies and procedures, that mineral materials would be available when needed and do not become inaccessible as a result of inadequate information during the land use decision-making process. Mineral land classification reports are produced by the State Geologist as specified by SMARA.

Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. The three Mineral Resource Zone (MRZ) classifications used in the SMARA classification-designation process are defined below (CDOC 2011a):

- **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-3:** Areas containing known or inferred aggregate resources of undetermined significance.

- **MRZ-4:** Areas where available information is inadequate for assignment to any other zone.

4.12.3 Environmental Setting

Surface Mines and Quarries

Considerable mining activity in San Luis Obispo County has taken place in the Santa Lucia Range (which extends north/south approximately 5 to 20 miles west of Paso Robles), with the primary ores extracted being cinnabar, quicksilver, and limestone. The most notable mines in northern San Luis Obispo County are the Lime Mountain, Klau, Buena Vista, Bonanza, Oceanic, and Almaden Mines, of which only Lime Mountain (approximately 17 miles west of Paso Robles) is still in operation (County of San Luis Obispo 2015).

Per the State Geologist's land classifications under SMARA, Estrella Substation and a majority of the 70 kV power line route would be located within areas classified as MRZ-1. Two segments of the new 70 kV power line segment would be constructed in areas classified as MRZ-3. The nearest MRZ-2 zone is delineated along the Salinas River approximately 0.3 mile southwest of the proposed 70 kV power line reconductoring segment. Additional areas of Huer Huero Creek approximately 5 miles southeast of Estrella Substation have been reclassified as MRZ-2 (CDOC 2011b).

Alternative substation sites (Alternative SS-1 and SE-1A) are located within areas classified as MRZ-3. Alternatives PLR-1A and PLR-1C would be similar to the Proposed Project because the majority of the alignments would be located within areas either classified as MRZ-1 or MRZ-3. Alternatives SE-1A and portions of Alternative SE-PLR-2 are located closer to the Salinas River, where there are areas that are classified as MRZ-2. The overall mineral resource zoning in these MRZ-2 areas is for Portland Cement Concrete Grade aggregate (CDOC 2011b).

Figure 4.12-1 shows open pit mines and quarries located within the Proposed Project, reasonably foreseeable distribution components, and alternatives vicinity. Most of these mines and quarries are located in and around the Salinas River and are streambed or gravel bar skimming and pitting operations, where the primary product is sand and gravel.

Oil, Gas, and Geothermal Resources

According to San Luis Obispo County, commercially extractable petroleum resources have not been encountered within their jurisdiction, or are not of a high enough quality to support their extraction (County of San Luis Obispo 2015). The California Division of Oil, Gas, and Geothermal Resources (DOGGR) oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells in California, and tracks every known oil, gas, and geothermal well and oil and gas field in the state.

Figure 4.12-2 depicts data obtained from DOGGR of known geothermal wells and plugged oil and gas dry holes located within the vicinity of the Proposed Project, reasonably foreseeable distribution components, and alternatives. As indicated in Figure 4.12-2, two geothermal wells are located within 0.25 mile of the proposed 70 kV power line (within the River Oaks Golf Course in the City of Paso Robles). No known oil, gas, or geothermal wells are located on the Estrella Substation site or in proximity to the reasonably foreseeable distribution components.

As shown on Figure 4.12-2, two plugged oil or gas dry holes are located within 0.25 mile of Alternative PLR-1A and PLR-1C, and these alternatives also pass within 0.25 mile of the same two geothermal wells passed by the Proposed Project (located within the River Oaks Golf Course). Alternative SE-PLR-2 is located within 0.50 mile of two plugged oil or gas dry holes, located east of the alignment. None of the other alternatives are located in close proximity to known oil, gas, or geothermal wells.

