Section 3.5
Energy and Mineral Resources

This section analyzes the potential effects of the proposed Phase II 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 LGS gas pipeline would tie into PG&E's Line 400 or 401.

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 constructed in 2006. Two additional wind farms are proposed for the Montezuma Hills and will be constructed in 2008.

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 Phase II 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 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 fields sites; therefore, there would be no conflicts with these facilities. Construction of the PG&E interconnect (near the metering station) is small and not expected to conflict with construction of future wind farms located to the east and south of the metering station. There would be no impact.

Applicant-Proposed Measures and Mitigation Measures

No APMs or mitigation measures have been identified for energy and mineral resources because the impacts are either less than significant or there is no impact expected from construction of the Phase II facilities.