

## Energy and Mineral Resources

This section analyzes the potential effects of the project on energy and mineral resources in the area. Included is an examination of the project's effects on local sand and gravel mining, extraction of natural gas from local gas fields, and development of wind energy projects.

### Environmental Setting

#### Regional Setting

The PG&E gas transmission system provides natural gas to about 3.6 million customers. The service area covers approximately 70,000 square miles and includes all or portions of 48 of California's 58 counties. PG&E sells and distributes natural gas to its customers through either direct customer sales or direct purchase by a customer from competitive suppliers using PG&E's gas transmission and distribution lines.

PG&E's main natural gas transmission lines are high-pressure, high-flow pipelines. Most of the approximately 5,700 miles of transmission pipelines are buried underground. The proposed Lodi Gas Storage gas pipeline would tie into PG&E's Line 400.

#### Local Setting

#### Mineral Resources

The most common mineral resource in the region is aggregate, in the form of sand and gravel, which is used for road base and in production of Portland cement concrete. No significant aggregate deposits have been identified within or adjacent to project facilities (California Department of Conservation, Division of Mines and Geology 1988).

## Energy Resources

Natural energy sources in the vicinity of the proposed project include natural gas deposits and consistent winds. Energy infrastructure in the project area includes several natural gas pipelines and well sites. The proposed project is located at the Kirby Hill gas field, which has been substantially depleted. The project's proposed wells and pipelines would cross this field. The gas pipeline also would cross land designated for wind energy development within the Collinsville-Montezuma Hills Wind Resource Area (WRA). This WRA is identified in the Solano County General Plan Energy Element. Several companies are proposing to install wind turbines in the Montezuma Hills area, and these proposals are in various stages of approval at the local level. The Shiloh I wind farm was approved by the Solano County Planning Commission in 2005 and will be constructed in the hills, immediately south of the gas pipeline alignment. Construction of this wind energy project is expected to start in summer 2005 and be completed by early 2006.

## Regulatory Setting

### California Surface Mining and Reclamation Act

The California Surface Mining and Reclamation Act (Public Resources Code Sections 2710 et seq.) includes state policies for the protection and continued availability of mineral resources. Under this act, the State Geologist identifies areas with mineral resources of statewide and regional significance. Cities and counties are then required to incorporate policies that are consistent with the act into their general plans.

Solano County has established policies for conservation of mineral resources, as follows:

- The County shall preserve, for future use, areas with significant mineral resources by preventing residential, commercial, and industrial development that would be incompatible with proper mining practices; and
- The County shall ensure that mineral extraction operations are performed in a manner that is compatible with surrounding land uses; does not adversely affect the environment; and, at the end of such operations, restores the site to a use compatible with surrounding land uses.

## Suisun Marsh Protection Act

The Natural Resources section of the Suisun Marsh Protection Act contains several findings and policies that support extraction and storage of natural gas in the Suisun Marsh gas fields. The act contains policies that allow natural gas production as long as the activities are consistent with the Suisun Marsh Protection Plan and follow specified standards and safeguards to protect the marsh environment.

## Impact Analysis

### Significance Criteria

Criteria for determining the significance of impacts on energy and mineral resources were developed based on questions contained in the environmental checklist form in Appendix G of the State CEQA Guidelines. Based on these checklist questions, a project may have a significant effect on the environment if it would eliminate the availability of:

- A known mineral resource that would be of value to the region and the residents of the state; or
- A locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land use plan.

Section 15064(h) of the State CEQA Guidelines states that a change in the environment is not a significant effect if the change complies with a standard that is a quantitative, qualitative, or performance requirement found in a statute, ordinance, resolution, rule, regulation, order, or other standard of general application. For the purposes of analyzing the energy and mineral resource effects of the proposed project, an impact on mineral resources and energy was considered significant if the proposed project would conflict with the goals and policies of the Solano County General Plan.

## Impacts

### **IMPACT 3.5-1: POTENTIAL TO OVERCOVER OR PRECLUDE EXTRACTION OF MINERAL RESOURCES**

Project implementation would not adversely affect any known natural gas or aggregate deposits. No significant aggregate deposits are mapped in the project area. Construction and operation of the project would not interfere with or preclude the operation of active natural gas fields in the region. Additionally, the

proposed project is designed to operate within the surplus capacity of the existing PG&E distribution system. This impact is considered less than significant, and no mitigation is required.

### **IMPACT 3.5-2: POTENTIAL TO CONFLICT WITH WIND ENERGY DEVELOPMENT**

All wind energy development is located east of the proposed well field and compressor station sites; therefore, there would be no conflicts with these facilities. The proposed pipeline would be installed just north of the Shiloh I wind farm. The turbines, electrical lines, and access roads associated with this wind farm will be constructed mostly in 2005 and possibly into early 2006. The gas pipeline construction corridor occurs just north of the wind farm and would be constructed in 2006, after the wind farm project; therefore, the pipeline construction would not conflict with wind turbine construction. In addition, the proposed pipeline alignment is parallel to an existing pipeline, thereby minimizing any potential conflicts. This impact is considered less than significant, and no mitigation is required.

## **Mitigation Measures**

Potential impacts associated with energy and mineral resources were determined to be less than significant, and therefore no mitigation is required.