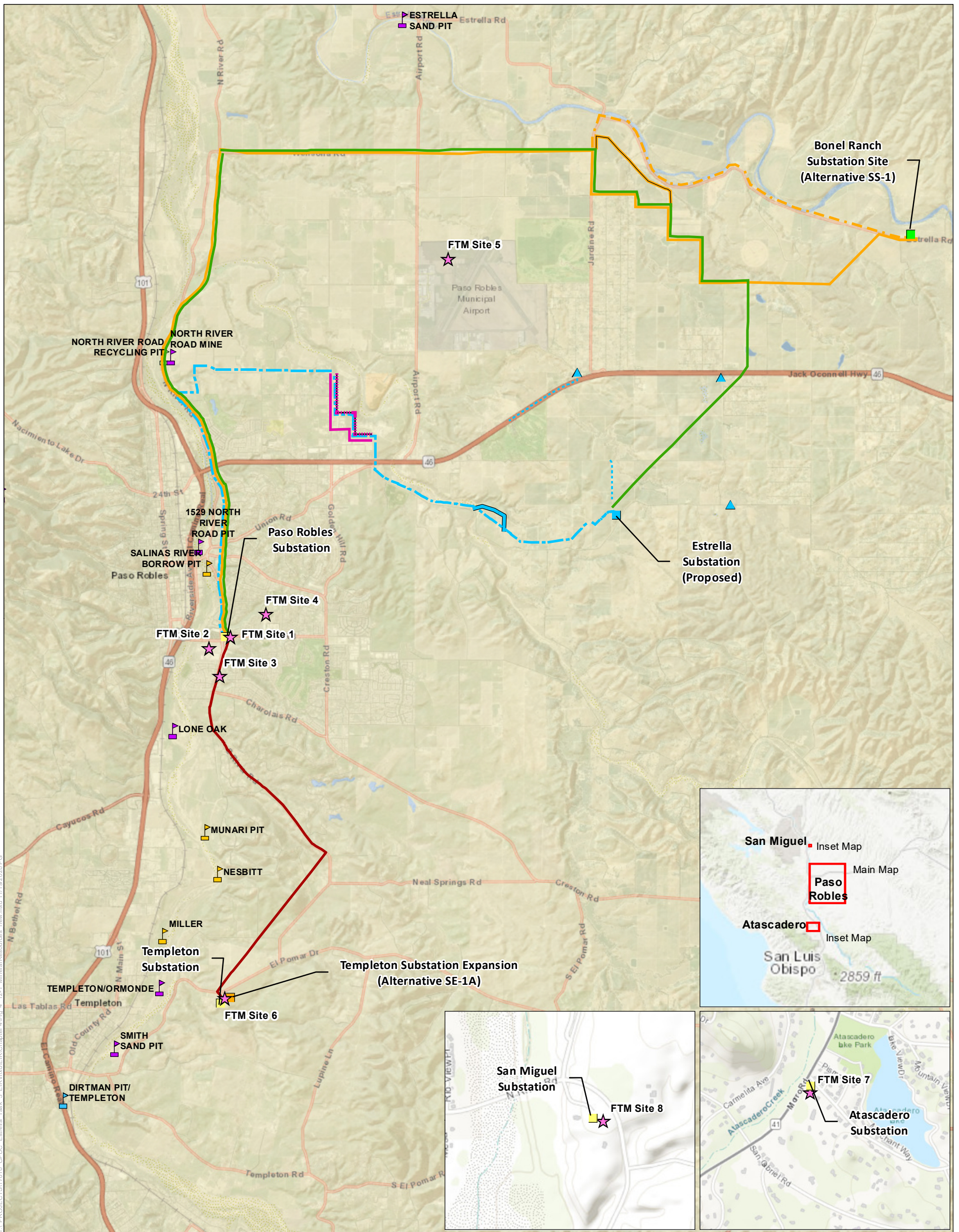
Locally Classified Extractive Resource Areas

As described in Appendix A, the County of San Luis Obispo Code (Title 22, Land Use Ordinance) provides regulations for development in delineated Energy and Extractive Resource Areas (EX) and Extractive Resource Areas (EX1), which are both used to indicate areas where mineral or petroleum extraction occurs or where mineral resources are likely to occur. Refer to Appendix A for detailed information on the County of San Luis Obispo Land Use Ordinance regulations. None of the Proposed Project components, reasonably foreseeable distribution components, or the alternative alignments/sites are located within the EX or EX1 combining designations (see Figure 4.11-3 in Section 4.11, “Land Use and Planning”). The nearest EX1 area is within the Salinas River corridor south of Paso Robles.

Other Mineral Resources

No other significant mineral resources (i.e., gold or other valuable metals, magnesium-rich serpentine, or bentonite) are known to exist in the Proposed Project, reasonably foreseeable distribution components, or alternative site areas.

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- Proposed Project**
- Estrella Substation
 - 70kV Route
 - 70 kV Minor Route Variation 1
- Reasonably Foreseeable Distribution Components**
- New Distribution Line Segments
 - ▲ Additional 21/12 kV Pad-Mounted Transformer
- Existing Infrastructure**
- Existing Substations

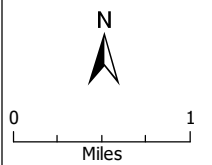
- Project Alternatives**
- ★ Front-of-the-Meter (FTM) Battery Storage Sites (Alternative BS-2)
 - Alternative SS-1: Bonel Ranch Substation Site
 - Alternative SE-1A: Templeton Substation Expansion - 230/70 kV Substation
 - Alternative PLR-1A: Estrella Route to Estrella Substation
 - Alternative PLR-1C: Estrella Route to Bonel Ranch, Option 1
 - Alternative PLR-1C: Minor Route Variation 1
 - Alternative PLR-1C: Minor Route Variation 2
 - Alternative PLR-3A: Strategic Undergrounding, Option 1
 - Alternative PLR-3B: Strategic Undergrounding, Option 2
 - Alternative SE-PLR-2: Templeton-Paso South River Road Route

- Mines and Quarries**
- ▲ Active
 - ▲ Exempt
 - ▲ Idle
 - ▲ Reclaimed
 - ▲ Closed

Figure 4.12-1
Mineral Resources

Source: ESRI 2018, DOGGR 2019, CA DOC 2019, PG&E 2019, SCWA 2017

Note: The route variations shown are offset and simplified in order to display the alignments of the alternative routes that may overlap in places



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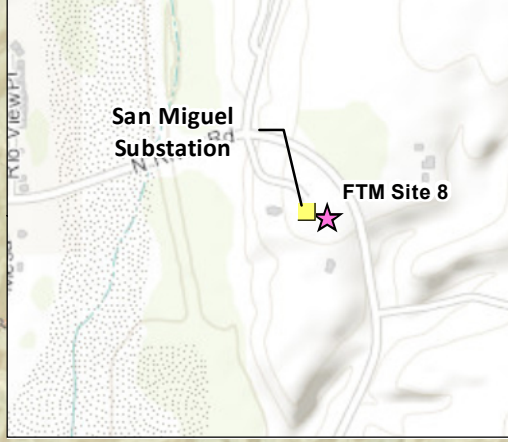
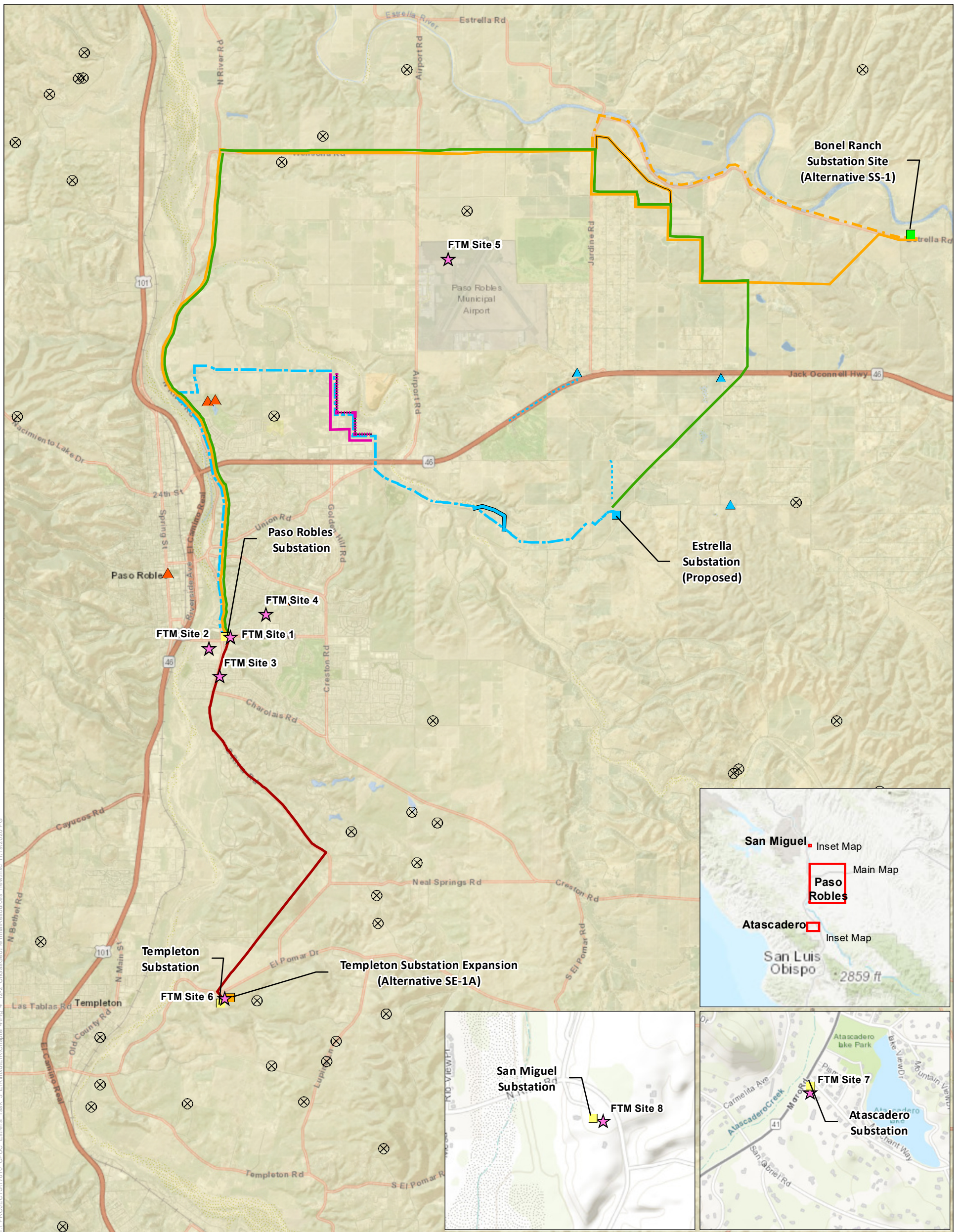
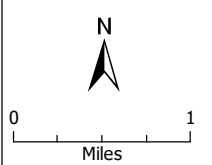


Figure 4.12-2
Oil, Gas, and Geothermal Resources

- | Proposed Project | Project Alternatives | Oil, Gas, and Geothermal Resources |
|---|--|--|
| ■ Estrella Substation | ★ Front-of-the-Meter (FTM) Battery Storage Sites (Alternative BS-2) | ▲ Geothermal Resources |
| - - - 70kV Route | ■ Alternative SS-1: Bonel Ranch Substation Site | ⊗ Plugged Oil/Gas Dry Hole |
| — 70 kV Minor Route Variation 1 | ■ Alternative SE-1A: Templeton Substation Expansion - 230/70 kV Substation | |
| Reasonably Foreseeable Distribution Components | — Alternative PLR-1A: Estrella Route to Estrella Substation | |
| - - - New Distribution Line Segments | — Alternative PLR-1C: Estrella Route to Bonel Ranch, Option 1 | |
| ▲ Additional 21/12 kV Pad-Mounted Transformer | - - - Alternative PLR-1C: Minor Route Variation 1 | |
| Existing Infrastructure | — Alternative PLR-1C: Minor Route Variation 2 | |
| ■ Existing Substations | — Alternative PLR-3A: Strategic Undergrounding, Option 1 | |
| | - - - Alternative PLR-3B: Strategic Undergrounding, Option 2 | |
| | — Alternative SE-PLR-2: Templeton-Paso South River Road Route | |

Source: Paso Robles General Plan 2018, PG&E 2019, SCWA 2017

Note: The route variations shown are offset and simplified in order to display the alignments of the alternative routes that may overlap in places



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4.12.4 Impact Analysis

Methodology

The impact analysis considered the extent to which the Proposed Project, reasonably foreseeable distribution components, and alternatives would result in the loss of known mineral resources or locally-important mineral resource recovery sites. Effects were evaluated qualitatively in accordance with the significance criteria below.

Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines, it was determined that the Proposed Project, reasonably foreseeable distribution components, and alternatives would result in a significant impact on mineral resources if they 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.

Environmental Impacts

Proposed Project

Impact MR-1: 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 – *Less than Significant*

Per the State Geologist's land classifications under SMARA, the proposed Estrella Substation site is located entirely within an area classified as MRZ-1, or an area with little likelihood for the presence of significant mineral resources. The site currently supports vineyards and does not, and has not in the past, supported mining operations. Thus, there would be no impact on known mineral resources at the proposed substation site.

The proposed 70 kV power line alignment, including Minor Route Variation 1, primarily traverses areas classified as MRZ-1. While there are several existing sand and gravel mining operations located within the Salinas River in Paso Robles, none of these are within 0.25 mile from the Proposed Project 70 kV power line. No portion of the 70 kV power line alignment is located within an area classified as MRZ-2. As such, construction and operation of the proposed 70 kV power line would not affect any known mineral resources.

Segments of the proposed 70 kV power line alignment, including the segment crossing Huer Huero Creek and an additional approximately 2 miles of the proposed new 70 kV power line segment, traverse areas classified as MRZ-3, which are areas containing known or inferred mineral occurrences of unknown mineral resource significance. If significant mineral resources are ultimately determined to be present within these areas, the presence of the power line could potentially hinder mineral resource accessibility. For example, the presence of a power line pole would prevent development of a mine in this immediate area. However, due to the fact that the poles would be spaced hundreds of feet apart, this should not significantly affect the

availability of the mineral resources that may be identified in the future. Additionally, given the current land uses along the Proposed Project 70 kV power line alignment (primarily agricultural, as well as industrial and rural residential), the likelihood of future mining in these areas is low. Mining uses are not prohibited within existing PG&E easements as long as they do not interfere with PG&E's easement rights and usage, and do not create a G.O. 95 and/or a California Division of Occupational Safety and Health infraction (NEET West and PG&E 2017).

The two geothermal wells located within the River Oaks Golf Course are approximately 580 feet and 950 feet southeast of the closest features of the Proposed Project. Construction would not extend near or above the existing wells or into the River Oaks Golf Course parcel. As depicted in Figure 2-7 (see Sheet 5) in Chapter 2, *Project Description*, Clubhouse Drive would be used to access construction areas to the north, but use of the access road by construction equipment and vehicles is not expected to impact well servicing units and associated equipment required to service the existing wells. Additionally, Proposed Project-related construction activities along public roadways in this area would be temporary and limited in nature. The Proposed Project does not include the construction of any infrastructure (e.g., fencing, landscaping, trees, etc.) along Clubhouse Drive or anywhere that might obstruct access to oil, gas, or geothermal wells.

Overall, construction and operation of the Proposed Project components would not result in the loss of availability of known mineral resources that would be of value to residents of the region or the state. Therefore, this impact would be **less than significant**.

Impact MR-2: 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 described in Section 4.12.3, the Proposed Project is not located within an EX or EX1 combining designation or any other locally-important mineral resource recovery site or area delineated on a local general plan, specific plan, or other land use plan. Therefore, **no impact** would occur.

Reasonably Foreseeable Distribution Components and Ultimate Substation Buildout

The reasonably foreseeable new distribution line segments and additional 21/12 kV pad-mounted transformers are located in areas classified as MRZ-1 (CDOC 2011a, 2011b). Therefore, construction and operation of these facilities would not affect known mineral resources. Likewise, as shown in Figure 4.12-1 and Figure 4.12-2, no mines or quarries or oil, gas, or geothermal wells exist within or in close proximity to the reasonably foreseeable distribution components. The equipment and facilities associated with ultimate substation buildout would primarily be placed within the fence line of the already-constructed Estrella Substation. As a result, construction and operation of the reasonably foreseeable distribution components and infrastructure affiliated with ultimate substation buildout would have no potential to impact any of these types of resources. Additionally, distribution components and infrastructure related to ultimate substation buildout are not located within an EX or EX1 combining designation and would not affect the availability of a locally-important mineral resource recovery site. Therefore, **no impact** would occur under significance criteria A or B.

Alternatives

No Project Alternative

Under the No Project Alternative, no new substation or 70 kV power line would be constructed or operated. Therefore, there would be no potential for any new physical features to limit accessibility to known mineral resources and there would be no change to the existing baseline conditions. Therefore, **no impact** would occur under significance criteria A or B.

Alternative SS-1: Bonel Ranch Substation Site

As noted in Section 4.12.3, the Bonel Ranch Substation Site is located within an area classified as MRZ-3 (i.e., an area containing known or inferred mineral occurrences of unknown mineral resource significance). If significant mineral resources are determined present within these areas in the future, these resources could be made locally inaccessible as a result of construction of the substation. The substation would occupy a total of roughly 15 acres and would prevent mining of materials within this immediate area. As such, relative to the proposed Estrella Substation, Alternative SS-1 has a greater potential for impacts to mineral resources. Nevertheless, the Bonel Ranch site is currently used for agriculture and does not support mining operations, and any future mining activities on the site are speculative. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative SS-1 is not located within an EX or EX1 combining designation, and thus would not affect locally-designated mineral resource recovery sites. Therefore, **no impact** would occur under significance criterion B.

Alternative PLR-1A: Estrella Route to Estrella Substation

Alternative PLR-1A is approximately 6.5 miles longer than the Proposed Project 70 kV power line, requiring a greater amount of ground disturbance and a longer duration of construction. Alternative PLR-1A also traverses a larger portion of lands designated as MRZ-3, as compared to the Proposed Project 70 kV power line alignment. As discussed above under Impact MR-1, if significant mineral resources are determined to be present within the MRZ-3 areas, the presence of the power line could potentially hinder mineral resource accessibility (e.g., presence of a power line pole would prevent development of a mine on this immediate area); however, due to the fact that the poles would be spaced hundreds of feet apart, this should not significantly affect the overall availability of the mineral resources. No portion of the alignment is located within an area classified as MRZ-2.

As shown on Figure 4.12-1, one active mine (North River Road Recycling Pit) and one inactive mine (North River Road Mine) are located within immediate proximity to the Alternative PLR-1A reconductoring segment. In this area, under Alternative PLR-1A, the existing 70 kV line between San Miguel Substation and Paso Robles Substation would be recondored, including pole replacement. The existing 70 kV line follows North River Road in this area. Construction activities for Alternative PLR-1A could potentially disturb operations at the North River Road Recycling Pit due to construction equipment and vehicles needed to access the pole work areas; however, it is unlikely that mining operations would be significantly impacted. Once installed, the recondored 70 kV power line would not be meaningfully different from the existing line and would not affect mining/resource recovery operations.

Alternative PLR-1A would pass by the same two geothermal wells (both over 1000 feet away) at River Oaks Golf Course that are discussed for the Proposed Project. Similar to the Proposed Project, equipment access from public streets during construction of Alternative PLR-1A is not expected to impact well servicing units or equipment. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative PLR-1A does not traverse areas designated as EX or EX1 combining designation, nor does it cross any other locally-important mineral resource recovery areas. As such, **no impact** would occur with respect to significance criterion B.

Alternative PLR-1C: Estrella Route to Bonel Ranch, Option 1

The Alternative PLR-1C route would be largely similar to Alternative PLR-1A, but would start at the Bonel Ranch site rather than the proposed Estrella Substation. Alternative PLR-1C is similar in length to Alternative PLR-1A and similarly requires an extended construction duration compared to the Proposed Project. Alternative PLR-1C also traverses a larger portion of lands designated as MRZ-3 compared to the Proposed Project alignment, but construction and operation of Alternative PLR-1C would not significantly affect the availability of resources in MRZ-3 areas should they be found to be significant. No portion of the alignment is located within an area classified as MRZ-2.

The reconductoring segment for Alternative PLR-1C would be identical to that for Alternative PLR-1A. As such, it would pass by the same active and inactive mines along North River Road. Refer to the discussion above under “Alternative PLR-1A” for potential impacts on mining/resource recovery activities from the reconductoring segment construction and operation. The Alternative PLR-1C reconductoring segment also would pass by the same two geothermal wells (both over 1000 feet away) at River Oaks Golf Course as the Proposed Project 70 kV power line reconductoring segment and Alternative PLR-1A. As discussed above, these impacts would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative PLR-1C is not located within an EX or EX1 combining designation, nor does it cross other locally-important mineral resource recovery areas. As such, **no impact** would occur under significance criterion B.

Alternatives PLR-3: Strategic Undergrounding (Options 1 and 2)

While Alternative PLR-3 (both options) would include additional excavation required for undergrounding a portion of the power line alignment, the potential effects on mineral resources from construction and operation of Alternative PLR-3 would be largely similar to those from the Proposed Project. The Alternative PLR-3 undergrounding route options would pass through areas designated as MRZ-1 or not classified for mineral resources and no existing mines or oil, gas, or geothermal wells are located in this area. The Alternative PLR-3 underground components would largely be installed within existing streets or through industrial areas and would not affect the availability of mineral resources. Therefore, impacts under significance criterion A would be **less than significant**.

The Alternative PLR-3 alignment is not located within an EX or EX1 area. Therefore, **no impact** would occur under significance criterion B.

Alternative SE-1A: Templeton Substation Expansion – 230/70 kV Substation

As noted in Section 4.12.3, the Templeton Substation Expansion Site is located within an area classified as MRZ-3, or an area containing known or inferred mineral occurrences of unknown mineral resource significance. If significant mineral resources are determined present within these areas, these resources could be made locally inaccessible as a result of construction of the substation. The substation would occupy a total of roughly 15 acres and would prevent mining of materials within this area. As such, relative to the proposed Estrella Substation, Alternative SE-1A has a greater potential for impacts to mineral resources. Nevertheless, the Templeton Substation Expansion Site is currently used for agriculture and does not support mining operations, and any future mining activities on the site are speculative. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative SE-1A is not located within an EX or EX1 combining designation, and thus would not affect locally-designated mineral resource recovery sites. As a result, **no impact** would occur under significance criterion B.

Alternative SE-PLR-2: Templeton-Paso South River Road Route

The Alternative SE-PLR-2 power line route would be shorter than the proposed 70 kV power line alignment and would have a 9-month shorter construction schedule. Alternative SE-PLR-2 traverses a larger portion of lands designated as MRZ-3, as compared to the Proposed Project alignment. As discussed above under Impact MR-1, if significant mineral resources are determined to be present within the MRZ-3 areas, the presence of the power line could potentially hinder mineral resource accessibility (e.g., the presence of a power line pole could prevent development of a mine on this immediate area); however, due to the fact that the poles would be spaced hundreds of feet apart, this should not significantly affect the overall availability of the mineral resources. No portion of the alignment is located within an area classified as MRZ-2.

None of the existing mines or quarries in proximity to Alternative SE-PLR-2 are close enough to be potentially affected by construction or operation of the alternative. Likewise, two existing plugged oil/gas dry holes in the area are both located over 1,500 feet east and would not be affected by construction or operation activities. As a result, impacts under significance criterion A would be **less than significant**.

Alternative SE-PLR-2 does not traverse lands designated as EX or EX1 and therefore would not significantly affect availability of locally-designated mineral resource recovery sites. Therefore, **no impact** would occur under significance criterion B.

Alternative BS-2: Battery Storage to Address Distribution Need

Construction of FTM BESSs under Alternative BS-2 would involve similar construction activities (e.g., grading, earth-moving) as the proposed Estrella Substation. Should it be determined that mineral resources are present beneath a site selected for an FTM BESS, the presence of FTM BESSs could potentially hinder mineral resource accessibility (e.g., the presence of infrastructure could prevent development of a mine within the immediate area). However, due to the limited size required for these facilities, this should not significantly affect the overall availability of the mineral resources. For those illustrative FTM sites considered in this EIR, FTM Site 6 is located at the Templeton Substation Expansion Site, which is within an area designated as MRZ-3.

Construction and operation of a FTM BESS at this site would have similar potential to impact the availability of mineral resources in this location as discussed above for Alternative SE-1A. None of the other example FTM sites are within MRZ-3 areas and none of the FTM sites are within MRZ-2. Additionally, no existing mines, quarries, or oil, gas, or geothermal resources are located in close proximity to any of the example FTM sites. Likewise, none of the FTM sites are located on areas designated as EX or EX1.

Overall, FTM BESS sites were selected for illustrative purposes only, BESS installations have not been designed and technologies have not been selected, and the specifics of Alternative BS-2 are unknown. Thus, project-level determinations cannot be made as impacts are speculative. Therefore, consistent with CEQA Guidelines Section 15145, no significance conclusion is provided for any of the significance criteria.

Alternative BS-3: Behind-the-Meter Battery Storage

The specific locations of development sites under Alternative BS-3 are unknown. As described in Chapter 3, *Alternatives Description*, individual BTM solar and storage facilities would be installed primarily on or within existing buildings. In these situations, installation of BTM facilities would have little to no potential to impact mineral resources. In situations where a commercial, industrial, or residential property owner were to install new BTM solar and/or BESS facilities on previously undeveloped portions of their property; there is potential for impacts to mineral resources if mineral resources were determined to be present in these areas. Nevertheless, developed commercial, industrial, and residential properties are likely to be properties where mineral resources are already unavailable.

Given that the only EX or EX1 areas within the greater Paso Robles area are located within the immediate Salinas River corridor south of Paso Robles Substation (see Figure 4.11-3 in Section 4.11, “Land Use and Planning”), it is unlikely that BTM facilities would be installed in these areas. Even if they were, they would be unlikely to significantly affect the locally-designated mineral resources in these areas.

Overall, due to the fact that specific locations and characteristics of BTM resources procured under Alternative BS-3 are unknown at this time, project-level impact determinations are not possible as the impacts are speculative. Therefore, consistent with CEQA Guidelines Section 15145, no significance conclusion is reached under any of the significance criteria.